

DOCKETED

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BUSINESS MEETING
BEFORE THE
CALIFORNIA ENERGY COMMISSION

In the Matter of:)
) 21-BUSMTG-01
 Business Meeting)
 _____)

REMOTE ACCESS ONLY

The California Energy Commission's (CEC) May 12, 2021 Business Meeting will be held remotely, consistent with Executive Orders N-25-20 and N-29-20 and the recommendations from the California Department of Public Health to encourage physical distancing to slow the spread of COVID-19. The public may participate consistent with the direction in these Executive Orders.

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.

WEDNESDAY, MAY 12, 2021

10:00 A.M.

Reported by:
Peter Petty

APPEARANCES

Commissioners (Via Remote)

David Hochschild, Chair (Absent)
Karen Douglas
Andrew McAllister
Patricia Monahan
Siva Gunda

Staff Present: (Via Remote)

Drew Bohan, Executive Director
Linda Barrera, Chief Counsel
Noemi Gallardo, Public Advisor

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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. <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)</i>	
ii. <i>Communities for a Better Environment and Center for Biological Diversity v. Energy Resources Conservation and Development Commission, and California State Controller, (Alameda County Superior Court, Case No. RG13681262, Court of Appeal, First Appellate District, Division Four, Case No. A157299)</i>	
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vii. <i>Southern California Gas Company v. California State</i> <i>Energy Resources Conservation and Development</i> <i>Commission</i> (Sacramento County Superior Court Case No. 34-2021-80003576-CU-WM-GDS).	
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.	
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APRIL 12, 2021

10:01 a.m.

COMMISSIONER DOUGLAS: All right, well good morning everybody and happy belated Mother's Day. Thank you for joining the Energy Commission's May Business Meeting. I'm Commissioner Karen Douglas and I will lead the meeting today in Chair Hochschild's absence. Chair Hochschild had his second vaccination yesterday and took today off in an abundance of caution. And we all hope he's feeling well and it sounds like he is, so let's proceed now with the Pledge of Allegiance.

Commissioner Gunda, will you please lead us in the Pledge of Allegiance?

(No audible response.)

MS. GALLARDO: Commissioner Gunda, you're muted on the screen. It sounds like he's having audio issues.

COMMISSIONER DOUGLAS: All right, Commissioner Gunda?

All right, let me see here, Commissioner McAllister, could you lead us in the Pledge of Allegiance?

COMMISSIONER MCALLISTER: Sorry, I'm away. Can you hear me okay?

COMMISSIONER DOUGLAS: Yes.

COMMISSIONER MCALLISTER: Great. Okay.

(Whereupon the Pledge of Allegiance is recited.)

1 COMMISSIONER DOUGLAS: Thank you, Commissioner
2 McAllister.

3 So just a couple announcements before we fully
4 begin. So, first of all, good news is on the horizon.
5 California is set to fully reopen. We're looking at
6 reopening on June 15th and in the meantime, of course,
7 continue wearing a mask indoors and get vaccinated when you
8 can. And we encourage you to register at the "My Turn"
9 website created by the Governor's Office to receive
10 notifications of your eligibility to get vaccinated and to
11 schedule an appointment. For more information, go to
12 myturn.ca.gov.

13 Now, I also wanted to mention that the Commission
14 is celebrating the Second Annual Clean Energy Hall of Fame
15 Awards in December 2021. The awards recognize leaders who
16 are helping advance California's clean energy goals.
17 Nominations are being accepted until June 25th in the
18 following categories: lifetime achievement, clean energy
19 champion, and youth game changer. Please submit
20 nominations for individuals and entities, contributing to
21 advancing our clean energy future. Go to the Commission's
22 web page for more details or contact the Public Advisor's
23 Office at 916-654-4489.

24 Today's Business Meeting is being held remotely
25 without a physical location for any participant consistent

1 with Executive Orders N-25-20 and N-29-20 and the
2 recommendations from the California Department of Public
3 Health to encourage social distancing in order to slow the
4 spread of COVID-19.

5 The public may participate and/or observe the
6 meeting consistent with the direction in these executive
7 orders. Instructions for remote participation can be found
8 in the notice for this meeting and as set forth on the
9 agenda posted on the Commission's website link for the
10 Business Meeting. We are using a combination of Zoom and
11 Verizon for remote access. If Zoom shuts down today, we
12 will continue this meeting on our Verizon phone line. Call
13 Verizon at 888-823-5065. Again, 888-823-5065. The pass
14 code is "Business Meeting."

15 The Commission values public participation and
16 stakeholder engagement. Pursuant to the California Code of
17 Regulations Title 20, 1104(e) any person may make oral
18 comment on any agenda item. To ensure that the orderly
19 conduct of business such comments will be limited to three
20 minutes or less per person as to each item listed on the
21 agenda that is voted on today.

22 Any person wishing to comment on information
23 items or reports, which are non-voting items, shall reserve
24 their comment for the general public comment portion of the
25 meeting agenda and shall have three minutes or less total

1 to state all remaining comments. To provide public comment
2 please call our Verizon phone line at 888-823-5065. The
3 pass code is "Business Meeting. Provide your name,
4 affiliation and item number.

5 Before turning to the agenda items, I'm excited
6 to announce that at today's Business Meeting, the
7 Commission is seeking to approve nearly 39 million in
8 grants and loans, which is funding that helps accelerate
9 California economic recovery.

10 So moving to Item 1, the Consent Calendar, items
11 will be taken up and moved on, as a group. A Commissioner
12 may request that an item be moved and discussed later in
13 the meeting. Do we have a motion for Item 1?

14 (Overlapping colloquy.)

15 COMMISSIONER DOUGLAS: Go ahead, Commissioner
16 Monahan.

17 COMMISSIONER MONAHAN: I move Item 1.

18 COMMISSIONER DOUGLAS: Thank you. Commissioner
19 McAllister, do you second?

20 COMMISSIONER MCALLISTER: I'll second.

21 COMMISSIONER DOUGLAS: Perfect. So all in favor,
22 Commissioner Monahan?

23 COMMISSIONER MONAHAN: Aye.

24 COMMISSIONER DOUGLAS: Commissioner McAllister?

25 COMMISSIONER MCALLISTER: Aye.

1 COMMISSIONER DOUGLAS: Commissioner Gunda?

2 COMMISSIONER GUNDA: Aye.

3 COMMISSIONER DOUGLAS: And I vote aye as well, so
4 that item passes 4-0.

5 Let's go on to Item 2, the Diversity Commitment
6 Update. In this item, staff will present highlights of
7 investment programs and efforts to accomplish the CEC's
8 diversity commitment to increase participation of and
9 benefits to small and diverse business enterprises and
10 funding programs. As well as increasing the participation
11 of benefits to disadvantaged communities through programs
12 and policies, so Noemi Gallardo, if you could present,
13 please.

14 MS. GALLARDO: Commissioner Douglas, I apologize.
15 It had been determined earlier there was no public comment
16 on Item 1, the Consent Calendar. So I just wanted to make
17 sure that was on the record.

18 COMMISSIONER DOUGLAS: Thank you.

19 MS. GALLARDO: You're welcome, and yes I will
20 begin here.

21 So good morning to all of you. For the record, I
22 am Noemi Gallardo, the Public Advisor. Today, I'm honored
23 to join a group of my colleagues to present the 2020
24 Diversity Report, which is an update of our progress to
25 meet the goals of the Commission's commitment to energy

13

1 equity and supplier diversity.

2 As we work towards 100 percent clean energy
3 future, we should seek to include 100 percent of
4 Californians to create a clean energy society that
5 prospers. This would mean that all Californians
6 participate in and benefit from clean energy, especially
7 those who have been disproportionately burdened by
8 pollution and been on the frontlines of climate change.
9 These also tend to be the people who have historically
10 experienced disparate economic and health disparities.
11 Next slide.

12 All right, 2020 represented the 5th year
13 anniversary of the resolution that memorialized the
14 Commission's commitment to supplier diversity and energy
15 equity. That commitment as shown on the screen focuses on
16 optimizing fair and equal opportunities for small and
17 diverse-owned businesses as well as economically
18 disadvantaged and underserved communities, to participate
19 in and benefit from the Commission's programs.

20 For this anniversary report, we decided to
21 demonstrate the progress we've made through the grant and
22 loan programs that make up our investments. I'll highlight
23 some comprehensive stats and then turn it over to my
24 colleagues from various divisions to speak about each
25 program. Next slide.

1 We're going to share the statistics of each
2 program, the locations of the related project sites, and
3 stories reflecting the impact of the programs.

4 The first statistic I'd like to highlight is the
5 \$458 million investment made through the Commission's loan
6 program known as the Energy Conservation Assistance Act.
7 These loans are zero to low interest and have been

8 These loans are zero to low interest. And have
9 enabled public sector entities and schools to fund energy
10 projects, resulting in significant savings and making for a
11 cleaner environment, particularly important for frontline
12 communities.

13 The next highlight is the \$23 million investment,
14 the Commission has supported for tribal projects. The
15 Commission's Tribal Liaison Tom Gates has helped the agency
16 be more diligent in our efforts to be accessible to tribes,
17 to strengthen our role as partners. And better assist in
18 administering energy research and project funding
19 opportunities that are eligible tribes. Next slide.

20 Now I'd like to focus on the investments we've
21 made in, and benefiting disadvantaged communities. You'll
22 hear us mention disadvantaged communities throughout the
23 Diversity Report. And we focused on disadvantaged
24 communities as defined by CalEnviroScreen 3.0, because it's
25 the only standardized metric implemented across programs at

1 the Commission for which we can compare apples-to-apples.
2 That's why we're focusing on that.

3 This slide shows that as of December 31, 2020,
4 the Commission has invested \$996 million for projects in
5 and benefitting disadvantaged communities. There are nine
6 grant programs established between 1980 and 2018 that have
7 been active in the last five years, which are the ones we
8 focused on. And this dollar amount doesn't tell the entire
9 story of how Californians benefit from our investments, but
10 when we invest money in a project that means more
11 technology is implemented in these regions, which leads to
12 more infrastructure in communities. Which tends to lead to
13 more jobs and careers for individuals, and that's the
14 biggest value, because those types of jobs create stability
15 and increase wealth for families and Californians who need
16 it the most. Next slide.

17 Here we see a graph displaying the percentages of
18 funds that have been invested in projects located in
19 disadvantaged communities by the Commission's nine grant
20 programs. The spending ranges from 8 percent on the low
21 end to a high of 77 percent. I was happy to see that the
22 majority of the spending percentages are in the double
23 digits. I think that's a good sign. Next slide.

24 This map provides a glimpse of projects invested
25 in by the Commission throughout California. The yellow

1 shading represents the areas considered the top 25 percent
2 most impacted disadvantaged communities according to
3 CalEnviroScreen 3.0. The importance of this map is that
4 geography is one of the dimensions of equity and gives us a
5 sense of how well we're reaching those who need resources
6 the most, and where we can be intentionally and diligently
7 doing more to ensure communities aren't left out or left
8 behind from the clean energy root solution that we're
9 leading. And instead can benefit from the Commission's
10 great work.

11 I'll also clarify that projects from three of our
12 grant programs, including EPIC and the ECCA loan program
13 are not reflected in this map for various reasons. So that
14 means that we have done fairly well funding projects
15 throughout the state, and there would be a lot more dots
16 here. So that's good, I think, too.

17 And I especially appreciate the investments in
18 the Central Valley region given it is one of the most
19 adversely impacted areas. But we also can see on this map
20 that there are areas where we don't have that many
21 sprinkles and that could definitely use some more love like
22 the Inland Empire.

23 So that it concludes the introduction and now
24 you'll hear from my colleagues, who will share the
25 statistics of each program, the locations of the related

1 project sites if it's available. And also stories
2 reflecting the impact of the programs, which I think is the
3 most valuable aspect. Next slide.

4 I'd like to invite my colleague, Daniel Johnson,
5 to begin with the Local Government Challenge, which is the
6 program that gets the gold start for investing the highest
7 percentage of its funds in projects located in and
8 benefitting disadvantaged communities.

9 So Daniel, you're up.

10 MR. JOHNSON: Thanks, Noemi.

11 Hello, Commissioners. My name is Daniel Johnson.
12 I'm an Associate Energy Specialist in the Efficiency
13 Division. I'm honored to present the Local Government
14 Challenge Grant program. Next slide.

15 The Local Government Challenge is a partnership
16 between the Energy Commission and local governments to
17 develop innovative solutions that will improve energy
18 performance in California's communities. The Commission
19 has awarded more than \$10 million total in two competitive
20 grant programs. The Local Government Challenge is an
21 example of how the Commission is helping local governments
22 achieve energy planning and take action to reach targets
23 and goals to ensure a resilient and sustainable future.

24 In 2017, the Local Government Challenge awarded
25 \$7.2 million for Energy Innovation Challenge grants and \$3

1 million for Small Government Leadership Challenge grants.

2 The energy innovation grants provided
3 opportunities to deploy new energy efficiency and renewable
4 generation projects that support local goals and statewide
5 energy policy. Awardees were required to establish
6 standards and implementation templates for widespread
7 adoption by other local governments.

8 As of early 2021, ten projects are complete; the
9 rest will likely be completed by early 2022. Seventy-seven
10 percent of the funding was invested in projects located in
11 disadvantaged communities, totaling about \$7.9 million for
12 seven projects.

13 The small government grants made available
14 dedicated funding to disadvantaged communities with
15 populations fewer than 150,000. This type of intentional
16 design was the reason why such a high percentage of the
17 funding went to projects located in disadvantaged
18 communities. Part of why the program was so popular and
19 effective was that the Commission responded during a time
20 of need for local governments and included technical
21 assistance to help ensure their improvements were
22 successful. Next slide, please.

23 This map shows the locations of the projects with
24 the diamonds representing projects located in disadvantaged
25 communities. Next slide, please.

1 In terms of impact, the story I want to share is
2 from Gateway Cities Council of Governments. The Gateway
3 Cities Council of Governments is a collection of 27 cities
4 and areas of unincorporated Los Angeles County and the Port
5 of Long Beach, totaling 2.1 million people. Three-quarters
6 of the residents live in census tracts designated as
7 disadvantaged communities. Local jurisdictions have high
8 needs for funding to address climate change and meet the
9 state's climate goals.

10 This sub-region is prone to a variety of climate
11 impacts, including extreme temperatures, sea level rise,
12 flooding and urban runoff, urban heat island effect,
13 droughts, and worsened air quality. The Climate Action
14 Plan Framework provides cities with the tools to prepare
15 for climate impacts, reduce emissions, and pursue climate
16 investments. The project achieved its goal facilitating
17 climate action planning at a reduced cost and provided
18 gateway cities with a competitive advantage to pursue much-
19 needed climate action funding. Next slide, please.

20 This is the address for the Local Government
21 Challenge webpage. Stay tuned for a showcase of all of the
22 various project resources later this year.

23 That concludes my presentation. Now I'd like to
24 introduce my colleague Katrina Leni-Konig to present.

25 MS. LENI-KONIG: Hello, Commissioners. My name

1 is Katrina Leni-Konig. I'm a supervisor in the Energy
2 Research & Development Division. I'm excited to present
3 three grant programs as well as our investments with
4 tribes. Next slide.

5 I'll start with the Food Production Investment
6 Program, also known as FPIP. This program invested the
7 second highest percentage of monies in projects located in
8 and benefitting disadvantaged communities. It was
9 established in 2018 to provide grants that help food
10 processors save energy and money while reducing greenhouse
11 gas emissions. The program's initial budget provided up to
12 \$57 million to help accelerate the adoption of advanced
13 energy efficiency and renewable energy technologies.

14 The food processing industry is one of the
15 largest energy users in California. It is also a large
16 producer of greenhouse gas emissions. The Food Production
17 Investment Program enables producers to replace high-
18 energy-consuming systems with market-ready and advanced
19 technologies and equipment.

20 As of December 2020, 72 percent of FPIP funding
21 was invested in projects located in disadvantaged
22 communities totaling about \$80 million for 36 projects.

23 Next slide.

24 Here's a map showing the locations of the FPIP
25 projects with the diamonds representing projects in

1 disadvantaged communities, which are highlighted in yellow.
2 As you can see, we have supported numerous projects in the
3 San Joaquin Valley as part of FPIP. The San Joaquin Valley
4 is one of the world's most productive agricultural regions.
5 It is also home to numerous food production facilities.
6 Unfortunately, the San Joaquin Valley has some of the
7 nation's worst air quality due to the region's topography
8 that traps air pollution from large industries and traffic.
9 Next slide.

10 The story I want to share is about Initiative
11 Foods located in the City of Sanger, a disadvantaged
12 community in the San Joaquin Valley. The facility
13 specializes in processing fresh fruits and vegetables into
14 organic baby food and is the third largest baby food
15 producer in the United States. The facility was destroyed
16 by a fire in 2016, requiring most of the facility to be
17 rebuilt. The fire left 120 employees without jobs and
18 Initiative Foods worked hard to get their people back to
19 work by rebuilding the facility and helping them find jobs
20 in the meantime.

21 Funded by FPIP, the replacement of 30-to 40-year-
22 old energy systems is the final step in a facility-wide
23 modernization effort. This project will install energy
24 efficient air compressors, boiler, and refrigeration
25 equipment. And will help them save money so they can

1 continue to grow their business. Their greenhouse gas
2 emissions reductions will be equivalent to removing over
3 1,000 passenger vehicles. Also, they will be reducing
4 nitrogen oxides by 44,000 pounds annually in a
5 disadvantaged community that is significantly impacted by
6 air pollution.

7 The next program is the Commission's Natural Gas
8 Research and Development Program that invests over \$21
9 million annually in science and technology advancements
10 that help improve public health and safety, decarbonize end
11 uses in buildings and industry, and develop fuel
12 alternatives, and reduce environmental impacts.

13 As of 2020, 40 percent of demonstration,
14 deployment, and manufacturing funding was allocated to
15 disadvantaged communities totaling about \$19 million. This
16 also included grants for 27 demonstration sites in
17 disadvantaged communities. So next slide.

18 This map shows natural gas investments throughout
19 the state. The recipient headquarters are identified with
20 triangles, while project installation sites are identified
21 with circles. As you can see, the disadvantaged
22 communities are marked as yellow, and low-income
23 communities are marked in brown. Next slide.

24 In terms of impact from our Natural Gas Research
25 Program, the story I want to share is about the trajectory

1 of our investments to reduce emissions from heavy-duty
2 vehicles. While this may not be news to many of us, a
3 recent study made headlines highlighting a major
4 environmental justice concern that Americans of color face
5 higher levels of exposure to deadly fine particulate matter
6 from traffic and other sources. We also know that
7 pollution from heavy-duty diesel vehicles significantly
8 impacts communities located near ports, railyards, and
9 other major freight corridors. We at the CEC are working
10 to reduce associated emissions through our Natural Gas
11 Program.

12 So our past investments supported the development
13 of near-zero NOx natural gas engine technology to displace
14 diesel and reduce emissions from heavy-duty vehicles. We
15 have since shifted our R&D priorities towards zero
16 emissions vehicles. Despite this clear target, diesel and
17 natural gas vehicles will likely be on the road during this
18 transition.

19 So we have an active project that will help
20 bridge current and future heavy-duty vehicle technologies.
21 The project is assessing the real-world effectiveness of
22 current combustion technologies and emissions regulations
23 by collecting in-use activity and emissions data across a
24 variety of vehicle types. Going forward, this data will
25 help us ensure that combustion vehicles are as clean as

1 possible during the transition. This project is also
2 tracking vehicle movement and behavior to inform plans for
3 infrastructure needed to transition to zero-emission heavy-
4 duty vehicles.

5 So future investments will continue to focus on a
6 transition away from combustion engines to zero emission
7 technologies. Our natural gas program will invest in
8 hydrogen fuel cell technologies while the EPIC program will
9 support battery electric technologies. We expect that our
10 investments will lead to a significant reduction in air
11 pollution impacting our communities. Next slide.

12 The next program I'd like to highlight is EPIC,
13 our electric research and development program, which
14 continues to advance technology and work to address the
15 barriers to clean energy adoption. So over 33 percent of
16 our technology demonstration funding have gone to projects
17 located in and benefitting disadvantaged communities. This
18 number increases to 68 percent when including projects in
19 low-income communities and tribes. These investments are
20 helping us to develop better solutions that are more
21 impactful and accessible. Project teams are gaining
22 experience working within communities and understanding
23 conditions in the real world to help develop technologies
24 that really benefit all Californians. While we recognize
25 that there is more work to be done, we have made

1 significant progress in disadvantaged communities, with
2 \$112 million for demonstration projects at 136 sites. Next
3 slide.

4 This map shows the location of EPIC technology
5 demonstration and deployment projects benefiting California
6 Native American tribes as represented in blue, low-income
7 communities in green, and disadvantaged communities
8 highlighted in orange. So EPIC has conducted extensive
9 outreach and designed grant funding opportunities to really
10 ensure that our investments and technology innovations
11 bring clean energy benefits to communities throughout the
12 state. It's really important to our program. Next slide.

13 The story I would like to share is about
14 OhmConnect and how it has transformed the lives of its
15 customers. OhmConnect is a residential demand response
16 software that pays households to reduce their energy use
17 when the electric grid is stressed. Each #OhmHour demand
18 response event invites users to temporarily turn things
19 down or off manually, or automatically by connecting their
20 smart devices. Their EPIC project proved that large
21 numbers of small customers are willing and able to be
22 flexible with their electricity consumption when provided a
23 modest incentive and the means to participate easily.

24 So when Kim McDermott started participating, her
25 family was living paycheck to paycheck. By reducing their

26

1 energy use during peak demand hours and referring friends,
2 they earned over \$13,000 in 4 years. She says that
3 OhmConnect has really helped them through some hard times,
4 and by referring others she has been able to pass that
5 along to so many other families.

6 Not only has OhmConnect helped its customers, but
7 during the August 2020 heat wave, OhmConnect played a major
8 role in providing critical grid support by reducing 1 GWh
9 of energy with a peak capacity of 100 MW across 150,000
10 active users. That's pretty impressive. Through their new
11 EPIC project, they expect to enroll at least 30 percent of
12 their new customers from disadvantaged communities. So
13 it's one of the areas they're advancing equity. Next
14 slide.

15 Now I'd like to talk about the investments made
16 in tribes. So the Commission's Tribal Program helps the
17 organization conduct effective government-to-government
18 cooperation, collaboration, and communication with
19 California Native American tribes. Led by the CEC's Tribal
20 Liaison, Tom Gates, the tribal program includes assistant
21 tribal liaisons within each division, including myself
22 representing the Energy Research and Development Division.
23 Together, we work to advance the Commission's mission and
24 provide meaningful tribal input into the development of
25 regulations, rules, policies, plans, and activities that

27

1 may affect them. The program supports outreach, conducts
2 tribal cultural resources assessments, and hosts tribal
3 energy events to promote collaboration and relationship
4 building between the Commission, tribal leaders, and their
5 staff. And we assist in administering energy research and
6 project funding opportunities eligible to tribes, which is
7 what I'll focus on for this presentation.

8 First, I'd like to introduce the Tribal
9 Government Challenge, which is funded by the Commission and
10 administered by the California Strategic Growth Council.
11 It recognizes the valuable role that tribes serve in
12 promoting clean air standards and the state's climate and
13 energy goals. Funding for the Tribal Government Challenge
14 Planning Grant will help tribes conduct planning to
15 identify solutions to reduce greenhouse gas emissions,
16 improve clean energy access, and advance climate adaptation
17 and resiliency on tribal lands and in tribal communities.
18 This includes \$1.9 million invested and 8 projects funded.

19 I'll also describe the EPIC Research and
20 Development Program has invested over \$21 million dollars
21 and funded 7 projects in partnership with tribes. These
22 projects are building tribal energy resiliency and
23 developing innovative solutions through the demonstration
24 of microgrids and long duration storage technologies,
25 ensuring critical services are available when needed. Next

1 slide.

2 So this is a map showing the locations of the
3 tribes funded by the Tribal Government Challenge Grants in
4 purple as well as the EPIC projects in orange. These
5 grants include tribes throughout the state, north and
6 south, some coastal, and some further inland representing
7 diverse ecosystems and climates that offer unique
8 opportunities for clean energy solutions. Next slide.

9 So in terms of impact, the story I want to share
10 is about the Kashia Band of Pomo Indians of the Stewarts
11 Point Rancheria that received a tribal government challenge
12 grant to develop a comprehensive energy planning project
13 encompassing multiple tribal properties and projects. The
14 tribe plans to lower costs, increase resiliency, and
15 mitigate its carbon footprint by developing on-site solar,
16 wind, and hydropower generation, and energy efficiency
17 measures, at the Center for Abalone Research, Education,
18 and Restoration, also called the Kashia Abalone Center
19 currently under development.

20 The photographs on the right were taken at a
21 South African abalone farm that has successfully integrated
22 solar and hydropower into their operations similar to the
23 plans for the Kashia Abalone Center.

24 The proposed center is part of the tribe's plan
25 for the Kashia Coastal Reserve, and a response to the

1 "Perfect Storm" of environmental conditions that have
2 decimated northern California abalone, which is an iconic
3 animal for many Native American tribes, including the Pomo
4 Indians. Abalone has an important cultural significance.
5 And has been an important food source for thousands of
6 years. And the shells have been used for jewelry, tools,
7 and trade for thousands of years.

8 In addition to the abalone center, they are
9 exploring biomass fuel supply and energy production from
10 tribally-owned forest property and local timberland. The
11 project also includes planning for energy efficiency
12 measures and renewable energy generation at the Stewarts
13 Point Rancheria. The tribe intends to establish a Tribal
14 Energy Utility to deliver energy to its members.

15 So by reducing energy use and taking control of
16 energy production and delivery, the tribe will be able to
17 reduce its cost and carbon footprint across its territory,
18 while exercising its sovereignty and increasing its
19 resiliency.

20 With that, I will pass it onto my colleague Larry
21 Rillera.

22 MR. RILLERA: Great. Thank you, Katrina. That
23 was awesome.

24 Hola and good morning, Commissioners. My name is
25 Larry Rillera. I am staff in the Fuels and Transportation

1 Division. Next slide, please.

2 I'm very excited and honored to present the Clean
3 Transportation Program, which is in its 13th year of
4 existence. The overall program goal is, "to develop and
5 deploy innovative technologies that transform California's
6 fuel and vehicle types to help attain the state's climate
7 change policies."

8 Annual investment plans articulate state
9 policies, goal-driven priorities, and investments aimed at
10 reducing greenhouse gas emissions, petroleum dependence,
11 criteria pollution emissions, and sustaining a clean
12 transportation economy for all Californians. The program
13 is built on partnerships and by incorporating input from an
14 array of business and equity stakeholders, consumers, and
15 advisory bodies such as the Disadvantaged Communities
16 Advisory Group and the Clean Transportation Program
17 Advisory Committee.

18 As of December 2020, 32 percent of Clean
19 Transportation Program funding went to projects in
20 disadvantaged communities. However, the percentage of
21 investments climbs to 49 percent when low-income
22 communities are included as well. This represents over
23 \$485 million in project investments. Over 1,338 projects
24 funded in disadvantaged communities out of a total of 2,200
25 projects. Next slide, please. Thank you.

1 This is a map showing project locations funded by
2 the Clean Transportation Program in disadvantaged
3 communities. Projects impacted by these investments
4 includes Calexico Unified School District, the Port of Long
5 Beach and nearby environs, and Granville Homes in Fresno.
6 Next slide, please.

7 A few highlights I would like to draw your
8 attention to include: 1) the IDEAL Communities Partnership,
9 2) investments in the California Electric Vehicle
10 Infrastructure Project or CALeVIP, 3) the Electric School
11 Bus Training Project, and 4) the Sustainable Freight
12 Foundations Certificate.

13 First CALeVIP offers incentives for the purchase
14 and installation of electric vehicle charging
15 infrastructure throughout the state. CALeVIP is currently
16 funded for nearly \$125 million with a potential of up to
17 \$200 million. Local partner co-funding contributions are
18 over \$32 million. I would note that through CALeVIP, some
19 projects require funds to be spent in unincorporated
20 communities, low-income communities, and/or disadvantaged
21 communities.

22 Second, last year we launched the IDEAL
23 Communities Partnership through an agreement with the
24 Foundation for California Community Colleges. The IDEAL
25 Communities partnership is an intentionally designed equity

1 effort that will assess the development of a technical
2 assistance program, conduct outreach and engagement with
3 priority communities to better understand and support their
4 clean transportation needs, establish an IDEAL Student
5 Ambassador Program. And lastly, conduct an IDEAL Community
6 Forum for communities to express their clean transportation
7 needs and to identify ways to improve partnerships and
8 investments of the program.

9 Thirdly, workforce training and development has
10 been a hallmark of the program since inception. The
11 Electric School Bus Training Project provides training to
12 school bus technicians that receive school buses from our
13 school bus replacement program.

14 And lastly, the program completed a beta freight
15 workforce project, the Sustainable Freight Foundations
16 Certificate effort, with the Governor's Office of Business
17 and Economic Development and CSU Long Beach. Next slide,
18 please.

19 In a partnership with the colleges through the
20 Advanced Transportation and Logistics Initiative, the Clean
21 Transportation Program has established a ZEV, Zero Emission
22 Vehicle High School Pilot Program. We established the
23 "Automotive 3: ZEV Technology Program", where 28 high
24 schools are currently participating. This wildly
25 successful effort will be expanding the automotive program

1 to include even more high schools. We will also be
2 establishing a new ZEV Truck Technology Program as well.
3 Next slide, please.

4 So what about results? Throughout the Clean
5 Transportation Program portfolio, a focus has been on job
6 creation. Over 9,000 jobs have been supported since
7 program inception. Turning to specific workforce
8 investments, the total program investment for the workforce
9 training and development portfolio is over \$36 million
10 dollars for over 20,000 trainees and hundreds of faculty
11 and trainers.

12 The Clean Transportation Program will continue to
13 lead in the establishment of ZEV training opportunities and
14 career transportation pathways in equity and frontline
15 communities. And will continue to be a priority of the
16 program as more ZEV technologies are deployed.

17 So what is next? Increase the ZEV and ZEV
18 infrastructure deployments, maturation of the ZEV supply
19 chain in California, and continuing intentional engagement
20 and support for front line communities, equity communities,
21 and disadvantaged communities will be critical as the Clean
22 Transportation Program investments help the state achieve
23 its climate goals while also accruing environmental and
24 economic benefits for all.

25 That concludes my presentation. Now I would like

1 to introduce my colleague Hally to present. Thank you.

2 MS. CAHSSAI: Thanks, Larry. Good morning
3 Commissioners. My name is Hally Cahssai and I'm a
4 supervisor in the Renewable Energy Division. I am pleased
5 to present three programs starting with the New Solar Homes
6 Partnership also known as the NSHP. Next slide, please.

7 The NSHP program was launched in 2007 as part of
8 a statewide solar incentive program called the California
9 Solar Initiative. It incentivizes installation of solar
10 energy systems in new home construction in investor-owned
11 utility territories.

12 As of December 2020, 15 percent of NSHP funds
13 were invested in projects located in disadvantaged
14 communities totaling \$34 million invested in over 11,700
15 projects. Next slide, please.

16 In terms of impact, to promote strong support of
17 all project types, the NSHP offers different incentive
18 rates to market rate and affordable housing projects. This
19 different incentive rate promotes efficient use of program
20 funding and assistance to demographics most in need. As of
21 the latest incentive level, the NSHP provides \$1.85/watt
22 for affordable housing and \$0.75/watt for market rate
23 housing.

24 The NSHP program has contributed to the adoption
25 of rooftop solar in the following ways. First, assisting

35

1 the development of a new and critical sector to reach
2 greater market maturity and market saturation. This
3 support has helped promote the inclusion of rooftop solar
4 in the latest building standards.

5 Second, providing assistive resources to
6 prospective consumers in the form of solar equipment lists,
7 contractor directories, and NSHP program support

8 Third, helping move California towards the goal
9 of one million solar roofs.

10 The stay-at-home orders have vastly changed how
11 the program functions. Program processes changed by moving
12 to a fully digital process, helping applicants avoid the
13 need to mail-in documents as before. As the program is set
14 to end on December 31, 2021, the contributions of NSHP
15 towards the solar market will continue. Next slide,
16 please.

17 The second investment program I'm presenting is
18 the Geothermal Grant and Loan Program. This program was
19 established in 1980 to help reduce dependence on fossil
20 fuels and to stimulate the state's economy through
21 geothermal resource developments. Funding for the
22 Geothermal program comes from royalty and lease payments
23 made to the United States government by geothermal
24 developers operating on federal land in California.

25 The geothermal program distributes grants and

1 loans with these goals. Promoting and maintaining
2 development of California's vast geothermal energy
3 resources, mitigating adverse impacts caused by geothermal
4 development, and helping local jurisdictions offset the
5 costs of providing public services necessitated by
6 geothermal development.

7 As of December 2020, 8 percent of the Geothermal
8 Program's funding totaling \$2.5 Million for 1 project is
9 located in a disadvantaged community. Next slide, please.

10 In this map of the projects, you can see that
11 geothermal resources are spread throughout California. By
12 nature, the projects tend to be in rural areas of the
13 state. In addition to California's vast lower temperature,
14 direct use resources, and hot springs located throughout
15 the state, California has installed more geothermal
16 electricity capacity than any other state in the US or
17 other country worldwide with over 2,700 megawatts of
18 installed capacity from 43 operating power plants.

19 The diamond represents a project in the
20 disadvantaged community region in Imperial County known as
21 the Salton Sea. The yellow shaded regions represent the
22 top 25 person most impacted disadvantaged communities as
23 classified according to CalEnviroScreen 3.0. Next slide,
24 please.

25 The project at the John L. Featherstone

1 geothermal plant in the Salton Sea had a Budget of \$2.5
2 million and Match Budget of \$2.53 million and was
3 successfully completed in September 2020. The purpose of
4 the grant was to develop an integrated engineering design,
5 reducing the risks and costs associated with a commercial
6 lithium plant, to produce lithium and mineral co-products.

7 Current efforts of the geothermal program are to
8 support and offer project management to the Lithium Valley
9 Commission, further exploring the opportunities for lithium
10 industry development in the Salton Sea Geothermal Resources
11 Area. Next slide, please.

12 The final program I'm presenting is the Renewable
13 Energy for Agriculture Program also known as REAP. REAP
14 was established in 2018 and offers grant funding for the
15 installation of renewable energy technologies serving
16 California's agricultural sector.

17 REAP was funded through California Climate
18 Investments, a statewide program utilizing billions of Cap-
19 and-Trade dollars to reduce greenhouse gas emissions,
20 strengthen the economy, and improve public health and the
21 environment—particularly in low-income and disadvantaged
22 communities.

23 REAP was allocated \$10 million in funding, with
24 \$9.5 million available for grant awards. The projects
25 awarded were spread across 18 counties in California,

1 including 8 out of the top 10 agricultural counties in the
2 state. As of December 2020, 39 percent of REAP funds or
3 about 3.7 million for 16 projects were invested in
4 disadvantaged communities. REAP program funding was
5 exhausted in the 2019 solicitation. Next slide, please.

6 This map shows the project locations of the
7 investments made. The map's diamonds indicate REAP
8 projects in disadvantaged communities and the highlighted
9 areas indicate the top 25 most impacted disadvantaged
10 community areas per CalEnviroScreen 3.0. Next slide,
11 please.

12 I would like to highlight the highest-scoring
13 REAP applicant happens to be a woman and first-generation
14 minority-owned low-income farm. The applicant's farm
15 specializes in organic produce. The applicant serves local
16 farmer's markets, restaurants, and stores providing fresh
17 organic produce to low-income children and seniors.

18 The team looks forward to the opportunity to be
19 even more successful in the future funding opportunities
20 and further advance the mission of the CEC.

21 That concludes my presentation. Now I'd like to
22 introduce my colleague David Velasquez to present.

23 MR. VELAZQUEZ: Thank you, Hally. Good morning,
24 Commissioners. My name is David Velazquez. I'm an Energy
25 Commission Specialist in the Renewable Energy Division.

1 I'm excited to present two programs starting with the
2 California Clean Energy Jobs Act, more commonly known as
3 our Prop 39 K-12 Program. Next slide, please.

4 In terms of the investment, Prop 39 has granted
5 more than 1.7 billion over five years to schools to plan
6 and install energy efficiency upgrades and clean energy
7 generation measures at over 7,000 project sites.

8 As of December 2020, 28 percent of Prop 39
9 funding was invested in projects located in disadvantaged
10 communities totaling about \$419 million for 1,684 projects.
11 Next slide, please.

12 This map shows the project locations of Prop 39
13 projects. On this map, the yellow highlighted areas are
14 the top 25 percent most impacted Disadvantaged Communities
15 according to the metrics set by CalEnviroScreen 3.0. The
16 diamonds on the map represent projects in disadvantaged
17 communities. As you can see, there is a lot of overlap
18 showing Prop 39 was able to provide funding for these
19 communities that needed help the most. The Prop 39 K-12
20 Program invested funds in all 58 counties especially
21 impacting those Central Valley and Southern California
22 disadvantaged communities in our agricultural communities
23 suffering from poor air quality. Next slide, please.

24 Prop 39 has had a major impact on schools
25 throughout California. As mentioned previously, the

1 program has invested over \$1.7 billion to energy projects
2 at over 7,131 sites. The estimated annual savings for
3 these energy measures are in excess of \$100 million. These
4 projects are helping students and teachers by providing an
5 overall healthier learning environment with the new
6 equipment installed. Next slide, please.

7 Now I'd like to present the Energy Conservation
8 Assistance Act Program also known as ECAA. This
9 presentation will look a bit different than the others,
10 because this program is a loan program, not a grant
11 program. The ECAA program has two loan types. One loan
12 type provides zero-interest rate loans to public school
13 districts, charter schools, county offices of education,
14 and state special schools awarded via a competitive
15 application process. The other ECAA loan type provides 1
16 percent interest rate loans to cities; counties; special
17 districts; and public colleges, universities, care
18 institutions, and hospitals awarded via a first-come first-
19 serve application process. Both loans have been issued to
20 eligible applicants throughout California. Next slide,
21 please.

22 In terms of impact, over its lifetime, ECAA has
23 provided hundreds of millions of dollars in loans for
24 energy efficiency projects to cities, counties, schools,
25 and other public entities. These projects have resulted in

1 substantial energy cost savings.

2 The program has demonstrated there is a need on
3 the part of public entities in California for these low and
4 zero interest loans. Cities, counties and schools are very
5 interested in pursuing these loans to fund energy projects
6 resulting in energy efficiency, energy generation, improved
7 environment and energy cost savings.

8 The ECAA program has provided loans throughout
9 the state, to both large and small public entities,
10 including many disadvantaged communities. Projects funded
11 by the loans have benefits apart from increased energy
12 efficiency, energy generation and resilience. ECAA
13 projects encourage the development of clean energy jobs,
14 clean energy job training programs, installing clean energy
15 technologies in disadvantaged communities making this
16 technology a part of their everyday lives. ECAA-funded
17 energy projects also help improve air quality in local
18 communities and move us closer to achieving our climate and
19 energy goals.

20 That concludes my presentation. Now I'd like to
21 invite Noemi to come back. Thank you very much.

22 MS. GALLARDO: Thank you, David.

23 I'd like to close with some takeaways from the
24 2020 Diversity Report. I'll start with lessons learned.

25 First, several of the programs shows that the

1 Commission is responsive when the state is impacted by
2 crises and other hardships. A quick example is NSHP
3 extending deadlines during the COVID-19 pandemic. And
4 local government challenge grants providing funds to local
5 governments recovering from an economic downturn.

6 Some programs also have realized they need to
7 provide material for communities in other languages to help
8 ensure limited English proficient companies can access the
9 programs.

10 Second we're in need of more standardized metrics
11 to evaluate the Commission's programs. We currently rely
12 on the CalEnviroScreen 3.0, which is a good tool but it's
13 limited in certain ways. For example, it doesn't include
14 tribes. I am planning to work with divisions to develop
15 other metrics that we can standardize to try and show that
16 those additional dimensions of diversity and equity work.
17 The Clean transportation Program is a good example of how
18 they're adding the workforce development dimension of
19 benefits and tracking that.

20 Finally, we've seen that programs that
21 intentionally designed the programs to be equitable and
22 provide resources tailored to community needs can be really
23 successful. So the local government challenge
24 (indiscernible) nearly 80 percent of spending in
25 disadvantaged communities. Because they've dedicated

1 funding to those communities with populations fewer than
2 150,000, so that reached some of those communities that
3 needed it. They also included technical assistance to help
4 ensure the government plans are successful.

5 I'm hoping to see at least some programs reach
6 100 percent spending in disadvantage and equity communities
7 when they can. Some programs are limited by conditions or
8 parameters beyond our control, but we can definitely
9 continue to be intentional and diligent about investing
10 resources strategically.

11 In terms of opportunities to advance equity, the
12 key takeaways I want to highlight are to maximize our
13 transition to in-person engagement, getting closer to the
14 community. For example, conducting some of our business
15 meetings in different regions of the state and scheduling
16 an additional data connect with residents and community-
17 based organizations located there. This would be really
18 helpful to us, to better determine what the needs are, what
19 the gaps are, any challenges and opportunities that they
20 may have that we can address. And what they deem as
21 benefits that we can learn from as well.

22 Second, there are several opportunities rising to
23 partner with our peer agencies, including the Public
24 Utilities Commission and Strategic Growth Council, to
25 determine how to better define community benefits, how to

1 design tracking methods and develop more resources for
2 communities together.

3 I also plan to work with our advisory body, the
4 Disadvantaged Communities Advisory Group to guide our
5 efforts, particularly helping us finalize an equity
6 framework.

7 And lastly, I've started to form an internal task
8 force to help close gaps and existing equity efforts and to
9 achieve our goals to advance energy equity and supplier
10 diversity in a more coordinated fashion. Next slide.

11 Finally, I'd like to thank my colleagues who
12 supported behind the scenes to produce the Diversity Report
13 including Tom Gates, Travis David, Gabriel Blossom, Dorothy
14 Murimi, Karina Camacho, Armin Agullo, (phonetic) Heather
15 Bird, and the teams supporting the presenters.

16 And I'd also like to thank my co-presenters for
17 their time and love they invested in the Diversity Report.
18 Team, please turn on your video boxes and join me on the
19 stage here. That concludes our presentation of Item 2, the
20 2020 Diversity Report. We welcome any questions or
21 comments that you may have, Commissioners.

22 COMMISSIONER DOUGLAS: All right. Well, thank
23 you so much Noemi. And thanks to all of our presenters:
24 Daniel, Katrina, Larry, Hally, David. It's great to hear,
25 not only the content of what you had to say, but the

1 enthusiasm and strong support for helping us achieve these
2 goals.

3 And with that, this is a non-voting item. Let me
4 ask now if any Commissioners have comments or questions,
5 Commissioner McAllister?

6 COMMISSIONER MCALLISTER: Yeah, just quickly.
7 Thanks, Noemi, and the whole team for that. I really am
8 gratified to see really how well we're doing. I mean, I
9 think you've laid it out nicely, you know, highlighting our
10 successes and then presenting ways we can improve.

11 I just have to say how proud I am of the
12 challenges programs, the local government challenge and the
13 tribal challenge. You know, we were using -- the original
14 idea was to sort of start small, use reflows ARRA period,
15 right? We're still churning through money from the Obama
16 stimulus period. And these are reflows that come in from
17 our various financing programs that we started way back
18 then. And Commissioner Douglas, you were right in there in
19 there in the original implementation of.

20 And then as we get those reflows -- when the
21 economy went bust and local governments had to lay off
22 their building departments, you know 80 percent in some
23 cases with they're building departments -- we really wanted
24 to create a resource that those local governments could
25 rely on and doing an equitable way. And it's just really

46

1 gratifying to see.

2 You know, we've been paying attention along the
3 way, and so we kind of knew the details of each project was
4 funded by that. But it's nice to see that overall picture
5 and the success. And really the fact that we're moving the
6 needle on the equity front at the local government level,
7 which is a huge gap for resources in the state. You know,
8 often state resources have a difficult way finding their
9 way to local governments, and we need to fix that.

10 So you know if there's some federal stimulus, we
11 can channel that into those programs, possibly, you know we
12 can we can find more reflows in other pots to continue to
13 nurture those approaches. Because I think that local
14 government is essential for our success as a state to reach
15 our climate mitigation goals. But structurally, it's a
16 kind of chronic underfunding that happens at the local
17 government level. So I really want to highlight those
18 programs.

19 And then obviously Prop 39, our schools, that was
20 huge re-formula based program, but really got around the
21 state and move the needle as well.

22 So but all the programs have their role and I
23 really appreciate your oversight and your overview of all
24 of that. I'm really proud of the Commission and all the
25 staff that have worked on those programs over the last

1 decade.

2 COMMISSIONER DOUGLAS: Super. Thank you,
3 Commissioner McAllister.

4 Commissioner Monahan?

5 COMMISSIONER MONAHAN: Well, I wanted to thank
6 our Public Advisor. And it was wonderful to see the
7 evolution of this report. I mean last year was the first
8 year that I had actually been exposed to it. I think it
9 was Noemi's first as well. And to see just -- I really
10 liked the fact that there were folks representing each of
11 the funding streams, representing and providing story
12 vignettes about the successes. To me that really helped
13 deepen kind of our thinking around equity.

14 You know this is something we've talked about a
15 lot, but I just want to emphasize in a public setting that
16 tracking grants locations is easy. And it's important, but
17 it doesn't necessarily reflect a benefit to communities
18 that we need to deepen our attentiveness to quantifying
19 benefits.

20 And I really appreciated what Larry presented in
21 terms of jobs, I thought well yeah that's the kind of
22 metrics we need. Like 9,000 new jobs, 20,000 people
23 trained, at least 20,000 plus people trained. And, so I
24 look forward to working with you, Noemi, and Disadvantaged
25 Communities Advisory Group, and the broader stakeholder

1 Community just on ensuring that we are constantly
2 improving.

3 I mean we never -- we are not there yet, we'll
4 never be there in terms of equity. But our job is to
5 always improve and to have a public process that is
6 engaging and brings people in. And really tries to do a
7 better job supporting disadvantaged low-income tribal
8 communities, priority communities, however we end up
9 identifying them.

10 So the Clean Transportation Program has been
11 trying to think through these benefits. And we really are
12 committed to in the next year being more transparent about
13 that. And working with Noemi and working with others to do
14 that. We've gotten some feedback from our stakeholder
15 community that they want us to spend 50 percent of our
16 funds index, and they want 50 percent of the benefits going
17 to DACs and low-income communities. So really, we are
18 listening to our stakeholders and we want to be more
19 transparent in how we're qualifying benefits.

20 COMMISSIONER DOUGLAS: Super. Thank you,
21 Commissioner Monahan.

22 Commissioner Gunda?

23 COMMISSIONER GUNDA: Thank you, Commissioner
24 Douglas.

25 I just wanted to start off with thank yous to

1 Noemi and Dorothy who has been in the meetings kind of
2 helping me come up to speed on a lot of these efforts.
3 Excellent presentations by Daniel and David, Hally, Katrina
4 and Larry. Thank you so much for both kind of being
5 thoughtful in your presentations, being thorough. I just
6 appreciate the transparency on how we're approaching the
7 metric, so very much thankful for all your efforts.

8 I do definitely recognize the value that Noemi
9 has been bringing in terms of really thinking about how
10 best to articulate the story of how we are doing in equity
11 across all areas. So I just am grateful, Noemi, for your
12 efforts in this area.

13 And also I want to thank DACAG for their
14 participation in most of our grant-making processes and
15 providing guidance and such. So an overall thank you.

16 As a point of opportunity, Noemi, you have kind
17 of laid out some excellent opportunities there. I do --
18 you know, as kind of the Lead Commissioner of EAD, which is
19 primarily analytical, would love to continue to work with
20 you to think about how those efforts on the analytical side
21 and the data side could better inform our equity efforts.
22 And looking forward to having a slot next year on that
23 side, how well we can do that.

24 So thank you all again. Thank you so much.

25 COMMISSIONER DOUGLAS: Well, super. Thank you,

1 Commissioner Gunda.

2 And I just wanted to add very briefly that I
3 really love hearing the diversity of programs and just how
4 it brought different kinds of benefits, engaged with
5 different communities.

6 I had the opportunity, earlier this week to
7 participate in the EPIC Empower Innovation Event. And
8 moderate a panel or a breakout session discussion, which
9 had a primary focus on active listening to and learning
10 from participants from disadvantaged communities and
11 communities that are under-resourced. And how to bring
12 that into our programs and be more effective in this kind
13 of engagement and so it was great to do that.

14 And I continue to be really pleased to see the
15 many ways that the Energy Commission's executive leadership
16 and divisions and obviously the Public Advisor and support
17 from the Public Advisor's Office help us work to meet the
18 Energy Commission's commitment to inclusion, equity,
19 diversity and access. And this report is really good
20 demonstration of that.

21 So thank you, Noemi and team, and with that I
22 think we'll move on to the next item.

23 So Item Number 3 then, CA3 Backup Generating
24 Facility, 21-SPPE-01. So let's see, Eric?

25 MR KNIGHT: Good morning, Commissioners. I'm Eric

51

1 Knight, Manager of the Siting and Environmental Office in
2 the Siting, Transmission, and Environmental Protection
3 Division. With me are Staff Attorney, Lisa DeCarlo, and
4 Staff Project Manager, Eric Veerkamp. We're here to
5 present a proposed order appointing a Committee to oversee
6 a Small Power Plant Exemption proceeding for the proposed
7 CA3 Backup Generating Facility. Next slide, please.

8 The CA3 Backup Generating Facility would consist
9 of 44 2.75 MW diesel-fired generators to provide up to 96
10 MW of emergency backup power to the proposed CA3 Data
11 Center should there be a loss of utility power to the data
12 center from the electrical grid.

13 I'd like to point out what may look like a
14 discrepancy on this slide. With 44 2.75 MW generators it
15 may appear that the (indiscernible) generating capacity of
16 the backup facility would be 121 MW. However, the backup
17 facility includes redundant generators to ensure that the
18 maximum electrical demand of the data center would be met
19 during an emergency. So the maximum load would be 96 MW.

20 The data center would be housed in a nearly
21 470,000 square-foot, four-story building. The project,
22 which includes the backup facility and the data center,
23 would be located at 2590 Walsh Avenue in the City of Santa
24 Clara.

25 The applicant, Vantage Data Centers, filed its

1 Small Power Plant Exemption application on April 12th,
2 2021, seeking an exemption from the CEC's power plant
3 licensing jurisdiction..

4 The SPPE option is only available for thermal
5 power plants between 50 and 100 megawatts, and pursuant to
6 Public Resources Code section 25541, the exemption can only
7 be granted if the CEC finds that "no substantial adverse
8 impact on the environment or energy resources will result
9 from the construction or operation of the proposed
10 facility."

11 Staff is conducting an environmental review of
12 the exemption application and will prepare an environmental
13 analysis document in accordance with the California
14 Environmental Quality Act. Staff's environmental document
15 will analyze the entirety of the project including the
16 demolition of an existing one-story office and warehouse
17 building on the project site. Next slide, please.

18 In conclusion, staff recommends approval of the
19 proposed order establishing a committee to oversee the CA3
20 Backup Generating Facility Small Power Plant Exemption
21 proceeding.

22 Thank you. And we'd be happy to answer any
23 questions you may have.

24 COMMISSIONER DOUGLAS: Thank you, Eric.

25 Is there any public comment on this item?

1 MS. GALLARDO: This is Noemi Gallardo, the Public
2 Advisor. We do not have any public comment on Item 3.

3 COMMISSIONER DOUGLAS: All right, very good then.

4 Let's see here, so then I'll propose that I,
5 Commissioner Douglas, serve as the Presiding Member on this
6 Committee. And Commissioner Gunda, as the Associate Member
7 of the Committee for this proceeding. Commissioner Gunda,
8 do you have any comments and would you be willing to make a
9 motion to this effect?

10 COMMISSIONER GUNDA: Yes, thank you, Commissioner
11 Douglas. I have no comments. I move approval for the
12 Committee as described by Commissioner Douglas to have
13 herself as the Presiding Member and myself as the Associate
14 Member of the Committee.

15 COMMISSIONER DOUGLAS: Thank you very much, and
16 do we have a second?

17 COMMISSIONER MCALLISTER: I'll second.

18 COMMISSIONER DOUGLAS: All right, thank you,
19 Commissioner McAllister, second.

20 So we'll now take the vote. Commissioner
21 McAllister?

22 COMMISSIONER MCALLISTER: Aye.

23 COMMISSIONER DOUGLAS: Commissioner Monahan?

24 COMMISSIONER MONAHAN: Aye.

25 COMMISSIONER DOUGLAS: Commissioner Gunda?

1 COMMISSIONER GUNDA: Aye.

2 COMMISSIONER DOUGLAS: And I vote aye, so that
3 item passes 4-0. Thank you very much.

4 And now turning to Item 4, Integrated
5 Environmental Solutions Virtual Environment Approved
6 Computer Compliance Program for the 2019 Title 24, Part 6
7 Nonresidential, Version 1.0. Let's see, I welcome RJ
8 Wichert to present.

9 MR. WICHERT: Thank you. Good morning,
10 Commissioners. My name is RJ Wichert and I'm a Mechanical
11 Engineer in the Building Standards Office.

12 I'm here to ask for your approval of Integrated
13 Environmental Solutions Virtual Environment Title 24 2019
14 version 1.0, also known as IES VE Title 24, as an
15 alternative calculation method, or ACM, for showing
16 compliance with the 2019 Energy Code for newly constructed
17 nonresidential buildings. Next slide, please.

18 If approved, IES VE Title 24 will expand the list
19 of approved nonresidential third-party software vendors,
20 giving the public three software options, including the
21 public domain software CBECC-Com, to show performance
22 compliance with the Energy Code. Further, approving IES VE
23 Title 24 will simplify the building design and compliance
24 process for design firms already using other components of
25 IES VE during the building design phase. Instead of

1 needing to create multiple building simulation models, at
2 least one for design in IES VE and a second in an approved
3 compliance software like CBECC-Com, firms will be able to
4 create one IES VE model that will work for both design and
5 compliance. Next slide, please.

6 IES VE Title 24 was submitted to the CEC as an
7 alternative nonresidential energy simulation engine to
8 CBECC-Com under the allowances of section 1.1.5 of the 2019
9 ACM Approval Manual. Unlike other third-party software,
10 which use the CBECC-Com simulation engine and ruleset,
11 alternative simulation engines can use a different
12 simulation engine, but must integrate the CBECC-Com
13 compliance manager ruleset in order to produce simulation
14 results accurate to the CBECC-Com software and passing all
15 applicable sensitivity and ruleset tests. Next slide,
16 please.

17
18 Staff reviewed and tested IES VE Title 24 to
19 confirm that the application is in compliance with all
20 requirements of the ACM Approval Manual and is seeking
21 approval of the resolution on this item. Thank you and I'm
22 available to answer any questions you may have.

23 COMMISSIONER DOUGLAS: All right, thank you very
24 much for that presentation is there any public comment on
25 this item.

1 MS. GALLARDO: This is Noemi, the Public Advisor.
2 Yes, it looks like we have one public comment. So that is
3 Liam Buckley on our Verizon line. Liam, a reminder to
4 please restate your name, spell your name. And you will
5 have up to three minutes to make your public comment. I
6 will let you know when your line is open.

7 MR. BUCKLEY: My name is Liam Buckley, L-i-a-m B-
8 u-c-k-l-e-y.

9 MS. GALLARDO: Thank you, Liam. Please continue.

10 MR. BUCKLEY: Hello, Commissioners. On behalf of
11 IES Software, I want to take the opportunity to thank the
12 Energy Commission and the Building Standards Office team
13 for the support they've provided to us throughout the
14 development cycle. And we're looking forward to working
15 with that team again in the future.

16 Our local team in California are similarly
17 looking forward to working with the building design
18 industry in California, to achieve a zero carbon build
19 environment, thank you.

20 MS. GALLARDO: Thank you. This is Noemi, Public
21 Advisor. That is the last comment, Commissioner Douglas.

22 COMMISSIONER DOUGLAS: All right, thank you very
23 much, then.

24 Time for Commissioner discussion and Commission
25 McAllister would you like to start?

1 COMMISSIONER MCALLISTER: Yes, so thank you RJ,
2 for your presentation. It was a really great description
3 of the context here and also I wanted to thank Mr. Buckley
4 and IES for bringing this forward and working with our
5 staff on creating a new additional alternative for folks to
6 comply with the code.

7 And I just wanted to reiterate and highlight
8 something that RJ said, which is you know, we do have a
9 public domain software CBECC-Com that has an engine, a
10 modeling engine that people can use, you know designers,
11 and can use to navigate code compliance. It is so much
12 better for the industry and the marketplace as a whole to
13 have that process integrated within the design software
14 itself. And that's really what IES has done and they built
15 the engine that fits within their broader set of tools.

16 And these are tools that already have a large
17 user base, a relatively sophisticated user base and design-
18 build firms, and you know it's a global enterprise. And so
19 it's really gratifying to have this to this point where we
20 can, if we approve it -- if vote we vote to approve it then
21 give that additional flexibility to folks building in
22 California. So I really wanted to just again thank the
23 staff and IES and looking forward to moving this item.
24 Obviously I support this item.

25 COMMISSIONER DOUGLAS: Thank you, Commissioner

1 McAllister. And obviously anything that helps facilitate
2 compliance with the Building Standards and simplifies, is a
3 huge help and a huge benefit.

4 Commissioner Monahan, any comments?

5 (No audible response.)

6 Commissioner Gunda?

7 (No audible response.)

8 All right, I think we're ready for a motion.

9 COMMISSIONER MCALLISTER: Great, I'll move Item
10 4.

11 COMMISSIONER DOUGLAS: Commissioner Monahan,
12 could you second?

13 COMMISSIONER MONAHAN: I'll second Item 4.

14 COMMISSIONER DOUGLAS: Fantastic, so with that
15 we'll call a vote. Commissioner McAllister?

16 COMMISSIONER MCALLISTER: Aye.

17 COMMISSIONER DOUGLAS: Commissioner Monahan?

18 COMMISSIONER MONAHAN: Aye.

19 COMMISSIONER DOUGLAS: Commissioner Gunda?

20 COMMISSIONER GUNDA: Aye.

21 COMMISSIONER DOUGLAS: Thank you. And I vote in
22 favor as well, so that item passes 4-0.

23 Moving on to Item 5, Energy Conservation
24 Assistance Act Loan Program or ECAA Program. I welcome
25 Matt Jones to present.

1 Thank you, hello Commissioners. My name is Matt
2 Jones and I am a Supervisor with the Renewable Energy
3 Division. I'm here to request your approval of two Energy
4 Conservation Assistance Act, commonly known by the acronym
5 ECAA, loan agreements with the City of Ferndale and the
6 County of Mariposa, and one ECAA-ED loan to the Ravenswood
7 City School District. The ECAA and ECAA-Ed programs provide
8 low-interest loans to public entities for energy-efficiency
9 upgrades. Next slide, please.

10 Benefits to California from ECAA Loans include
11 improved health outcomes, the creation of green jobs, lower
12 utility bills for municipalities and schools, and increased
13 energy efficiency. Next slide, please.

14 The City of Ferndale is proposing to finance an
15 energy project using an ECAA one percent interest loan in
16 the amount of \$203 thousand. The project involves
17 retrofitting old inefficient lighting with efficient LED
18 lighting at one city-owned facility and installing rooftop
19 solar PV systems at two additional city-owned sites. Next
20 slide, please.

21 The County of Mariposa is proposing to finance an
22 energy project using an ECAA one percent loan in the amount
23 of \$2.8 million dollars. The project involves retrofitting
24 old inefficient lighting with efficient LED lighting at
25 eight sites and installing solar PV systems at an

1 additional four sites. Next slide, please.

2 The Ravenswood City School District is proposing
3 to finance an energy project using an ECAA-ED zero percent
4 interest loan in the amount of \$2.9 million. The project
5 involves retrofitting inefficient lighting with new LED
6 lighting at two school sites and installing Solar PV
7 systems at an additional four sites. Next slide, please.

8 Staff has reviewed all of these projects and has
9 determined that they are technically sound. The projects
10 would have significant energy and cost savings.

11 The City of Ferndale project is estimated to save
12 over 77,000 kWh annually and have energy cost savings for
13 the city of over \$14,000 every year.

14 The County of Mariposa's project is estimated to
15 save over 919,000 kWh annually and save the city over
16 \$190,000 every year.

17 The Ravenswood City School District project is
18 estimated to save approximately 963,730 kWh annually and
19 save the District over \$158,000 in energy costs every year.

20 Next slide, please

21 Legal staff found these projects to be exempt
22 from the California Environmental Quality Act. Energy
23 Commission Staff recommend approval of these loans. Thank
24 you for your consideration.

25 This concludes my presentation. If you have any

1 questions, I would be happy to answer them.

2 COMMISSIONER DOUGLAS: Thank you very much for
3 that presentation, Matt.

4 At this point, is there any public comment on
5 Item 5?

6 MS. GALLARDO: This is Noemi, the Public Advisor.
7 There are no public comments on Item Number 5.

8 COMMISSIONER DOUGLAS: All right, let's go to
9 Commissioner discussion and Commissioner McAllister, would
10 you like to start?

11 COMMISSIONER MCALLISTER: Yes, so thanks for that
12 presentation. I think we routinely approving the ECCA
13 program loans, because we know that the staff is evaluating
14 those and does a really good job. And works with a local
15 jurisdictions, whether it's the schools school districts,
16 or the cities and counties to make sure that they check all
17 the boxes of the program, that the project is cost
18 effective and has the right financial profile.

19 So I like seeing these projects that have lots of
20 different end uses and help pushing the ball forward on
21 various fronts so. So I don't have any further comments, a
22 lot of confidence in staff bringing this forward. And I'm
23 happy to support and I can go ahead and move if there are
24 no other comments.

25 COMMISSIONER DOUGLAS: Are there any additional

1 comments?

2 COMMISSIONER MONAHAN: So I just want to say,
3 every time these come up they're like a bright spot in our
4 day. I don't know if it's so for all the Commissioners, but
5 this is actually we're helping local governments, we are
6 helping schools. You know, we're helping all these
7 entities that are struggling, saving them money and making
8 the environment more clean. Like what's not to love about
9 this, though?

10 So just thank you and your team for the hard work
11 on this.

12 COMMISSIONER MCALLISTER: And also if you think
13 about if you look at the actual end uses that are being
14 financed by these by these loans, a lot of them have long-
15 term ties with Energy Commission R&D and LEDs. Obviously
16 we've helped push the market for those and solar. We've
17 helped bring the cost down, and you know, eight-track
18 (phonetic) improvements. All the kinds of various things
19 that ECCA funds, we've done a lot to make those systems all
20 they can be and bring the cost down, to enable programs
21 like this on the hardware side. So there's just a lot to
22 like. It's very, very reaffirming. And we all need that
23 in this day and age, so anyway I'll move Item 5.

24 COMMISSIONER DOUGLAS: Thank you very much.

25 Commissioner Monahan, would you like to second?

63

1 COMMISSIONER MONAHAN: I'll second the item.

2 COMMISSIONER DOUGLAS: Excellent, so let's take
3 the vote. Commissioner McAllister?

4 COMMISSIONER MCALLISTER: Aye.

5 COMMISSIONER DOUGLAS: Commissioner Monahan?

6 COMMISSIONER MONAHAN: Aye.

7 COMMISSIONER DOUGLAS: Commissioner Gunda?

8 COMMISSIONER GUNDA: Aye.

9 COMMISSIONER DOUGLAS: And I support as well, my
10 vote's in favor, so the vote count is 4-0 and the motion
11 passes.

12 Turning now to Item 6, the University of
13 California Davis. I welcome Miki Crowell to present.

14 MS. CROWELL: Good Morning, Commissioners. My
15 name is Miki Crowell and I am an Air Pollution Specialist
16 in the Fuels and Transportation Division. I am here to
17 present an agreement with the Regents of the University of
18 California, Davis Campus to award the \$125,000 contract to
19 study the role of the light-, medium-, and heavy-duty
20 vehicles and infrastructure in a California hydrogen
21 transition. Next slide, please.

22 The demand for hydrogen as a transportation fuel
23 in California is expected to increase based on auto
24 manufacturers' projections of vehicles. And with increased
25 planned investments on medium and heavy-duty vehicles, as a

1 response to the Governor Newsom's Executive Order N-79-20,
2 that set goals that all new passenger cars and trucks sold
3 in California to be zero-emission by 2035. All medium and
4 heavy-duty trucks and buses operated in California to be
5 zero-emission by 2045 everywhere feasible. And all drayage
6 trucks to be zero-emission by 2035.

7 This proposed agreement with UC Davis will study
8 the role of vehicles and infrastructure in a California
9 hydrogen transition and will be part of a larger project
10 that UC Davis is currently undertaking.

11 The larger project will study a future hydrogen
12 system design, scale-up and optimization within California,
13 the benefits this system will have within the state, the
14 costs of developing and operating the system, and policies
15 needed to achieve it.

16 For this larger study, UC Davis will look at a
17 statewide multi-sector hydrogen system, including power
18 generation, building, and other industry sectors.

19 This project has secured funding from various
20 industry stakeholders and research support from other
21 research institutions.

22 The study results from this agreement and the
23 larger project will help shape future policies,
24 solicitations, and projects to support the hydrogen system,
25 which in turn will advance the state towards its air

1 quality and climate change goals. Next slide, please.

2 For this agreement, UC Davis will study vehicle
3 scenarios, location of hydrogen demand and supply, station
4 investment behavior, and impact of demand from the
5 transportation sector.

6 For vehicle scenarios: the project team will
7 explore different light-, medium-, and heavy-duty fuel cell
8 electric vehicle sales scenarios to 2050, and what factors
9 will affect these sales.

10 For location of hydrogen demand and supply the
11 project team will model the transportation system using
12 their California spatial model to analyze where hydrogen
13 demand and generation are likely to be and the distribution
14 system needed to connect them. The impacts of different
15 vehicle scenarios on the number, types, and locations of
16 hydrogen refueling stations will be the focus.

17 For station investment behavior the project team
18 will estimate station costs and investment requirements for
19 different types of hydrogen refueling stations. They will
20 explore station utilization rates needed to achieve return
21 on investments, as well as approaches and policies to
22 attract private investment under different circumstances.

23 For impact of demand from the transportation
24 sector the project team will link the transportation
25 hydrogen demand generated in different scenarios to their

1 modeling of hydrogen supply and infrastructure, to
2 understand what happens to overall costs to build a
3 hydrogen system if the demand from the transportation
4 sector is higher or lower. Next slide, please.

5 Staff recommends approval of this item and adopt
6 staff's recommendation that this action is exempt from
7 CEQA.

8 Staff is available to answer any questions you
9 may have and thank you.

10 COMMISSIONER DOUGLAS: Thank you, Miki.

11 Are there any public comments on this item?

12 MS. GALLARDO: This is Noemi, the Public Advisor.

13 Yes, we do have a public comment, it is Lewis Fulton.

14 Lewis, a reminder to please restate your name, spell your
15 full name, and you have up to three minutes to state your
16 comment. Your line is open, you may begin.

17 MR. FULTON: Yes, I'm Lewis Fulton, L-e-w-i-s F-
18 u-l-t-o-n. I direct the Energy Futures Program at UC
19 Davis, and we are very happy to have this project with the
20 California Energy Commission. And we look forward to
21 working with you on this.

22 As Ms. Crowell said it's part of a larger project
23 and the project overall will be looking at potential
24 development of full hydrogen systems for California,
25 including both transportation and other sectoral demands

1 for hydrogen. And then we're building a set of models on
2 the supply side to try to understand how you would build
3 out the hydrogen system to meet those demands with a
4 spatial and temporal detail.

5 The California Energy Commission project provides
6 us with very important funding to strengthen our
7 characterization of the transportation demands that we may
8 see. And how those could vary and what factors will drive
9 that and also how refueling station economics will play
10 into this and how various policies will interact with all
11 of that.

12 So the policy aspect will be important. We'll
13 want to understand what we can do to get the hydrogen
14 system up and running and become a free standing system,
15 but we need to understand what additional policy support
16 would be needed to do that. And just how big are the
17 hurdles to do that.

18 So that's all I wanted to comment on, but we
19 really look forward to this project with CEC.

20 COMMISSIONER DOUGLAS: All right, well thank you
21 very much for commenting on this item.

22 And at this point we'll move on to Commissioner
23 discussion beginning with Commissioner Monahan.

24 COMMISSIONER MONAHAN: So on this Item Number 6,
25 I have to recuse myself from the discussion and vote of the

1 proposed contract to the University of the Regents, of the
2 University of California on behalf of the UC Davis Campus
3 Institute of Transportation Studies.

4 I'm on the Board of Advisors for the Institute
5 for Transportation Studies. In that role, I do not make
6 governance decisions on behalf of the Institute, but we
7 provide guidance and oversight of the program and it's four
8 branches. Additionally, I do not receive any compensation
9 in any form, including reimbursements for per diem for
10 expenses. So there's no financial interest in which there
11 will be a conflict of interest under the Political Reform
12 or Government Code section 1090.

13 However, in an abundance of caution, I am
14 recusing myself to avoid any perception of a conflict of
15 interest. So I'm going to step away from my seat. I'll
16 mute myself, but I'll leave my video on and I'll return
17 when the Public Advisor contacts me.

18 COMMISSIONER DOUGLAS: All right, thank you
19 Commissioner Monahan. I will give her a moment to move
20 away from the video. There we go.

21 All right, so Commissioners, does anyone else
22 have any comments they'd like to make on this item or
23 question?

24 Commissioner Gunda?

25 COMMISSIONER GUNDA: Yeah, just a thank you for

1 the presentation. And again I just wanted to acknowledge
2 what an important conversation hydrogen is moving forward
3 to really understand the utility of hydrogen both in the
4 transportation -- but as I understand the larger project at
5 UC Davis also includes a study on the grid reliability and
6 kind of the opportunities of hydrogen for broader grid
7 needs. And so just looking forward to this project and
8 look forward to listening to the results (indiscernible),
9 so thank you.

10 COMMISSIONER DOUGLAS: Thank you.

11 Any other comments on this?

12 COMMISSIONER MCALLISTER: Yeah, just quickly. I
13 mean along those same lines, you know, this is an area
14 broadly that we need to get kind of jump-started in
15 California to understand, in particular with hydrogen it's
16 going to need probably or very likely some kind of an
17 integrated approach across sectors. Including as
18 Commissioner Gunda said, power sector potential
19 applications. But also industrial and thermal in addition
20 to the transportation. And so having an initiative that
21 that is looking broadly, and that we can provide specific
22 funding for, it really makes a lot of sense kind of to do
23 that in earnest.

24 And this hydrogen conversation is turning out to
25 be a pretty integrated one, so I think all of us across the

1 dais here will have interest in bits and pieces of it. And
2 so it's really nice to have some integrated thinking moving
3 forward, so I'm also supportive of this item.

4 COMMISSIONER DOUGLAS: Yeah, and I agree with
5 both of your comments very much. And I'm in strong support
6 as well.

7 Let me ask, Commissioner Gunda, would you like to
8 make a motion?

9 COMMISSIONER GUNDA: Yeah, I would like to move
10 Item 6.

11 COMMISSIONER DOUGLAS: Thank you.

12 And Commissioner McAllister?

13 COMMISSIONER MCALLISTER: Second.

14 COMMISSIONER DOUGLAS: All right, we have a
15 motion and a second, so we'll move on to the vote.

16 COMMISSIONER DOUGLAS: Commissioner Gunda?

17 COMMISSIONER GUNDA: Aye.

18 COMMISSIONER DOUGLAS: Commissioner McAllister?

19 COMMISSIONER MCALLISTER: Aye.

20 COMMISSIONER DOUGLAS: And I vote aye as well.

21 So this item passes 3-0, with one recusal.

22 And Noemi, if you could bring Commissioner
23 Monahan back, that would be very helpful.

24 MS. GALLARDO: Will do, I will let her know.

25 COMMISSIONER DOUGLAS: Thank you.

1 In the meantime, when Commissioner Monahan
2 returns, we will start Item 7, Zero Emission Transit Fleet
3 Infrastructure Deployment. And let's see, Esther Odufuwa,
4 did I say that right? Well, wonderful. Well welcome, and
5 it looks like Commissioner Monahan is back, so go ahead.

6 MS. ODUFUWA: Good morning, Commissioners. My
7 name is Esther Odufuwa, Energy Commission Specialist with
8 the Fuels and Transportation Division. Today, we're
9 seeking approval today for two agreements resulting from
10 the Zero-Emission Transit Fleet Infrastructure Deployment
11 Solicitation.

12 In July 2020, staff released this solicitation,
13 which announced the availability of up to \$20 million to
14 fund the electric vehicle charging or hydrogen refueling
15 infrastructure that is needed to support the large-scale
16 conversion of transit fleets to zero-emission vehicles.

17 Under this solicitation, four projects were
18 proposed for award, and the infrastructure that will be
19 deployed as a result is expected to support more than 230
20 zero-emission buses. Today I will be presenting two
21 hydrogen refueling infrastructure transit agreements, while
22 two electric charging infrastructure transit agreements
23 will be presented at a later Business Meeting. Next slide,
24 please.

25 The proposed projects will reduce greenhouse

1 gases and motor vehicle emissions, providing air quality
2 benefits to transit riders and the communities served, and
3 these are often disadvantaged and low-income communities
4 and priority populations. The proposed projects will
5 demonstrate large-scale infrastructure projects,
6 resiliency, and also provide best practices and key lessons
7 learned for future replicability at other transit agencies.

8 They will also help other California transit
9 agencies understand the technology that may work best for
10 their applications, their routes, and their environment,
11 which ultimately accelerate meeting the California Air
12 Resources Board's Innovative Clean Transit requirements of
13 transitioning California's entire transit fleet to zero-
14 emission by 2040. Next slide, please

15 The first agreement is with North County Transit
16 District. The goal of this agreement is to design and
17 construct a hydrogen fueling station that will have a
18 capacity for up to 50 fuel cell buses in the City of
19 Oceanside.

20 North County Transit District plans to deploy an
21 initial 25 fuel cell buses by 2025 with 25 more planned for
22 the future. North County Transit District's planned
23 infrastructure deployment will allow for more buses to be
24 fueled in the future without any upgrades needed to the
25 station and is expected to decrease future costs by

1 constructing a higher capacity station now.

2 The benefits of the proposed project will extend
3 to several communities beyond the immediate project site,
4 which is located in a low-income community. Other project
5 benefits include increased public health, safety, and
6 economic development outcomes for the larger community.

7 Next slide, please

8 The second project is with Sunline Transit. The
9 goal of this agreement is to expand Sunline's existing
10 heavy-duty hydrogen fueling infrastructure to include a new
11 stand-alone liquid hydrogen station that will support
12 current and future transit fueling needs.

13 The infrastructure that will be deployed will be
14 used to fuel 17 buses in addition to the 16 fuel cell buses
15 currently in the fleet. This infrastructure will
16 ultimately be capable of fueling a total of 96 fuel cell
17 electric buses when SunLine's transit fleet is fully
18 transitioned to zero emission buses.

19 There are 7 disadvantaged communities within
20 SunLine's service territory. And SunLine is also within
21 Riverside County, which according to the National Ambient
22 Air Quality Standards is in a non-attainment area.
23 SunLine's bus service is critical to these communities
24 because it is relied upon by community members for
25 essential travel to workplaces, medical appointments, and

1 government agencies. Next slide, please

2 Staff recommends approval of these two grant
3 awards and adoption of staff's determination that the
4 projects are exempt from CEQA.

5 Thank you all for your time and consideration of
6 these items. I'm available for any questions.

7 Additionally, I believe the CEO/General Manager of Sunline
8 Transit, Lauren Skiver, is on the call to provide public
9 comments.

10 Thank you very much. That concludes my
11 presentation.

12 COMMISSIONER DOUGLAS: Thank you very much for
13 that presentation.

14 And Noemi, do we have public comment?

15 MS. GALLARDO: Yes, we do. Esther's correct, we
16 have Lauren on the line. Lauren, a reminder to please
17 restate your name, spell your full name. You have up to
18 three minutes. Your line is open, you may begin.

19 MS. SKIVER: Thank you, Lauren Skiver, L-a-u-r-e-
20 n S-k-i-v-e-r, CEO and General Manager for Sunline Transit
21 Agency in the Coachella Valley.

22 I first want to say a big thank you to the
23 California Energy Commissioners and staff for their
24 commitment to funding and these projects awards that
25 further the state's climate goals. This award is a key

1 element of Sunline's overall zero emission goals, and is
2 moving forward hydrogen technology and infrastructure, not
3 just for public transit but for fleet operators within
4 California.

5 This project will allow Sunline to further
6 demonstrate the reality of what's possible, which we've
7 been doing for many decades. And lay the foundation for
8 other operators to see what can work and how we can help
9 them achieve those goals.

10 We look forward to working with the CEC teams.
11 They've been amazing and always have been amazing to work
12 with, and stand ready to deliver the next paradigm of
13 hydrogen infrastructure for transportation. And again,
14 this is for both private and public fleet operators and
15 will be the new paradigm of the future in hydrogen
16 technology, thank you.

17 COMMISSIONER DOUGLAS: Thank you for those
18 comments.

19 And Noemi, any other public comments?

20 MS. GALLARDO: No more comments on Item Number 7.

21 COMMISSIONER DOUGLAS: All right, thank you very
22 much, then let's move on to Commissioner discussion.

23 Commissioner Monahan, would you like to start.

24 COMMISSIONER MONAHAN: Yeah. Well, I want to
25 thank Esther for that great presentation. And you know

1 coming on the on the heels of the UC Davis hydrogen study
2 that we're proposing, I think it tells a story about how we
3 are continuing to explore the role of hydrogen. And I
4 think, particularly in the medium and heavy-duty arena
5 where batteries just may not be able to meet all the needs.

6 And I want to highlight both these transit
7 districts are leaning in to this challenge, especially at a
8 time when transit districts across the country are really
9 struggling. And yet, even as ridership has been flagging
10 because of COVID-19 there's a recognition going forward
11 that ridership will increase. And that attentiveness to
12 zero emissions transportation is really important.

13 I'm interested also in the fact that Sunline has
14 been a longtime leader in clean transportation, especially
15 on the hydrogen fuel cell front and really an early
16 adopter. And the fact that they're also exploring -- that
17 they're using our grant for a liquid hydrogen delivery
18 system is potentially -- I don't know if transformation
19 maybe is too strong, but it's just that that storage is an
20 issue as we all know, with hydrogen. It's very small and
21 gaseous and it likes to leak.

22 And so figuring out how do we deliver it and
23 exploring different solutions for that, I think is really
24 important. So I'm strongly supportive of these grants and
25 strongly supportive of this idea that we need to help

1 transit districts meet the CARB regulation and explore both
2 battery electric and hydrogen fuel cell electric solutions
3 to a zero emission transportation future.

4 COMMISSIONER DOUGLAS: Fantastic, well thank you
5 Commissioner Monahan.

6 Any additional comments or questions,
7 Commissioner McAllister or Commissioner Gunda?

8 COMMISSIONER GUNDA: Yeah, Commissioner Douglas,
9 thank you. I just wanted to also thank Esther for her
10 presentation. I also want to just thank Commission Monahan
11 for her leadership and vision on this, on the investments
12 in the medium and heavy duty transportation sector.

13 I definitely recognize also apart from the carbon
14 emissions at the positive impact on the disadvantaged
15 communities in terms of hydrogen fuel cell investments. So
16 just thankful to the entire team, the FTD team, for being
17 very thoughtful in kind of going through these
18 solicitations and planning for those investments, and thank
19 you, Commissioner Monahan, for your leadership.

20 COMMISSIONER DOUGLAS: Thank you very much,
21 Commissioner Gunda.

22 So at this point let me see if we can get a
23 motion, Commissioner Monahan?

24 COMMISSIONER MONAHAN: I move Item 7. I think
25 we're on 7?

1 COMMISSIONER DOUGLAS: Yes, perfect.
2 Commissioner Gunda, would you like to second?
3 COMMISSIONER GUNDA: Absolutely, second.
4 COMMISSIONER DOUGLAS: All right, so we'll move
5 on the vote then, Commissioner Monahan?
6 COMMISSIONER MONAHAN: Aye.
7 COMMISSIONER DOUGLAS: Commissioner Gunda?
8 COMMISSIONER GUNDA: Aye.
9 COMMISSIONER DOUGLAS: Commissioner McAllister?
10 COMMISSIONER MCALLISTER: Aye.
11 COMMISSIONER DOUGLAS: And I vote in favor as
12 well, so the vote count is unanimous, 4-0, and the motion
13 passes.
14 We'll move on now -- thank you, Esther, we'll
15 move on now to Item 8, Skyven Technologies, Incorporated.
16 And the presentation will be I believe Mike Hunt.
17 (phonetic)
18 No, it is not Mike Hunt, sorry, go ahead.
19 MR. LASAM: Good morning, Commissioners.
20 COMMISSIONER DOUGLAS: Baldomero Lasam, good
21 morning.
22 MR. LASAM: Good morning. My name is Baldomero
23 Lasam and I'm a mechanical engineer in the Energy Research
24 and Development Division. Today, I'm presenting one
25 recommended award from the R&D solicitation on Solar

1 Heating, Cooling and Power for Industrial and Commercial
2 Applications. Next slide, please.

3 The objective of this R&D solicitation and the
4 project recommended today is to reduce natural gas
5 consumption from the industrial and commercial sectors by
6 advancing a solar thermal system capable of delivering
7 process heat and hot water, as well as refrigeration and
8 electricity. Developing and deploying solar thermal
9 technologies targeting the industrial and commercial
10 sectors will reduce greenhouse gas emissions. The proposed
11 award will help inform future deployment strategies by
12 providing data on system performance and cost-
13 effectiveness. Next slide, please.

14 This graph shows the natural gas consumption by
15 various sectors in California. The industrial sector
16 accounts for more than one-third of the total natural gas
17 consumption and roughly one-fourth of the state's
18 greenhouse gas emissions. The vast majority of this
19 consumed natural gas, which is about 85 percent, is used
20 for process heat and boiler applications in the
21 manufacturing industry. The commercial sector additionally
22 accounts for 12 percent of natural gas consumption. Next
23 slide, please.

24 The proposed project with Skyven Technologies
25 will develop and pilot-test a high concentration

1 photovoltaic and thermal system for solar combined heat and
2 power or CHP, that is efficient, reliable, and low-cost.
3 The system is expected to produce up to 20 percent more
4 electrical power per unit collector area than state-of-the-
5 art non-concentrating photovoltaic systems, while
6 simultaneously capturing medium temperature heat. Each
7 solar CHP system developed under this project will have a
8 rated capacity of 500 watts electricity and 750 thermal
9 watts, with the potential to avoid 750 pounds of carbon
10 dioxide emissions annually.

11 Deploying the proposed solar CHP technology in
12 the industrial and commercial sectors, is expected to
13 reduce dependence on natural gas and reduce the amount of
14 electrical power sourced from the grid, including during
15 times of constraint. The technology will be demonstrated
16 and deployed at the Water, Energy and Technology Center at
17 California State University at Fresno. Next slide, please.

18 In conclusion, staff recommends approval of this
19 grant award and adoption of staff's determination that this
20 project is exempt from CEQA. Thank you, and I'm happy to
21 answer any questions.

22 COMMISSIONER DOUGLAS: All right, thank you very
23 much.

24 Do we have any public comments on Item 8?

25 MS. GALLARDO: This is Noemi, the Public Advisor.

1 Yes, we do. It looks like we have one public comment
2 that's Inbal Nachman. Inbal, a reminder to please restate
3 your name, spell your full name and you have up to three
4 minutes to speak. Your line is open, please begin.

5 MS. NACHMAN: Hi, everyone. My name is Inbal
6 Nachman, I-n-b-a-l N-a-c-h-m-a-n.

7 MS. GALLARDO: Please proceed.

8 MS. NACHMAN: Thank you. Hello, Commissioners,
9 on behalf of Skyven Technologies, I would like to thank the
10 California Energy Commission for this opportunity to
11 enhance clean energy innovation and development in
12 California's markets.

13 A key barrier to achieving the state's statutory
14 energy goals is a lack of renewable technologies that can
15 produce thermal energy at a cost that is competitive with
16 natural gas while creating financial returns that are
17 competitive with traditional non-concentrating solar
18 photovoltaics.

19 Skyven's original vision for the company was to
20 create a concentrated photovoltaics thermal system, due to
21 their promising potential to pave the way for the
22 penetration of solar energy into industrial facilities.
23 This grant will provide Skyven the ability to build on our
24 already existing solar thermal system and bring to life,
25 our original vision.

1 Thank you again.

2 COMMISSIONER DOUGLAS: All right. Thank you very
3 much for participating in the meeting and for your
4 comments.

5 Noemi, no other public comments correct?

6 MS. GALLARDO: That's correct, Commissioner
7 Douglas, no other comments for Item 8.

8 COMMISSIONER DOUGLAS: All right, well we'll move
9 on then to Commissioner discussion. Commissioner
10 McAllister, would you like to start us off?

11 COMMISSIONER MCALLISTER: Yes, just really
12 briefly. And first I wanted to just point out that the
13 reason I'm sort of leading off on the R&D items today is
14 that the Chair who's actually the Lead Commissioner -- I'm
15 the Associate on R&D -- would normally be kicking things
16 off. So I'm playing a more prominent role than maybe
17 normal on these for this meeting.

18 But I'm so excited to see some industrial thermal
19 applications that are finding non-fossil pathways. That is
20 a key, key really critical gap that we have. And obviously
21 our industrial base drives much of our economy and, as you
22 saw in the presentation, you know is responsible for a
23 significant portion of our natural gas combustion in the
24 state. And so we need to find alternatives to that at all
25 temperatures and for all processes to the extent we can.

1 And so it's really great to see this project
2 that's both generating electricity and producing thermal
3 energy for industrial applications, so really excited to
4 see how this proceeds and very supportive.

5 COMMISSIONER DOUGLAS: Thank you very much.

6 Commissioner Monahan, any comments or
7 Commissioner Gunda?

8 COMMISSIONER GUNDA: I just want to go -- sorry
9 just want to echo Commissioner McAllister's comments.
10 Thank you, Baldomero, for your presentation.

11 I think figuring out pathways to decarbonize the
12 industrial sector is so important moving forward, so thank
13 you for this project's investment and focus on that. Thank
14 you.

15 COMMISSIONER DOUGLAS: Absolutely, and I strongly
16 agree that as well. It's really exciting to see projects
17 that can help the industrial sector decarbonize as we move
18 forward. Let's move on here to a motion.

19 Commissioner McAllister, would you be willing to
20 make a motion?

21 COMMISSIONER MCALLISTER: Yes, and I wanted to
22 also just thank Baldomero for the presentation, and the
23 commenter as well. It's very exciting, so I will move Item
24 8.

25 COMMISSIONER DOUGLAS: Super, Commissioner Gunda,

1 would you like to second?

2 COMMISSIONER GUNDA: Absolutely, I second the
3 item.

4 COMMISSIONER DOUGLAS: All right, we'll move on
5 to the vote then.

6 Commissioner McAllister?

7 COMMISSIONER MCALLISTER: Aye.

8 COMMISSIONER DOUGLAS: Commissioner Gunda?

9 COMMISSIONER GUNDA: Aye.

10 COMMISSIONER DOUGLAS: Commissioner Monahan?

11 COMMISSIONER MONAHAN: Aye.

12 COMMISSIONER DOUGLAS: And I vote in favor as
13 well, so this item passes 4-0.

14 We'll go on now to Item 9, AgMonitor
15 Incorporated, Anish Gautam.

16 MR. GAUTAM: Thank you. Good morning,
17 Commissioners. My name is Anish Gautam. I am an electrical
18 engineer in the Energy Efficiency Research Office.

19 Now, California is home to vibrant and diverse
20 agricultural community valued at over \$50 billion, growing
21 and processing over 400 commodities from over 70,000 farms
22 that collectively irrigate 8 million acres in California
23 that we estimate has a agricultural pumping load of 4GW,
24 most during the critical summer months.

25 The agricultural sector continues to implement

1 energy and water efficiency measures. However, demand
2 flexibility from agricultural irrigation pumps has largely
3 been untapped. But can contribute a significant share of
4 the needed demand flexibility to support the transition to
5 a reliable and affordable zero-carbon electricity future.
6 Next slide, please.

7 AgMonitor's has developed a Software-as-a-Service
8 platform for California's growers using smart-meter data
9 with big data analytics to help growers know how much
10 energy and water they are using. And then providing
11 insights into ways to reduce their overall usage to lower
12 electricity costs, increase grid reliability, and reduce
13 greenhouse gas emissions by shifting our operations to
14 utilize as much renewable sources as possible. Next slide,
15 please.

16 As part of this project, we will leverage the
17 technology developed and tested under a recently completed
18 EPIC project, where we showed the energy, water and cost
19 savings that can be achieved by using AgMonitor's software
20 on (indiscernible) farms.

21 As part of this project, we will add new features
22 to the software to allow the permanent shift of peak
23 irrigation loads during 5:00 to 8:00 p.m. hours into non-
24 peak hours. So essentially moving 3 hours per day over 5
25 days for a total of 15 hours per week during the growing

1 season.

2 This project will be implemented on 10,000 acres
3 in PGE and SCE territory, and shift at least 3MW by August
4 of this year and a full 7MW by end of next year. The
5 project also has match funding. Next slide, please.

6 Staff recommends approval of this item as well as
7 staff's determination that this action is exempt from CEQA.
8 This concludes the presentation. Thank you so much for
9 your time and I am available to answer any questions you
10 may have.

11 COMMISSIONER DOUGLAS: Thank you. Thank you,
12 Anish.

13 Do we have public comment on this item?

14 MS. GALLARDO: This is Noemi, the Public Advisor,
15 no public comments on Item Number 9.

16 COMMISSIONER DOUGLAS: All right, thank you.
17 Let's move on to Commissioner discussion and Commissioner
18 McAllister, could you get us started?

19 COMMISSIONER MCALLISTER: Yeah, happy to kick off
20 briefly. Thanks, Anish, for that presentation. That was
21 terrific and again this is another one of these areas that
22 we're kind of embarking upon in earnest. Load flexibility
23 generally, and certainly as it applies to the agricultural
24 sector, is another place that we know now that it will
25 provide a nice part of the solution for underpinning

1 reliability and decarbonization. And help us optimize cost
2 in the electric grid going forward.

3 I want to acknowledge Commissioner Gunda for his
4 leadership in this area, really seeking out different
5 flexibility possibilities to underpin the reliability of
6 the state.

7 And I just think pumping, there are a few loads
8 that are that are easily made to be variable speed and have
9 storage associated with them. In the case of water,
10 obviously, you know you can store water, you can you can
11 often pump. You have some flexibility as to when you pump.
12 And so those are loads that are really ripe for helping to
13 manage load, to help reliability when we need it, either
14 routinely every day or when there's an event that limits
15 our capacity in other areas.

16 So I think even in this case, you know, possibly
17 with frequency regulation, voltage regulation, things like
18 that. So it's really nice to see these cloud-based
19 resources emerging to help make the cost accessible to
20 really all participants. And really bring California's
21 technical knowhow to the fore to help us manage our grid in
22 the digital age.

23 So I'm really excited about this project and
24 thanks again, Anish, for the presentation.

25 COMMISSIONER DOUGLAS: And thank you,

1 Commissioner McAllister.

2 And I think I will go to Commissioner Gunda next
3 for comments, please.

4 COMMISSIONER GUNDA: Yeah, as the Lead -- thank
5 you, Commissioner Douglas. A wonderful presentation,
6 Anish, thank you for that.

7 And I just want to echo Commissioner McAllister
8 his comments. I think that we have been more and more kind
9 of coming together and thinking through in an integrated
10 fashion the opportunities with load flex across a variety
11 of sectors. So I'm just really grateful for R&D's focus on
12 figuring out the ag sector and the opportunity there in
13 demand flexibility.

14 So just thank you for all the work that R&D is
15 doing and the wonderful briefings I've been getting in
16 terms of vision and thoughts behind this. So I think
17 you'll look forward to voting on this item.

18 COMMISSIONER DOUGLAS: Thank you.

19 Commissioner Monahan, any comments?

20 COMMISSIONER MONAHAN: Well, a comment and a
21 question, because I was struck by the low-hanging fruit
22 aspect of this. And I'm wondering, Anish, have we
23 quantified the savings in terms of just reduced energy
24 costs? Is there is there any economic implications for the
25 load shift that currently exists or is that there's a gap

89

1 in the -- I don't actually know how water is -- electricity
2 is funded. So (indiscernible) per hour.

3 MR. GAUTAM: There is going to be monetary
4 settings, because a lot of it is going to be a demand
5 charges that happens during those times. So right now,
6 from our previous project, what we're seeing is this
7 project is coming at a perfect time. The previous project
8 did not address the peak demand. We listed irrigation or
9 whatever the (indiscernible) wanted to it. But we saw that
10 the rates changed, that everyone kept asking if the demand
11 cost is a big cost now. It didn't use to be, but now it's
12 going to be something that we have to think about over the
13 year. And if you can do things to change your operations,
14 without affecting the crops and the yield that's a big win.

15 So this would not be possible without the
16 previous project that's been done with AgMonitor where we
17 established the entire ecosystem of a software that allows
18 them to see all aspects from pumping to the crops yield,
19 and in the (indiscernible) what that means in terms of the
20 bottom line.

21 So this puts together everything from the energy
22 efficiency aspect of it and pumps, the water costs, and
23 then now the need market and demand costs. That wasn't
24 really there but now is a part of it (indiscernible).

25 I hope that answers your questions, if not we can

1 definitely talk more later on it.

2 COMMISSIONER MONAHAN: Well, maybe we can talk
3 more later on. This is a complicated equation about how do
4 we set the right economic signals and that's really the PUC
5 for some territories, but you know this. And we're seeing
6 in the transportation side that these cottage industries
7 are cropping up just to figure out how to save industries
8 money through software. And through these lenses how do
9 you either change the load through flexible programs like
10 this? Or we're trying to increase electricity use for some
11 sectors like transportation, but want to do it in a
12 thoughtful way that supports the grid.

13 So we just seeing a lot of like cross pollination
14 between all these efforts to figure out how do we electrify
15 more and do it smarter to help the grid and save people
16 money. At the end of the day, you want to save people
17 money for doing the right thing so it's a really
18 interesting project, thank you.

19 MR. GAUTAM: Thank you.

20 COMMISSIONER MCALLISTER: Yeah, I might just
21 chime in -- oh, sorry.

22 COMMISSIONER DOUGLAS: No, go ahead.

23 COMMISSIONER MCALLISTER: Okay, I don't know if
24 Anish, you had a response to Commissioner Monahan. If not,
25 I just wanted to just make another comment.

1 MR. GAUTAM: Please, go ahead.

2 COMMISSIONER MCALLISTER: Great, yeah I mean it
3 strikes me if we think broadly about this, about the
4 agriculture sector -- and perhaps R&D is already having
5 some of these conversations internally -- but you know
6 remote sensing is increasingly used in agriculture at scale
7 to know exactly when to harvest a given field, or whatever.
8 And to monitor plant health as you said, you suggested,
9 Anish.

10 And we also in California have a whole bunch of
11 irrigation districts that are utilities, that have large
12 loads. That really have a lot of autonomy in terms of how
13 they manage their own their own electric systems. They may
14 or may not be part of the CAISO. They have lot of
15 independence and they do their own ratemaking. And so I
16 wonder, you know if we could maybe step back and take an
17 integrated view about how we can help optimize and work
18 even more closely, hand in hand with the large agricultural
19 producers and others in that sector to see what the
20 opportunities might be more broadly in energy management.

21 COMMISSIONER GUNDA: Commissioner Douglas, are
22 you okay if I just make a quick comment?

23 COMMISSIONER DOUGLAS: Yes, please.

24 COMMISSIONER GUNDA: Now, I just want to
25 recognize the important question that Commissioner Monahan

1 raised and Commissioner McAllister's thoughts on this. I
2 mean, the whole idea around the load flexibility, I think
3 there's a lot of leadership at the CEC -- and thank you to
4 Commissioner McAllister for his work on LMS.

5 I think you have this opportunity from the
6 pricing, from just telemetry sectors. And then how do you
7 gather all this information and then get to a 10,000 foot
8 level for resource planning? I think it's becoming very
9 integrated, very complex. And I think that the kind of
10 questions that are being raised on the dais are extremely
11 important to tackle as we move forward to think about this
12 comprehensively from an economics, and now from technology
13 and all sorts of things. So thank you, Commissioner
14 Monahan, for raising that. And Commissioner McAllister,
15 for your leadership too.

16 COMMISSIONER DOUGLAS: All right, any other
17 discussion on this item? Obviously it's a really important
18 topic and a really big opportunity for us as a state. Let
19 me see if we can get a motion, Commissioner McAllister?

20 COMMISSIONER MCALLISTER: Yes, I will move Item
21 9.

22 COMMISSIONER DOUGLAS: All right, Commissioner
23 Gunda, would you like to second?

24 COMMISSIONER GUNDA: Absolutely, second Item 9.

25 COMMISSIONER DOUGLAS: All right, we'll go to the

1 vote then.

2 Commissioner McAllister?

3 COMMISSIONER MCALLISTER: Aye.

4 COMMISSIONER DOUGLAS: Commissioner Gunda?

5 COMMISSIONER GUNDA: Aye.

6 COMMISSIONER DOUGLAS: Commissioner Monahan?

7 COMMISSIONER MONAHAN: Aye.

8 COMMISSIONER DOUGLAS: And I vote aye as well, so

9 this item passes 4-0. Thank you very much.

10 And we'll turn now to Item 10, Bringing Rapid
11 Innovation Development to Green Energy, Michael Ferreira.

12 MR. FERREIRA: Good morning, Commissioners. My
13 name is Michael Ferreira and I work in the Energy Research
14 and Development Division. I'm here today seeking approval
15 for two new grant agreements that resulted from our BRIDGE
16 2020 solicitation.

17 BRIDGE is one of a series of programs we've
18 established to support clean energy entrepreneurs, with
19 this funding opportunity having the specific purpose of
20 bridging the gap between public and private funding
21 opportunities. Next slide, please.

22 One main benefit of BRIDGE is advancing the clean
23 energy economy by funding promising clean energy
24 technologies that can enable the transition away from
25 fossil fuels. Some of the specific benefits of the

1 agreements being discussed today, include improved grid
2 resilience and reliability through reduced peak demand as
3 well as technologies that will enable electrification of
4 the grid. Next slide, please.

5 The first agreement is with Stasis Energy Group,
6 who will develop their thermal energy storage system
7 utilizing bio-based phase change materials. Peak energy
8 periods, which are currently 4:00 to 9:00 p.m., is when
9 electricity is most expensive and emits the most greenhouse
10 gases. And in California, HVAC is the largest single
11 contributor to peak energy loads, with the equipment often
12 being old and inefficient.

13 The thermal energy storage system being developed
14 in this project directly addresses the challenge of
15 reducing peak energy demand by storing cooling energy
16 during normal HVAC operations and releasing the energy
17 during peak periods. The product can be easily and
18 economically installed, or retrofitted into existing
19 packaged HVAC systems to provide a cost-effective
20 alternative to high-priced unit removal and replacement.

21 With this funding, Stasis will install their
22 Thermal Energy Storage System in 10 commercial buildings
23 and demonstrate and improve the product's ability to shift
24 electricity use out of peak periods. Next slide, please.

25 The second agreement is with EPC Power

1 Corporation to develop and optimize a DC-DC power
2 conditioning system to enable use of 2nd life EV batteries
3 in grid storage applications.

4 As an increasing number of batteries are
5 decommissioned from the transportation sector, they can be
6 repurposed for stationary applications at lower costs than
7 new batteries. However, achieving lower costs requires
8 improvements to power electronics, storage system designs,
9 and systems engineering to successfully scale product
10 offerings while meeting the strict reliability and safety
11 requirements demanded by the grid-tied stationary energy
12 storage sector.

13 EPC has developed key power electronics, controls
14 and cycling management technology that mitigates used
15 battery imbalances into a uniform state-of-health, to
16 achieve product reliability, and warrantied value. EPC has
17 incorporated these advancements into an initial design
18 concept called Modular Assembly Battery units, which are
19 capable of integrating multiple used battery form factors.

20 This project will develop the power electronics
21 portion into an economically viable solution for
22 integration into the Modular Assembly Battery unit and
23 evaluate the energy savings during a demonstration at an
24 existing power plant facility in San Joaquin. Next slide,
25 please.

1 Staff recommends approval of these two grant
2 agreements and staff's findings that these projects are
3 exempt from CEQA.

4 I believe Nick Brown or Rob Morton from Stasis
5 Energy Group and Allan Abela from EPC, are on the line and
6 would like to comment. And I am also available to answer
7 any questions. Thank you.

8 COMMISSIONER DOUGLAS: All right, well, thank you
9 very much.

10 Let's move on to public comment then, Noemi?

11 MS. GALLARDO: Yes, Michael's right, we do have a
12 couple of folks on the line here. So we'll start out with
13 Allan. Allan, a reminder to please restate your name,
14 spell your full name, you have up to three minutes. Your
15 line is open, you may begin.

16 MR. ABELA: Thank you, Commissioners. My name is
17 Allan Abela, A-l-l-a-n A-b-e-l-a and I'm with EPC Power.
18 I'm the Chief Commercial Officer and the Executive Vice
19 President, and also one of the cofounders. EPC Power was
20 founded in 2010, actually with a CEC grant. So thanks
21 again to all the support we've received over the years.
22 We're approaching almost 100 employees and manufacturing
23 exclusively in San Diego County, so all of that investment
24 is really gone to good work.

25 For this upcoming project we will be partnering

1 with Smartville, Inc a specialist in electric vehicle
2 batteries repurposing. Together we will develop an
3 optimized system capable of integrating multiple used
4 electric vehicle batteries into a safe, reliable and
5 economic battery energy storage system. We will develop
6 and validate our system at a commercial facility as said in
7 San Joaquin.

8 We're excited to partner with the CEC on this
9 upcoming project, and thank you for your time. I'm happy
10 to answer any questions you may have.

11 COMMISSIONER DOUGLAS: Thank you, very much.

12 Go ahead, Noemi.

13 MS. GALLARDO: I'm sorry to talk over you,
14 Commissioner Douglas. We have a second public commenter.
15 This is Nick. Nick, a reminder to please restate your
16 name, spell your full name, and you have up to three
17 minutes. Your line is open, you may begin.

18 MR. BROWN: Thank you. I'm Nick Brown, N-i-c-k
19 B-r-o-w-n, with Stasis Energy Group. Good afternoon,
20 Commissioners and Deputy Director Lauri ten Hope. I'll be
21 managing the BRIDGE project together with Stasis Energy
22 Group's President, Rob Morton.

23 And I wanted to use my time today to share our
24 perspective as clean tech entrepreneurs, because we feel
25 the state and the CEC have done a remarkable job of

1 building a clean tech ecosystem. One that rewards
2 initiative and high potential inventions, but one that also
3 requires performance and demands accountability. And
4 Stasis Energy Group has benefited greatly from the CEC
5 support and the cleantech ecosystem, including CalSEED,
6 Cleantech Open, CalTestBed, the incubators and now BRIDGE.

7 Our technology as Michael said, is a thermal
8 storage and load management solution that reduces peak
9 summer cooling demand by 60 percent. And shifts peak
10 energy consumption and from peak to off-peak periods. And
11 we heard you loud and clear about the focus on equity, and
12 so our goals are to reduce light day stress on the grid,
13 but also provide ratepayer benefits. Especially in
14 disadvantaged communities, including lower energy bills and
15 reduce greenhouse gas emissions. In fact, if installed on
16 just 10 percent of California's RTUs, we'd eliminate the
17 need for one 500 megawatt natural gas power plant.

18 So our BRIDGE demonstration project specifically
19 targets disadvantaged communities, low-income communities
20 like Fresno and Pomona and Irwindale and Compton,
21 Riverside. So thanks for the opportunity to further
22 development showcase our first-of-its-kind technology.

23 MS. GALLARDO: Thank you.

24 This is Noemi. Commissioner Douglas, that was
25 the last comment on Item 10.

1 COMMISSIONER DOUGLAS: Fantastic. Thank you to
2 the commenters.

3 And let's move on to Commissioner discussion,
4 Commission McAllister, could you start us off?

5 MS. GALLARDO: Commissioner, you're muted on the
6 screen.

7 COMMISSIONER MCALLISTER: Oh, sorry about that.
8 It was bound to happen eventually.

9 Thank you, Michael, I really appreciate the
10 presentation. And, you know, I think we're seeing such
11 quality proposals, projects come forward today. It's just
12 really there's a lot to talk about with all of them, and
13 just the innovation that as a group they're showing and no
14 exception on Item 10 here.

15 You know thermal energy storage, we've already
16 talked about that a little bit. And storage is one of the
17 keys. It's kind of the skeleton key in a way of, you know,
18 unlocking potential for reliability in the decentralized
19 and distributed and renewable grid.

20 So anyway, these two projects do that well and
21 I'm very supportive.

22 COMMISSIONER DOUGLAS: Thank you very much.

23 Any additional comments, Commissioner Monahan, go
24 ahead.

25 COMMISSIONER MONAHAN: So I have to say I had a

1 briefing yesterday from Michael and Anthony and others on
2 EPIC. And I was so excited by both of these projects that
3 I wanted to comment on this first project -- well first
4 project, first. So the Stasis Energy Group and I'm glad we
5 have Nick Brown on, because I mean I'm fascinated by this
6 idea that there's this bio based material that freezes at
7 higher temperature. And then when we hit peak you just
8 blow air over it, and that's what cools your building.
9 That is mind blowing to me and I really want to see it,
10 Nick, so it is just fascinating. I had to keep going over
11 and over it again with Michael, wait, say that again, how
12 is this working?

13 So it's a really fascinating technology and so
14 kudos to you, Nick and the team at Stasis for really coming
15 up with an out-of-the-box idea to deal with a big problem
16 in California.

17 So and, of course, the second one us, EV
18 batteries are near and dear to my heart. You know, there
19 was a McUsey (phonetic) report that came out that said that
20 by 2030 used EV batteries could comprise half of all global
21 energy storage needs. I mean the potential is huge, but
22 figuring out how to deal with (indiscernible) buses and
23 Nissan leaf batteries, and how to deal with putting them
24 all together in some way that stores energy and is cost
25 effective. And deals with the fact that you're going to

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1 have different bad battery degradation issues, is also
2 really important investment.

3 So I'm excited about both of these investments
4 and want to thank Michael and the team for bringing these
5 forward.

6 COMMISSIONER DOUGLAS: Thank you, Commissioner
7 Monahan.

8 Commissioner Gunda, any comments?

9 COMMISSIONER GUNDA: Yeah, I mean I think again,
10 echoing Commissioner McAllister, I think these are like
11 some wonderful projects today. I think that the
12 intersection of thermal comfort and kind of the load
13 management is kind of a difficult problem to solve. You
14 know, we want to ensure thermal comfort, as we think
15 through the kind of the grid liability and then overall
16 load reduction. And I think you know it's also heartening
17 to see the evolution of technologies, as Commissioner
18 Monahan pointed out. We've seen a lot of interactive
19 evaporative cooling technologies in the past for this kind
20 of load reduction and then looking at new materials that
21 don't really use water.

22 It's just great to see them and thank you,
23 Michael, for your presentation. And the commenters for
24 their comments today. Thank you.

25 COMMISSIONER DOUGLAS: Well, thank you.

1 Let's move on then to a motion. Commissioner
2 McAllister, would you be interested in making a motion?

3 COMMISSIONER MCALLISTER: I'll move Item 10.

4 COMMISSIONER DOUGLAS: Super. Commissioner
5 Monahan, would you second?

6 COMMISSIONER MONAHAN: I second.

7 COMMISSIONER DOUGLAS: Very good, we'll move on
8 to the vote then.

9 Commissioner McAllister?

10 COMMISSIONER MCALLISTER: Aye.

11 COMMISSIONER DOUGLAS: Commissioner Monahan?

12 COMMISSIONER MONAHAN: Aye.

13 COMMISSIONER DOUGLAS: Commissioner Gunda?

14 COMMISSIONER GUNDA: Aye.

15 COMMISSIONER DOUGLAS: And I vote aye as well,
16 this item passes 4-0.

17 And just briefly before we move on to Item 11 I
18 wanted to have a quick check in with all of you on the
19 agenda. We're just a little past noon. It looks to me
20 like it would be a long haul to try to cover everything
21 without a lunch break, so I wanted to suggest that we
22 consider taking up Items 11 and 12 and then breaking for
23 lunch.

24 Any thoughts on that from any of the
25 Commissioners?

1 COMMISSIONER MCALLISTER: That sounds good to me
2 and we could give Item 13 a time certain for our return.

3 COMMISSIONER DOUGLAS: I was thinking 1:00
4 o'clock?

5 COMMISSIONER MCALLISTER: Yeah, that's great.

6 COMMISSIONER DOUGLAS: Commissioner Monahan?

7 COMMISSIONER MONAHAN: No, I agree with lunch,
8 I'm a big fan of it.

9 COMMISSIONER DOUGLAS: Anyone want to move
10 approval for lunch? I'm kidding. All right, so we will.
11 So that's the plan, so if you're on the -- participating in
12 the meeting right now for Item 13 you can come back at 1:00
13 o'clock. That's when we will take it up. And if you're
14 here for Items 11 and 12 we will move through both items
15 before breaking for lunch.

16 So with that, thank you colleagues. And we will
17 move on to Item 11, Evaluation of Bi-Directional Energy
18 Transfer and Distributed Energy Resource Integration for
19 Medium and Heavy-Duty Fleet Electrification. Looking for
20 Ben Wender to present, there you are, thank you.

21 MR. WENDER: Good afternoon, Commissioners. It's
22 good to be here. My name is Ben Wender. I'm an Electric
23 Generation System Specialist in the Energy Research and
24 Development Division. Today, I am presenting two
25 recommended awards from the EPIC solicitation "Evaluating

1 Bi-directional Energy Transfers and Distributed Energy
2 Resource Integration for Medium and Heavy-Duty Fleet
3 Electrification.” Next slide, please.

4 The proposed awards will bring multiple benefits
5 to Californians. The technologies developed through these
6 awards will facilitate charging of large electric vehicles
7 like school buses in ways that reduce stress on the
8 electric grid, increase use of distributed energy
9 resources, and reduce the cost of charging for fleets
10 transitioning to electric vehicles. These technologies can
11 also provide resilience benefits for sites and communities
12 where they are deployed, while maximizing emission
13 reductions from the electric and transportation sectors.
14 Next slide, please.

15 The objective of the solicitation and of the
16 projects recommended today is to develop integrated
17 distributed energy resource packages to help charge fleets
18 of medium- and heavy-duty electric vehicles.
19 Transportation electrification is a key strategy for
20 reaching the state’s zero emission transportation goals,
21 including the targets established in Governor Newsom’s
22 Executive Order N-79-20 summarized here.

23 Projects will focus on demonstrating and
24 collecting data on three use cases: minimizing the cost of
25 charging; increasing utilization of renewable electricity;

1 and providing back-up power to increase resilience. Next
2 slide, please.

3 In the first project, MOEV, Incorporated will
4 partner with the Gardena Transit Agency to deploy 350 kW of
5 solar PV and 1 MWh of battery storage. The proposed
6 project will demonstrate MOEV's advanced charging
7 optimization and distributed resource integration software
8 in minimizing charging costs and increasing renewable
9 electricity utilization. Shown is a visualization of their
10 technology components, including a mobile app for messaging
11 and collecting information from drivers as well as real-
12 time monitoring of transit buses for optimal charge
13 scheduling.

14 MOEV is a former CalSEED Initiative awardee that
15 has matured with support from CEC investment in the state's
16 clean energy innovation ecosystem. Next slide, please.

17 The second project with Lawrence Berkeley
18 National Lab and their commercialization partner Paired
19 Power, will deploy four direct-DC fast chargers with
20 integrated solar and storage in the Franklin McKinley
21 School District in San Jose. The images shown show the
22 CalEnviroScreen 3.0 scores for the community served by the
23 school district, which ranks in the 80-85th percentile of
24 pollution vulnerability and burden.

25 Also shown is the proposed construction site at

1 the elementary school. The direct-DC chargers are more
2 efficient, because they avoid energy losses from converting
3 DC to AC and back to DC. The project will add 120 kW of
4 solar and 520 kWh of battery storage at the site that will
5 be used to power a community resilience hub in the school
6 cafeteria during power outages.

7 Project partners will engage community members to
8 identify desired emergency capabilities—such as public
9 access cooling and charging facilities—and then design the
10 demonstration to meet their objectives. Next slide, please.

11 So staff recommends approval of these two grant
12 awards, and adoption of staff's determination that these
13 projects are exempt from CEQA. Thank you and that
14 concludes my presentation. I'm available for any questions
15 as are representatives from MOEV and LBNL.

16 COMMISSIONER DOUGLAS: Excellent, thank you for
17 that presentation, Ben.

18 Do we have any public comment then, Noemi?

19 MS. GALLARDO: Yes, we do. It looks like we have
20 Rajit. Rajit, please restate your name -- apologies in
21 advance if I mispronounced it -- and please spell your full
22 name. You have up to three minutes. Your line is open.
23 You may begin.

24 MR. GADH: Thank you so much, Commissioners and
25 the CEC team. My name is Rajit Gadh, spelled R-a-j-i-t,

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1 last name G-a-d-h. And I'm one of the four cofounders of
2 MOEV, Inc., a startup company.

3 MOEV has -- and Commissioner McAllister, you
4 talked about the ARRA funding -- MOEV's technology was
5 developed originally at UCLA and three patents came out of
6 an ARRA grant in which we worked the Los Angeles Department
7 of Water and Power for electrification of transportation.
8 Most technology now uses AI and machine learning and
9 applying this technology to MVHD or medium-duty heavy-duty
10 fleets. Those fleets are characterized by very high levels
11 of power due to high levels of energy requirements for the
12 day and variations and constraints in the duty circles.

13 So the technology is a software technology that
14 sits on the cloud and it takes real time data from the
15 fleet operators, from the fleet telematics -- specifically
16 from the battery management systems in the vehicles as
17 you're driving around -- from the grid operators. From the
18 charging infrastructure, which in the case of this project
19 would be in EV charging stations of the vehicles, when
20 they're parked the solar PV and the battery. And then it
21 doesn't optimize -- it does a prediction and optimization.
22 The optimization pertains to the goals of the particular
23 fleet operator, in this case a bus transit fleet operator.
24 Lawrence Berkeley National Labs with their heavy pro and
25 heavy-load expertise is a partner in this project.

1 The key interesting technology what we're really
2 excited about is that you have continuous data streams
3 coming in and you're optimizing through the day. And the
4 reason to do that is because, as we know the energy, the
5 renewable energy through the day, varies. If the sun is
6 shining, if there's a cloud cover, it doesn't stop shining
7 and so forth. And so green energy same way. (phonetic)

8 And then the grid resilience needs of the grid
9 operator by web demand response or local resilience, is
10 varied through the day. We see through the day the
11 different levels of sort of infrastructure and see duty
12 cycle challenges that these fleet operators have.

13 The cost can vary dramatically if you're not
14 careful about your opex, (phonetic) your fuel bill might go
15 up (indiscernible) three or four. Or if you're not
16 careful, you install your (indiscernible) capacity and
17 you're essentially stressing the grid.

18 So our software takes all of that and optimizes
19 with one of the very, very important objectives also being
20 reduction of greenhouse gas emissions that help with health
21 issues in disadvantaged communities. And on the positive
22 side, a lot of these fleets tend to be in disadvantaged
23 communities. And so the possibility of jobs, as we
24 transition into this high tech world of EVs is there.
25 Thank you very much.

1 MS. GALLARDO: Thank you.

2 This is Noemi, there are no more public comments
3 for Item 11.

4 COMMISSIONER DOUGLAS: All right, thank you very
5 much. Let's move on to Commissioner discussion,
6 Commissioner McAllister, could you kick us off?

7 COMMISSIONER MCALLISTER: Well, I'll start us
8 off. I certainly want to imagine Commissioner Monahan is
9 really excited about this project too. But it's so great
10 another, you know, storage and intelligence solicitation
11 with great results, so kudos to the EPIC team on this.

12 Ben, thank you so much for that presentation.
13 The title of it is -- just starting off with the title of
14 it, it was a mouthful. But I think again this is a perfect
15 application of these kinds of R&D funds, you know, to have
16 as the commenter just -- as Rajit said, you know take
17 advantage of real-time information to manage and optimize,
18 to orchestrate both the demand side and with intelligence
19 about the supply side. And the grid needs at every given
20 moment.

21 And really the fact that it impacts disadvantaged
22 communities in a positive way. The fact that it can help
23 essentially use energy that would otherwise be curtailed,
24 and take advantage of that, I mean it's almost you know
25 pre-lunch or reduced lunch maybe. And maybe that's most

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1 applicable to schools. But I think having -- investigating
2 these loads and figuring out what the use cases actually
3 are, and just understanding how we can utilize these
4 resources. They're mobile and inherently flexible without
5 diminishing or compromising the level of service that they
6 give. And their main job is really huge.

7 And offloading the responsibility for energy
8 management of the sophisticated grid from institutions that
9 really have no desire or interest in being a utility or an
10 energy management business, right? A school, they need to
11 focus on being a school and so educating our youth. And so
12 having them be able to rely on competent backend services
13 that help them manage their costs and help them do their
14 primary role, I think is a really great value in these
15 kinds of projects. And it is not only going to help us
16 manage carbon, manage the grid increase reliability. But
17 also help the schools operate and function in a more robust
18 fashion as well. So really a win, win all around.

19 And I'm just very excited about this. And all
20 the other end uses were these fleets are going to sit. So
21 thanks, I'll stop there.

22 COMMISSIONER DOUGLAS: All right. Thank you.

23 All right, thank you. Commissioner Monahan,
24 additional comments.

25 COMMISSIONER MONAHAN: Yeah, I mean I am really

1 excited about these projects. And I think as we expand our
2 attention to the medium and heavy-duty sector the
3 opportunities, I think, are really great to set the
4 business case for electrification.

5 But there's also these big challenges. And one
6 of them, I mean is that everybody gets the same price for
7 the fuel that they use for transportation, no matter what
8 time of day it is, no matter where they are. And battery
9 electric vehicle to call for an entirely different mindset.

10 And so what I'm excited about with both these
11 projects, I mean with school districts of course
12 (indiscernible) whatever we can do to help them and help
13 them electrify their fleet, so that kids breathe easier on
14 the bus. I mean, it's compelling public health rationale
15 for both the transit bus and the school bus
16 electrification. But then as we expand to other heavy-duty
17 businesses that are just more focused on the byline, not
18 that they don't care about public health, but you know that
19 they're focused on the bottom line. So these kinds of
20 services that I referred to in the past that you need
21 sometimes somebody else whose job it is just to think
22 through, how do I electrify this fleet in the most cost
23 effective way, save money, provide resilience?

24 I mean it's complicated and I could see why AI is
25 a good application for this. But these kinds of

1 investments are really -- I mean, to move big businesses to
2 electrify their fleet they need a bottom line business
3 case. And its applications like this that are going to
4 help them figure that out.

5 COMMISSIONER DOUGLAS: Thank you, fantastic.

6 Commissioner Gunda, anything you'd like to
7 comment on the bottom?

8 COMMISSIONER GUNDA: Yeah, I just will say amen,
9 because it's so many things that are just really cool
10 projects. And it's like all in the same (indiscernible).
11 I absolutely agree with Commission McAllister and
12 Commissioner Monahan's comments on this.

13 COMMISSIONER DOUGLAS: All right, thank you very
14 much. Let's move on to see if we can get a motion,
15 Commissioner McAllister?

16 COMMISSIONER MCALLISTER: I move Item 11.

17 COMMISSIONER DOUGLAS: And a second.
18 Commissioner Monahan, would you like to second.

19 COMMISSIONER MONAHAN: I'll second.

20 COMMISSIONER DOUGLAS: Right, well we'll take the
21 vote then.

22 Commissioner McAllister?

23 COMMISSIONER MCALLISTER: Aye.

24 COMMISSIONER DOUGLAS: Commissioner Monahan?

25 COMMISSIONER MONAHAN: Aye.

1 COMMISSIONER DOUGLAS: Commissioner Gunda?

2 COMMISSIONER GUNDA: Aye.

3 COMMISSIONER DOUGLAS: All right, I vote aye as
4 well. This item passes unanimously 4-0, and thank you.

5 We'll go on to Item 12 Food Production Investment
6 Program 2020. And we are looking -- first, I welcome Cyrus
7 Gandhi to present.

8 MR. GHANDI: Hi. Good afternoon, Commissioners.
9 My name is Cyrus Gandhi. I am an Electric Generation
10 System Specialist I with the Energy Research and
11 Development Division. Today staff is providing a
12 presentation on the Food Production Investment Program,
13 followed by a recommendation to approve seven awards. This
14 presentation summarizes the results to date of the Food
15 Production Investment Program since the program inception
16 in 2018.

17 The Food Production Investment Program, or FPIP,
18 funds drop-in and emerging energy technologies at food
19 production facilities in California.

20 FPIP is part of California Climate Investments, a
21 statewide initiative that puts billions of Cap-and-Trade
22 dollars to work reducing greenhouse gas emissions,
23 strengthening the economy, and improving public health and
24 the environment, particularly in disadvantaged communities.
25 Next slide, please.

1 Food production is a key economic sector in
2 California and contributes \$82 billion to the economy
3 annually. And also provides 200,000 direct jobs, as well
4 as 560,000 indirect jobs.

5 Food production is also a large contributor of
6 greenhouse gas emissions with about 3.2 million metric tons
7 of CO2 equivalent emissions per year.

8 FPIP has allocated \$116 million across 5 funding
9 opportunities to 51 projects resulting in 164,000 metric
10 tons of CO2 equivalent in annual emissions reductions,
11 which is equivalent to removing 36,000 passenger vehicles
12 from the road. Next slide, please.

13 Scoping of the FPIP program was done in
14 collaboration with key stakeholders. Before the program
15 started, a working group was created, which included public
16 agencies, utilities, researchers, trade organizations, and
17 most importantly food producers. On this slide, you can
18 see the list of organizations represented in the working
19 group.

20 In addition to public workshops, several working
21 group meetings were held to get feedback on the program as
22 it was formed. The result was a program, which was easy to
23 apply to, conformed to the seasonal schedules of food
24 producers, and provided funding for what they needed most -
25 - implementing modern technologies. In essence, FPIP was

1 designed by food producers, for food producers. Next slide
2 please.

3 I will now present the recommended awards.

4 The first project is with Blue Diamond Growers.
5 This proposed project will upgrade the existing compressed
6 air system at the recipient's nut processing facility in
7 Sacramento. The system will consist of variable frequency
8 drive compressor, advanced controls, and larger piping and
9 air storage systems which enables lower system pressure
10 that requires less energy to maintain. Next slide please

11 The second project is with Pacific Coast
12 Producers. This project will overhaul the compressed air
13 system at the recipient's tomato processing facility in
14 Woodland. This project will install a high efficiency air
15 compressor, air dryer, filters, variable frequency drives,
16 and larger air storage tank to reduce system pressure and
17 energy use. Next slide, please

18 The third project is with Jessie Lord Bakery.
19 This project will install advanced energy-efficiency
20 upgrades at a pie producing facility in Torrance. This
21 project will install a boiler economizer, steam traps,
22 insulation, a low-global warming potential refrigeration
23 system, and new burners and controls for a baking oven.
24 Next slide please

25 The fourth project is with Baker Commodities.

1 This project will upgrade the hot water system at the
2 recipient's rendering plant in Vernon. The project will
3 install new natural gas burners for two high efficiency 800
4 hp boilers and upgraded insulation on two large holding
5 tanks. Next slide, please

6 The fifth project is with WWF Operating Company.
7 The proposed project will upgrade the existing steam system
8 with high efficiency steam traps at the recipient's dairy
9 processing facility in the City of Industry. This project
10 will install over 200 steam traps improving the efficiency
11 of the existing steam system. Next slide, please

12 The sixth project is with Campbell Soup Supply
13 Company. The proposed project will upgrade the existing
14 evaporator system at the recipient's tomato processing
15 facility in Dixon. This project will retrofit an existing
16 evaporator to add an additional evaporation stage, also
17 known as "effect", converting a two-stage evaporator into a
18 three-stage evaporator. The new system will provide more
19 evaporation capacity using the same amount of steam input,
20 thereby making the process more efficient. Next slide,
21 please

22 The lastly, the seventh project is with E.&J.
23 Gallo Winery. The proposed project will replace an aging
24 compressor system and refrigeration system at two of the
25 recipient's wineries. This project will install high

1 efficiency compressor equipment at the Livingston winery
2 and a low-global warming potential refrigeration system at
3 the St. Helena winery.

4 These 7 projects combined would reduce GHG
5 emissions by over 13,000 metric tons of CO2 annually. Next
6 slide please.

7 I will now show a short time-lapse video of an
8 FPIP project that was implemented at the Sun-Maid raisin
9 production facility in Kingsburg. This project modernizes
10 the compressed air system by replacing inefficient,
11 oversized compressors with highly efficient, sequenced
12 compressors. Instead of running constantly, this new
13 system kicks on each compressor as needed and at variable
14 speeds, saving energy.

15 As you can see, to minimize the downtime this
16 system was installed in only 10 days. And this project is
17 a great example of how FPIP helps facilities modernize
18 their operations and reduce energy use and greenhouse gas
19 emissions. Next slide, please

20 With that, staff recommends approval of these
21 seven awards as well as staff's determination that these
22 actions are exempt from CEQA. This concludes my
23 presentation. I am available to answer any questions you
24 may have and Kevin Uy and Kathryn Colson are also
25 available.

1 In addition, my understanding is that
2 representatives from Baker Commodities, Pacific Coast
3 Producers, Campbell Soup Supply and Jessie Lord Bakery
4 would like to make a verbal comment, or have prepared
5 written comments they would like read into record. Thank
6 you.

7 COMMISSIONER DOUGLAS: Thank you very much for
8 that presentation.

9 Noemi?

10 MS. GALLARDO: All right, so we do have several
11 public comments. I'm going to begin with a written
12 comment, this is from David Kiehn, that's spelled D-a-v-i-
13 d, Keen K-i-e-h-n. I might be pronouncing incorrectly, so
14 apologies for that. He's the Director of Agriculture
15 Operations at Campbell Soup Supply Company.

16 "Dear Commissioners Campbell Soup Supply Company
17 appreciates the work of the California Energy Commission
18 and its staff in developing and operating the Food
19 Production Investment Program. We are excited that our
20 proposal to add an evaporator effect at our facility in
21 Dixon, California was selected for funding during the
22 latest round of this program.

23 "California has served as a leader in agriculture
24 and food production for many generations and continues to
25 supply its bounty to the nation and the world.

1 "As a company committed to combating climate
2 change and its impacts, we welcome the opportunity to use
3 this funding to make our operations more sustainable. We
4 are also proud that this project will support California,
5 businesses and provide jobs to California workers.

6 "At Campbell, we are committed to building a more
7 resilient food system that improves the world we share for
8 generations to come. We look forward to completing this
9 project and using the lessons learned to help inform
10 further improvements in our own operations and those of
11 other similar facilities elsewhere. Sincerely, David."

12 MS. GALLARDO: That concludes the written
13 comment.

14 Next we have about four people on the Verizon
15 conference line. I'm going to start with Erick Watkins.
16 Erick, please restate your name, spell your full name, you
17 have up to three minutes. Your line is open, you may
18 begin.

19 (No audible response.)

20 MS. GALLARDO: Erick Watkins, your line is open,
21 you may begin.

22 (No audible response.)

23 MS. GALLARDO: All right, it seems like he may be
24 having -- Erick may be having some technical issues there,
25 so let's move on to the next person on the Verizon

1 conference line, which would be Sean Lee.

2 Sean, a reminder to please restate your name,
3 spell your full name. You'll have up to three minutes.
4 Your line is now open, please begin.

5 MR. LEE: Hi, this is Sean Lee, can you guys hear
6 me okay?

7 MS. GALLARDO: Yes, we can.

8 MR. LEE: Perfect. Thank you, so I'm the General
9 Manager and Owner of Jessie Lord Bakery. We specialize in
10 manufacturing pies. We've been in Torrance for over 30
11 years.

12 I'm speaking to express my gratitude for the FPIP
13 program, the opportunity that's provided and appreciation
14 for CPUC and all your work. You know, this project was
15 awarded to us, because of the diversity of energy
16 efficiency improvements that we have planned. It's
17 projected to help reduce our greenhouse gas emissions by
18 over 167,000 metric tons over the life of the equipment.
19 The majority of this will be achieved through the
20 elimination of HFC refrigerants with high global warming
21 potential.

22 And again, Jessie Lord Bakery just wants to thank
23 the California Energy Commission. And we're glad that we
24 have the ability to partner to invest in this type of
25 projects that will help the environment and also keep jobs

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1 and our facility operating in Torrance for the near future,
2 and after that. So thanks again.

3 MS. GALLARDO: Thank you.

4 The next comment will be William Cordray.

5 (phonetic) William, please restate your name, spell your
6 full name. You have up to three minutes. Your line is
7 open and you may begin. William, you may begin?

8 MR. CORDRAY: I didn't have a prepared statement,
9 excuse me for the error there, thank you.

10 MS. GALLARDO: No problem at all.

11 All right, so next up is Doug Smith. Doug, a
12 reminder to restate your name, please spell your full name.
13 And you have up to three minutes. Your line is open,
14 please begin.

15 MR. SMITH: Okay, my name is Doug Smith, D-o-u-g
16 S-m-i-t-h. I'm the Assistant Vice President for Research
17 and Development with Baker Commodities. And first, I would
18 just like to thank all the CEC Board Members and staff.
19 You have all been wonderful in working with Baker
20 Commodities in the past, and we hope to continue that in
21 the future. So a very big thank you to the Commission and
22 also the opportunity to be awarded a grant.

23 You have all been wonderful and working with
24 baker commodities in the past and we hope to continue that
25 in the future so very big thank you to the Commission and

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1 also the opportunity to be awarded a grant.

2 As a rendering industry we're kind of the tail
3 end of food processing. We take care of the items that the
4 public doesn't eat when they get the meats and stuff. But
5 we do produce products that are usable to the consumers, as
6 well as you know, animal feeds and biofuels. With that
7 being said, we have always prided ourselves as being a
8 diverter of organics from the landfill. We've kept all
9 these things out of landfills, so we hope to continue
10 aiding California in organics diversion.

11 But for this grant, this grant will help us
12 reduce California's food production cost. It's going to
13 greatly help us reduce our operating costs and the
14 greenhouse gas emissions, which is very important for us.
15 We're surrounded by communities that are priority
16 communities, and we would love to clean up the air that is
17 going out to our neighbors. We very much care about
18 communities around us, so this benefits us greatly.

19 And it also allows us as a corporation, you know,
20 that's environmentally conscious to work towards these low-
21 carbon futures that we have for California, to make the air
22 cleaner.

23 That's pretty much all I had to say. And I look
24 forward to working with all the staff that you guys have.
25 Thank you.

1 MS. GALLARDO: Thank you.

2 This is Noemi, again we're going to try Erick
3 Watkins' line again.

4 MR. GANDHI: Erick messaged me just now that he
5 is having a hard time unmuting. Is it *6 to unmute.

6 MS. GALLARDO: No, he's not Zoom. He's on
7 Verizon, but his line looks like it's open. Let's give him
8 a try, a Verizon operator was working with him.

9 Erick, are you able to hear us? If so please say
10 something.

11 MR. WATKINS: I can, can you hear me?

12 MS. GALLARDO: Yes, we can. Thank you.

13 MR. WATKINS: Oh, that's fantastic. Great.

14 Yeah, I just wanted to make a couple of quick comments
15 today. My name's Eric, Watkins, E-r-i-c-k W-a-t-k-i-n-s.
16 I work for Pacific Coast Producers. We're a cooperative
17 here in Northern Central California. We do canned fruit
18 and tomato products, have facilities in Lodi, Oroville and
19 Woodland.

20 Today you guys are reviewing for approval, a air
21 compressor project. I believe this will be the seventh
22 project that Pacific Coast Producers has done through the
23 Producers Incentive Program. And we just want to thank
24 everybody from CARB to CEC to the Legislature, for
25 supporting this program and I hope it gets renewed in the

1 future. And we hope we get our project approved today, and
2 thank you very much.

3 And I wanted to give a special thanks to Cyrus.
4 He's worked with me on all these projects and we've been
5 very successful. And we're about to finish, or third and
6 fourth projects and can't emphasize enough how great this
7 program is, thank you very much.

8 MS. GALLARDO: All right, this is Noemi again.
9 Commissioner Douglas, that was the last public comment on
10 Item 12.

11 COMMISSIONER DOUGLAS: All right, thank you very
12 much, Noemi.

13 Let's move to Commissioner discussion,
14 Commissioner McAllister.

15 COMMISSIONER MCALLISTER: Yeah so thanks,
16 Commissioner Douglas. And really all of the companies that
17 are on this item, really your efforts to decarbonize and to
18 improve your operations are incredibly necessary for
19 California. And I think we are actually privileged to be
20 able to help you do that.

21 So and I wanted to just back up and thank Cyrus
22 for the great presentation, really appreciate that. But I
23 wanted to back up a little bit and just say what a
24 spectacular program this has turned out to be. And a lot
25 of it, you know, certainly the competence of our of our

1 administrative staff and Laurie ten Hope's Division and
2 just the diligence with which they've constructed and
3 implemented the program, I think has really put our best
4 foot forward. And built a lot of trust with a sector of
5 our economy that is kind of new to this programmatic game
6 in a way. And so this programmatic kind of environment.
7 And so I think that is just incredibly positive and there's
8 a great foundation to build on there.

9 And backing up even further, you know, I remember
10 the origin of this program really was driven at the highest
11 levels of the state government. And Secretary Ross did a
12 convening and Secretary Crowfoot was involved in at the
13 beginning. And just to see that continuity come to
14 fruition at each business meeting that we have, an item
15 (indiscernible) on it, is really gratifying.

16 And I think there are many directions this
17 program can go if we could you know begin to address even
18 other sectors more in the food production side of things,
19 but also more broadly in industry. And you just see from
20 the diversity of these projects that all sorts of different
21 kinds of processes and end uses, compressors, refrigeration
22 systems -- most of which are going to be site built right
23 there. So in a sense custom hot water, different heating
24 loads, thermal loads.

25 I'm really happy to see some steam management in

1 here and the low GWP refrigerants as well, and the
2 refrigerant piece. That actually is something that we need
3 to focus -- we are focusing as a state on. But we really
4 need these projects to help demonstrate the path forward to
5 implement low GWP refrigerants as part of our overall
6 climate strategy.

7 So you know this combination of efficient of high
8 quality, efficient equipment and innovative controls, it
9 really is the sweet spot. And so we've seen over and over
10 again today that we're funding these integrated types
11 projects that take advantage of intelligence and AI in many
12 cases, applied to the latest efficient technology. And I
13 think that's just a really great place to be right now.
14 We're really demonstrating, I think, for many, many others
15 to build on.

16 And again I just commend -- thank Mr. Lee, and
17 Mr. Smith, Mr. Watkins for your comments. And again Cyrus
18 for the great presentation and just all your and the team's
19 great work administrating and bringing up ideas. And doing
20 the program opportunity notices and just getting the money
21 out there where it can do a lot of good, so thanks again.

22 COMMISSIONER DOUGLAS: Thank you, Commissioner
23 McAllister.

24 Commissioner Monahan, any comments?

25 COMMISSIONER MONAHAN: ((No audible response.))

1 COMMISSIONER DOUGLAS: Commissioner Gunda?

2 COMMISSIONER GUNDA: Yeah, Commissioner, thank
3 you. Just I wanted to thank Cyrus for his wonderful
4 presentation. And really highlighting the stakeholder
5 engagement that went into designing this program, just kind
6 of learning about this today a little bit more. I'm just
7 really proud of the work that the R&D team has been doing
8 in the stakeholder engagement and thinking through this
9 robustly, so thank you.

10 COMMISSIONER DOUGLAS: Thank you.

11 And I agree with all the comments made both by
12 you Commissioner Gunda and Commissioner McAllister, this is
13 a great program. But it's a very unique sector and
14 designing a program to work effectively with the food
15 production industry really requires the full participation
16 and help of the industry. And it's really nice to see how
17 well the team did and pulling that together.

18 So let's move on to a vote, Commission
19 McAllister?

20 COMMISSIONER MCALLISTER: Yeah, I'll move Item
21 12.

22 COMMISSIONER DOUGLAS: Commissioner Gunda, would
23 you like to second?

24 COMMISSIONER GUNDA: Yes, second Item 12.

25 COMMISSIONER DOUGLAS: Very good, so we'll go to

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1 the vote now.

2 Commissioner McAllister?

3 COMMISSIONER MCALLISTER: Aye.

4 COMMISSIONER DOUGLAS: Commissioner Gunda?

5 COMMISSIONER GUNDA: Aye.

6 COMMISSIONER DOUGLAS: Commissioner Monahan?

7 COMMISSIONER MONAHAN: Aye.

8 COMMISSIONER DOUGLAS: And I vote aye as well, so
9 this item passes 4-0.

10 Commissioners, I'd like to make a suggestion that
11 we come back at 1:15 instead of 1:00, is that acceptable?

12 (Overlapping colloquy.)

13 COMMISSIONER DOUGLAS: All right, very good. So
14 everybody, we will be breaking for lunch. We'll come back
15 at 1:15 and thanks very much.

16 COMMISSIONER GUNDA: Thank you all.

17 (Off the record at 12:41 p.m.)

18 (On the record at 1:16 p.m.)

19 COMMISSIONER DOUGLAS: Convening now after our
20 lunch break. It's 1:16 and we're moving on to Item 13,
21 Local Building Energy Efficiency Standards Application.
22 And I'm looking for Danuta Drozdowicz to present. Here you
23 go, welcome.

24 MS. DROZDOWICZ: Good afternoon, Commissioners.
25 My name is Danuta Drozdowicz. I work in the Efficiency

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1 Division's Buildings Standards Office and I'm presenting
2 local ordinances that exceed the energy code from
3 jurisdictions that have applied for review and
4 consideration by the CEC. Joining me today via the phone
5 line is Jacqueline Moore from the Chief Counsel's Office.
6 Next slide, please.

7 Jurisdictions that adopt local ordinances are
8 exploring and adopting technologies for our clean energy
9 future; and reducing state greenhouse gas emissions as they
10 lead from the grassroots. I think you'll find it
11 interesting that approximately one in three Californians
12 lives in a community with an energy code that exceeds state
13 energy standards. Next slide, please.

14 For a local standard to be enforceable, the
15 jurisdiction must file with the CEC, its determination that
16 its standards are cost-effective. And the CEC must find
17 that the local standards reduce energy consumption compared
18 to the current statewide Energy Code. Next slide, please.

19 To give you a better sense of what's happening
20 throughout the state, to date under this code cycle, 44
21 ordinances from 37 jurisdictions, have been approved by the
22 CEC. This does not include the applications on the agenda
23 today. The majority require all-electric or electric
24 preferred construction, 24 ordinances also require
25 photovoltaics on buildings not subject to the current

1 provisions of the energy code. And 23 required additional
2 electric vehicle infrastructure or charging. Next slide,
3 please.

4 Three jurisdictions have applied for approval to
5 enforce their ordinances at this Business Meeting.

6 The City of Piedmont requires that low-rise
7 residential retrofits valued at more than \$25,000 meet
8 energy efficiency requirements.

9 The City of Albany requires that newly
10 constructed buildings meet or exceed Energy Design Ratings
11 or Compliance Margins more stringent than the 2019 Energy
12 Code.

13 And the City of San Carlos requires that new
14 buildings, including substantial renovations and additions,
15 to be all-electric with some exceptions: Prewiring for
16 electric appliances where gas appliances are installed and
17 photovoltaic systems on most new buildings. Next slide,
18 please.

19 Because the applications meet all the
20 requirements of the Public Resources Code, staff recommends
21 approving enforcement of the ordinances. This concludes my
22 presentation. I am available to answer any questions you
23 may have.

24 COMMISSIONER DOUGLAS: Thank you for that
25 presentation.

1 Noemi, do we have any public comment on this
2 item?

3 MS. GALLARDO: This is Noemi, the Public Advisor.
4 I see no public comments for Item 13.

5 COMMISSIONER DOUGLAS: All right, thank you very
6 much, then let's go on to Commissioner discussion.

7 Commissioner McAllister, can you kick us off?

8 COMMISSIONER MCALLISTER: Yeah, for sure. So I
9 really want to just say thanks to the three jurisdictions
10 here for bringing us these reach codes.

11 And just as a reminder, Danuta, thank you very
12 much for the presentation. And appreciate every time we
13 get these Reach codes from local governments, I appreciate
14 the diversity of our state. You know, we're big, we have
15 16 climate zones. We have lots of different local goals.
16 And every constituency, every population is different. And
17 their elected officials actually make decisions that are
18 highly relevant for that particular context. And so the
19 variety, the diversity of Reach codes that we've considered
20 over the months and years is reflective of that.

21 So just to put a I guess mostly redundant, but it
22 bears repeating, that you know we really have a limited
23 role here as the Energy Commission. You know we're not
24 evaluating most of these reach codes. We're evaluating
25 just to make sure that they are more strict from an energy

1 perspective, then the minimum state code, Part 6 of Title
2 24. So that they do conserve energy, after all this is an
3 energy efficiency code.

4 And then we need evidence from the local
5 jurisdiction that they had a process to evaluate cost
6 effectiveness along the way, and so that's really the
7 extent of our of our evaluation of these and that, from our
8 perspective is enough for us to enable them to enforce that
9 Reach Code locally. We don't evaluate other aspects of the
10 code, so the different provisions, maybe in terms of all
11 electric or the particular posture towards some of these
12 broader questions.

13 So, but we do learn a lot from the local
14 governments. And markets actually have to respond to those
15 local governments. And it does help move the needle
16 forward in terms of low carbon technologies. And
17 hopefully, we'll again as we talked about earlier in the
18 meeting, see markets begin to scale and low GWP refrigerant
19 solutions, get some scale and get the cost down. So that
20 sort of thing is very positive coming out of this diversity
21 that we have in the state.

22 So with that I'll move -- well, we'll see if
23 anybody else has comments, but I'm happy to move.

24 COMMISSIONER DOUGLAS: Yeah, thank you,
25 Commissioner McAllister.

1 Are there any other comments from other
2 Commissioners are questions?

3 (No audible response.)

4 COMMISSIONER MCALLISTER: All right, Commissioner
5 McAllister if you would make a motion, please.

6 COMMISSIONER MCALLISTER: I will move Item 13.

7 COMMISSIONER DOUGLAS: Fantastic. Commissioner
8 Monahan, would you like to second?

9 COMMISSIONER MONAHAN: I'll second that item.

10 COMMISSIONER DOUGLAS: Great we'll move on to the
11 vote then.

12 Commissioner McAllister?

13 COMMISSIONER MCALLISTER: Aye.

14 COMMISSIONER DOUGLAS: Commissioner Monahan?

15 COMMISSIONER MONAHAN: Aye.

16 COMMISSIONER DOUGLAS: Commissioner Gunda?

17 COMMISSIONER GUNDA: Aye.

18 COMMISSIONER DOUGLAS: And I vote aye as well, so
19 that item passes as well 4-0.

20 With this let's turn to Item 14, possible
21 approval of the April 14, 2021 Business Meeting minutes.

22 Is there any public comment on Item 14?

23 MS. GALLARDO: This is Noemi, the Public Advisor.

24 I see no public comments on Item 14.

25 COMMISSIONER DOUGLAS: Thank you.

1 Any discussion on Item 14? All right, it doesn't
2 look like it, so could we get a motion Commissioner
3 Monahan?

4 COMMISSIONER MONAHAN: Move to approve Item 14.

5 COMMISSIONER DOUGLAS: Excellent, Commissioner
6 McAllister would you consider a second?

7 COMMISSIONER MCALLISTER: I'll second.

8 COMMISSIONER DOUGLAS: Very good, we'll move on
9 to the vote then.

10 Commissioner Monahan?

11 COMMISSIONER MONAHAN: Aye.

12 COMMISSIONER DOUGLAS: Commissioner McAllister?

13 COMMISSIONER MCALLISTER: Aye.

14 COMMISSIONER DOUGLAS: Commissioner Gunda?

15 COMMISSIONER GUNDA: Aye.

16 COMMISSIONER DOUGLAS: Very good and my vote is
17 in favor as well, so the vote count is 4-0 and the motion
18 passes.

19 Item 15, the Commissioner or Presiding Member
20 Reports, Commissioner Gunda, would you like to begin?

21 COMMISSIONER GUNDA: Thank you, Commissioner
22 Douglas. Thank you for deciding today -- it's awesome to
23 watch you in action today.

24 Just add in a few reports at the top. The
25 primary focus of the Assessments Division over the last

1 month has been to continue to think through reliability for
2 this summer, as well as the midterm. So staff have done
3 some excellent work both preparing analysis, an outlook
4 analysis for this summer, as well as the future that we're
5 going to talk through in a future workshop. So I'm really
6 proud of the EAD team for continuing to kind of develop new
7 products to inform stakeholders and the state to have a
8 robust conversation and how to think through procurement
9 for the future.

10 I want to note the town hall we had with Justice
11 Liu. What an amazing workshop that was. I want to thank
12 Justice Liu and inform the attendees today that we had a
13 town hall to discuss the outrage that has been happening
14 against the Asian American Community. And we were joined
15 by Commissioner Shiroma from the PUC. And I just want to
16 applaud the team for putting this together, the Chair for
17 thinking about it, but also our staff for opening up at the
18 town hall and sharing their stories and making it a
19 thoughtful exercise for all of us to reflect and move
20 forward as one big family.

21 We've been having a lot of briefings. Some of
22 them were in coordination with Commissioner Douglas's
23 office on thinking through future infrastructure planning
24 and then imagining the future of the grid. And so having -
25 - very informative from many stakeholders, which I would

1 not name every single one of them today. But it's helping
2 us to think through some of the analysis that CEC should
3 take on as we think through SB 100 and the future
4 implementation.

5 I want to call out both EAD staff, as well as
6 Siting staff for some of the excellent work that they are
7 beginning to imagine to inform some of these long-term
8 issues.

9 I want to take a moment to thank the IEPR team
10 for putting together that a reliability workshop last week,
11 which discussed the summer 2021 outlook. I want to thank
12 CPUC, CAISO, DWR as well as LADWP for their participation
13 including Secretary Matt Baker. And just helping think
14 through this collectively. as a state, as some of the
15 outlook, and some of the contingencies we have. And
16 (indiscernible) and how best to communicate, collaborate
17 and plan for this summer.

18 That's kind of like the high-level topics I had I
19 wanted to share. I'll just kind of keep my head down and
20 continue focusing on that reliability for the summer. And
21 every occasion I have, I just want to thank my fellow
22 Commissioners for the incredible work behind the scenes,
23 the generosity of spirit. And continuing to foster the
24 vision for the state, so thank you, everybody.

25 COMMISSIONER DOUGLAS: Thank you very much,

1 Commissioner Gunda.

2 Commissioner Monahan, could you go next?

3 COMMISSIONER MONAHAN: Happy to and just thank
4 you, Commissioner Gunda, for your leadership. I mean the
5 challenge of ensuring that our energy system is reliable
6 this summer is a big one. And there's a lot of great cross
7 agency, I think, collaboration on this. But your
8 leadership will be really important going forward, so just
9 thank you for stepping in.

10 So we're focused on the Governor's budget and
11 looking forward to when they revise, which will happen this
12 week. And on reauthorizing the Clean Transportation
13 Program, ensuring there's money for or front loaded for an
14 investments in infrastructure. And in ZEV infrastructure
15 in particular, but also with a real strong focus on medium
16 and heavy-duty vehicles. Whereas we all know we have air
17 quality issues that we need to wrestle with. So that has
18 been just a job and a half, I would say.

19 And Hannon, Quentin, and actually the whole team
20 at FTD (phonetic) has really been amazing on this one.
21 There's been a lot of fire drills, a lot of late-night
22 emails. So I think everybody here has been through this,
23 this is my first time at having something so big being in
24 the subject the reauthorization. So it's all somewhat new
25 to me and I'm learning. Thank god, for Anna (phonetic) to

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1 get me through this.

2 Let's see, I think you know I'm starting a bit
3 more and I'm interested in -- Commissioner McAllister I
4 know you've done a lot of this with the Council of Parties
5 (phonetic) coming up. And in Glasgow, and the fact that
6 there's a big focus on transportation, so there's been a
7 lot of cross agency discussions about what that should look
8 like. The staff at FTD are very involved and others in the
9 agency.

10 But I think Secretary Blumenfeld was really going
11 to be the lead for us on this, but there's a strong piece
12 of ZEV infrastructure that is increasingly emerging as part
13 of the narrative. So it's not just settings that targets
14 for vehicles, but also thinking about the infrastructure
15 needs to those vehicles.

16 So I'm excited. I mean the fact that it's
17 actually going to be in-person, which is shocking,
18 shocking. It's this potential, because this is as we all
19 know a global market. And we cannot -- you know,
20 California has been at this a long time. And longer than
21 anybody, longer than any other country hands down. And
22 now, what we're seeing is progress at the global stage.
23 And the EU, actually countries in the EU beating us in
24 terms of vehicle sales. The share of new vehicle sales, so
25 Germany and other countries, I mean Norway of course has

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1 been beating all of us for a long time as per the GM Will
2 Ferrell ads I like.

3 But you know I just feel like there's so much
4 opportunity for us California, as part of this global --
5 fostering these global partnerships. And figuring out how
6 to do that in the most effective way again is exciting and
7 it's kind of a new learning experience for me.

8 And speaking of Norway, I just want to say I did
9 have a speaking engagement. I thought it would just share
10 this, because I know that Commission Douglas was on there.
11 I'm not sure, but I don't think you guys were there, but it
12 was this in-person event and virtual event. And the Prince
13 of Norway was involved in convening this. But it was a
14 virtual -- like a real person event, but then they had this
15 virtual aspect with people from Norway being on the stage
16 kind of virtually with you.

17 And it was a very surreal experience actually to
18 be someplace without a mask. I mean just very surreal, but
19 exciting to feel like okay we're coming to the place of
20 more people being vaccinated. And more comfort with in-
21 person events. And so to that end, I wanted to let you
22 guys know and invite you, if you're still in -- well, I
23 don't know we can invite you actually. Never mind I take
24 that back, because I don't know if I can.

25 But we're planning a EV manufacturer's tour. And

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1 we had it started. The Chair and I were doing it last
2 year. And Commissioner Rechtschaffen came with us. And I
3 recently met with Liane Randolph, the new CARB Chair and
4 Commissioner Rechtschaffen on a socially distanced hike.
5 And I asked them if they wanted to restart this EV tour.
6 And they're like yes let's do it. And Chair Randolph was
7 like, let's do it in person, we are. So we are organizing
8 an in-person tour in probably late summer with some EV
9 manufacturers in Southern California. So excited to embark
10 on that and restart again to be able to like go physically
11 and do things. I'm excited for that possibility.

12 And I'm excited, because I just think EVs were a
13 number one export in California last year. With EV
14 manufacturing we had 70,000 jobs (indiscernible) we have
15 over 340 individual entities involved in electric vehicles,
16 zero emission vehicles, I should say. And so having this
17 be just part of our job is to help foster this ecosystem of
18 opportunity in California, good jobs, building the vehicles
19 and the infrastructure that we need to the future. I
20 think, is just a really great opportunity for us.

21 Okay that's it.

22 COMMISSIONER DOUGLAS: All right. Well, thanks
23 for that great report, Commissioner Monahan. And you may
24 even want to flag to the Chief Counsel's Office that they
25 help you think about how you might extend invitations. I

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1 think a number of us would be interested and as long as we
2 don't all traipse around a tour at once, we might be able
3 to find a way. But I'm really glad you're getting that off
4 the ground. And what an exciting thing to look forward to
5 this summer.

6 So Commissioner McAllister, your next.

7 COMMISSIONER MCALLISTER: All right. Well, thank
8 you Commissioner Douglas, this is great. I guess I have
9 some big things I really need to talk about, and give a lot
10 of thank yous this month. Just because we got a couple of
11 big ticket items out the door last week, reached a couple
12 of milestones. And there's just a lot of people to thank
13 behind both of those things.

14 And, in particular you all saw the news that the
15 45-day language period started for the Part 6 Building Code
16 Update. And I'm really happy with where this is landing.
17 Obviously the formal rulemaking is now underway. And we
18 have a couple of Commissioner workshop -- three
19 Commissioner workshop days the week of the 24th of this
20 month to have public opportunity to comment. There's
21 already been quite a bit of public interaction on this
22 update.

23 And we're landing in a place that's quite bold.
24 That's very innovative. That is really staking out this
25 decarbonization pathway and sending very clear signals to

1 the marketplace, that this is where we're headed. But at
2 the same time creating enough -- enabling enough
3 flexibility, so that you know as the housing market needs
4 to do builders and OEMs and all of the trade allies can
5 organize themselves to provide the housing that California
6 needs. And in a way that's flexible and kind of optimizes
7 the supply chain and then execution. And so it's very
8 clear what this statement is making within this building
9 code.

10 So I wanted to in particular just highlight --
11 you all know the -- well I think you've all gotten
12 briefings. I would encourage you to do so. But the high
13 points are really pivoting towards heat pumps as an
14 inherent efficient technology that's also low carbon for
15 the long term, as our electric system decarbonizes. Also
16 expanding our PV requirements into some nonresidential
17 building categories. Again, these are modest sized PV
18 systems that you have a big impact for the customer and are
19 very cost effective.

20 And we're also pairing those now for the first
21 time for batteries that actually really do -- you know, as
22 we saw earlier in the meeting and we've discussed in
23 previous meetings -- they're enabling technology for
24 decarbonization and renewables integration. And so at the
25 site level it's really that's playing out as that industry

1 matures.

2 And so now we're in the position again, of having
3 gotten to a place where at an initial phase we can begin to
4 require these technologies that California is going to
5 depend on, to get to our carbon reduction goals. And a
6 little bit of cleanup as well, and also focusing on indoor
7 air quality and low-rise single family residential as well
8 by adjusting our ventilation requirements. So those are
9 kind of the big ticket items.

10 But this is more than a village it's almost a --
11 it really mobilizes a significant portion of the Energy
12 Commission. And just to put it in context, I mean the
13 Energy Commission's origin really was three main
14 authorities in terms of the energy consumption environment.
15 Obviously we have forecasting. And we have emergency
16 planning. And we have power plant siting. Those were also
17 obviously in the mix, particularly the siting role. That
18 was in the mix in the 70s when that function didn't have a
19 home and the Commission was created for that.

20 But on the on the Buildings and Efficiency side,
21 you know that was the initiation of energy efficiency in
22 demand side management as a discipline. And building
23 standards, appliance efficiency standards and load
24 management standards were the three primary authorities
25 that enshrined in the Warren-Alquist Act. And we're moving

1 forward on all three of those in a very forthright way. We
2 have a new authority that's around load flexibility for
3 appliances that I think really joins that triumvirate as a
4 fourth.

5 So very exciting times, and so the Building
6 Standards get updated every three years. And this one is a
7 -- it is and has been and continues to be a big lift. And
8 I wanted to just go through -- let's see maybe not in any
9 particular order, I'm going to just highlight some of the
10 key people. But it's a long list and I'm just going to ask
11 you to bear with me here.

12 All of these people have been integral to the
13 development of the Building Code Update regulatory process.
14 And it requires a lot of management, and technical, and
15 administrative, and just very detail oriented. So far this
16 update has gotten 750 or so distinct comments from 550 or
17 so distinct commenters. There have been more than 40
18 workshops along the way with different forms and different
19 sets of stakeholders. And so there's just been a lot of
20 activity to get us where we are, so lots of public process.
21 And you've heard at previous business meetings, how much
22 interest there has been in this update.

23 So in the Building Standards Office, first
24 really everyone in that office, but I'll mostly just list -
25 - and you know I can't really do everyone justice here --

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1 reading their name is sort of I think not a complete
2 representation of how important each and every one of these
3 folks has been.

4 So Adrian Ownby, Alexis Markstrum, Amie Brousseau,
5 Che Geiser, Cheng Moua, Chris Olvera, Danny Tam, Danuta
6 Drozdowicz. Sorry, Danuta, I always do that. Haider
7 Alhabibi, Haile Bucaneg, Javier Perez, Jeff Miller, Maziar
8 Shirakh, Michael Shewmaker, Payam Bozorgchami, Peter
9 Strait, RJ Wichert, Robert Hudler, Ronald Balneg, Simon
10 Lee, and Thao Chau and Will Vicent.

11 And I just want to call out Will Vicent as the
12 Office Manager of the Building Standards Office. You know
13 you've waded in the deep water really fast and been doing a
14 great job. And Mazi and Payam, Danny, and the whole team
15 doing the technical analysis. Really, there's just a lot
16 of deep, deep expertise here that's world class at the
17 Energy Commission on this.

18 And RJ. Yeah, I'm going to leave somebody else.
19 I'm trying not to not to call out too many people
20 specifically, but the analysis that goes into making sure
21 that it's cost feasible in the marketplace, cost effective,
22 and good to go from a statewide regulation perspective.

23 In the Compliance Office Lorraine White is the
24 Office Manager, and Joe Loyer, Daniel Wong and Matthew
25 Haro, all of them have been really instrumental in sections

1 of the Building Code Update. And interacting with a lot of
2 the stakeholders on the update, making sure that it's
3 implementable and enforceable in the real world.

4 The Administration team, Amber on the media front
5 and the outreach fronts, Christine, and Mike the Deputy
6 Director and the Director, Mike and Christine you've really
7 been great leaders throughout this process. You know,
8 we're not to finish line yet. A lot of lot of interaction
9 with stakeholders and some tweaks in the offing as we move
10 through the 45-day language. But I really appreciate all
11 your leadership there. Tajanee Ford-Whelan, Mary Trojan,
12 Corrine Fishman, and again Amber Beck.

13 In the Chief Counsel's Office, which so critical
14 in a regular -- especially now that we've entered the
15 regulatory process formally. Linda Barrera, James
16 Qaqundah, Josephine Crosby, Justin Delacruz, Matt Chalmers
17 and Michael Murza, all of them have played a really key
18 role in this.

19 And I'll say we're doing also an environmental
20 impact report for this update, which doesn't always happen.
21 Actually it's relatively rare. But there's a lot of
22 analysis going into that. And as you all know that's a big
23 deal. We have a CEQA equivalent skill set in the Siting
24 Division.

25 So the Siting Division has really stepped up got

1 to give kudos to Sean and his team, as well as the Chief
2 Counsel's Office in putting that together. And I'll just
3 call out Linda Barrera again. The Chief Counsel has been
4 instrumental in moving that forward.

5 So, those are all the people I wanted to -- well,
6 let me just also thank Bill Pennington and Brian from my
7 office. You know, Bill in particular is a real lion in
8 this realm of Building Standards nationally and
9 internationally. And his input has been -- his guidance on
10 this has been really key as well. So anyway that's the
11 status report on that.

12 The other big one is the 3232 Draft Staff Report
13 is out for Building Decarbonization. So that's out on the
14 street for comments. The existing Buildings Office really
15 led that in the Efficiency Division, so that's Michael
16 Kenney, Heriberto Rosales, Jennifer Nelson, the Office
17 Manager Heather Bird, Aida Escala, Brian Samuelson, Gabe
18 Taylor, and Mike Sokol all from the Efficiency Division.
19 And Christine as well as the Deputy in Efficiency Division,
20 have helped guide that and put it together. But Michael in
21 particular and Heriberto and Jennifer have been key to
22 finishing that document.

23 That's been a real collaborative effort across
24 divisions. And the Assessments Division did the meat of
25 the analysis, actually put together the modeling tools and

1 managed the contract for that. And just provided,
2 developed, and I think will maintain this analytical
3 expertise in the building decarb arena. So that we can
4 monitor going forward how we're doing, and really as we
5 gather more and more end use data it'll provide incredible
6 insights as to how we're implementing, whatever the
7 Legislature then asks us to do as a result of that report.

8 So in the EAD Nick Janusch, Ingrid Neumann, Mike
9 Jaske, Matt Coldwell, the Office Manager, Aleecia
10 Gutierrez, the Deputy and Melissa Jones, on constructing
11 the report. And really helping us craft it. So that's out
12 on the street and really good to have that out there for
13 feedback.

14 Both of these developments in the Building Code
15 and the 3232 Building Decarb Report are going to inform
16 that theme in the IEPR discussion going forward. And I'll
17 just flag for everybody on the 21st there's a workshop
18 about the 3233 report. And then on the 25th is an IEPR
19 workshop on building decarbonization. So both of those are
20 you know where we grabbed that ball and we started to carry
21 it down the field during the IEPR process.

22 And on that note I'll just thank Heather and the
23 IEPR team for the few workshops we've already done on the
24 IEPR. And then all the ones that are to come and it's
25 going to be a full summer on a bunch of important topics.

1 I'm really looking forward to working with all of you and
2 my colleagues on the dais.

3 And many of these workshops will be interagency
4 where we'll have ARB, we'll have you know potentially OPR.
5 We'll have certainly the PUC on the dais I think relatively
6 often. And so, as we work through the building decarb
7 themes and the other themes in the IEPR I'm looking forward
8 to that.

9 The last item of note, I guess I will just thank
10 -- for completeness thank my other advisor, Fritz Foo, who
11 is helping out with the international stuff. Collaboration
12 with the EU, which has been really interesting lately.

13 And on the hydrogen topic as well. There's a
14 really rising interest in hydrogen. And I think, as we
15 move forward together to figure out what California is role
16 in that is going to be across sectors, we talked about
17 earlier in the meeting, it's really helpful to educate
18 ourselves about it as much as we can. And keep up to date
19 on this breadth of knowledge that exists on hydrogen.

20 And then finally just I'll sort of channel the
21 Chair here. He and I, a few days after our last Business
22 Meeting, went and visited Sonoma Clean Power, their
23 Advanced Energy Center, which we actually funded. You
24 might remember that we voted a significant grant for them
25 to set that up. And they are really in the final stretch

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1 of finishing it and opening it. And it's just going to be
2 a really fabulous resource for the public and Sonoma
3 County.

4 And then also just we can actually use it as an
5 offsite when we can do that again. So they've got a great
6 meeting space. They've got all the AV. So I think, as we
7 do, regional meetings around the state that'll be a nice
8 place. They're absolutely excited to host us. But the
9 demonstrative value and sort of all of the technologies
10 that we talked about at this meeting and in a previous
11 meetings, they're going be able to showcase in real life
12 for people. So they can actually use them and that piece
13 of market transformation, I think is going to be really
14 critical. And their leadership is amazing on this.

15 So with that I'll wrap up. Thanks for bearing
16 with me through all the thanks. But I think my theme for
17 this meeting is gratitude, both those for all the staff
18 that's working so hard.

19 And also my colleagues, you are just fantastic
20 and obviously including the Chair, who couldn't be with us
21 today. But we're firing on all cylinders and just the
22 collaborative spirit and the respect for public service is
23 something that is really precious. And I think sometimes
24 we have so much to do, we don't quite -- we're not able to
25 focus on backing up and sort of taking it all in. But I

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1 think we're moving the ball forward on so many fronts. And
2 it's impacting the world in a really positive way. And
3 you're all making that happen, so it's really a pleasure to
4 be working with you.

5 COMMISSIONER DOUGLAS: Well, thank you,
6 Commissioner McAllister, for those comments. And for the
7 thanks, which I know we all appreciate and share and right
8 back at you. And I know it's been a remarkably busy time
9 for you with the Building Standards.

10 I have my own update and then I actually have a
11 brief update to read from the Chair, so I'll go into my own
12 first. We've had some really nice international
13 collaboration, and collaboration with other states. In the
14 period since the last Business Meeting I had a chance to
15 join a NYSERDA, so that's New York, California, Denmark
16 conversation on offshore wind that also touched on
17 hydrogen. That was really nice conversation and
18 appreciated NYSERDA inviting us in at the last minute. But
19 it worked out really well to have that be a three-way
20 conversation.

21 We also had an opportunity, and I know that the
22 Chair, Commissioner McAllister and I think also
23 Commissioner Monahan participated in an information
24 exchange with -- or a dialogue with Germany on hydrogen.
25 And it was a great dialogue. I had a chance to ask about

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1 100 questions and got answers to some of them. And some
2 follow-up items, but I learned a lot. It was really nice.

3 We had a Lithium Valley Commission meeting on
4 April 29. The Lithium Valley Commission is really
5 valuable. It's so nice to have a community voice and
6 input. And to have a table where you get these diverse
7 stakeholders from industry, tribes, local community,
8 environmental justice, just all having an opportunity to
9 talk. And sort of envision what they want to see with this
10 incredible environmental and economic opportunity coming
11 out of Lithium Valley.

12 Like Commissioner Monahan, I had some of my first
13 in-person meetings. I actually had two, two days in a row.
14 So like you, Commissioner Monahan, the Norwegian Royal
15 visit, I think her topic was transportation and mine was
16 offshore wind. Commissioner Rechtschaffen joined us. And
17 it looked -- you know, we sat in a studio in San Francisco
18 with the moderator. And then there were two CEOs from
19 Norway participating. And it looked like -- they could
20 make it look like we were in the same room, it was really
21 fascinating. And great dialogue, very fun. My first work
22 trip, you know, for more than a year.

23 And followed the next day with a meeting in
24 Sacramento with the Yurok Chair and several members of the
25 Tribal Council who traveled to Sacramento. And had a

1 number of meetings with state agency folks on the roof of
2 the PUC. And in our case on some of the Capitol park
3 benches, supplemented by some outdoor chairs, that you
4 would take camping or to sporting events. And yeah, we had
5 a great conversation. And we actually really enjoyed being
6 able to talk and be outdoors in this beautiful environment.
7 It was really nice.

8 I wanted to thank Katrina Leni-Konig who spoke
9 earlier on the Diversity report. But she came to that
10 meeting with me and she brought a few chairs and I brought
11 a few chairs. But it worked out really well. I have
12 outdoor meeting space on my wish list now, because it was
13 very nice.

14 Let's see, we already mentioned the IEPR
15 reliability workshop. You know, as a number of you have
16 indicated this has been a really busy time as we think
17 about what do we need to do with the state to meet our SB
18 100 build-out goals. What do we need to do on summer
19 reliability? What do we need to do on summer reliability?
20 What do we need to do in between the long term in the
21 immediate term, to get our state leaders just to stay on
22 the on the right track. And to bring people along and
23 coordinate and cooperate and work together. And bring our
24 best you know, analysis and thinking to that. And so it's
25 been it's been a really busy and productive and interesting

1 time, I think, on the Commission.

2 And I think that wraps my report, but now with
3 your indulgence, colleagues, I will read the Chair's
4 report. Its brief and so here's what he has say.

5 He would like to thank Commissioner Gunda and
6 Commissioner Shiroma from the PUC for joining the town hall
7 we hosted on Anti-Asian violence a few weeks ago with
8 California Supreme Court Justice Goodwin Liu.

9 He especially wants to thank those who shared
10 their stories that day. And to 500 staff who joined and
11 listened with compassion to the stories that were shared.

12 He and Commissioner McAllister toured the Sonoma
13 Clean Powers Advance Energy Center in Santa Rosa, which you
14 mentioned, Commissioner McAllister. Which demonstrates all
15 electric home appliances, electric induction cooktops, heat
16 pumps and other measures to decarbonize. And he'd like to
17 encourage the public to visit when it opens later this
18 month. I might put that on my list to.

19 He brought up the IEPR reliability workshop. And
20 thanks Commissioner Gunda, the IEPR team, and EAD for a
21 successful workshop. And also mentioned that he and
22 Commissioner Gunda will be participating in a legislative
23 hearing next week on reliability. And thanks staff for
24 their hard work on this important issue.

25 And in terms of the express terms for Title 24,

1 offers his congratulations again to Commission McAllister
2 for an outstanding job getting the energy code released,
3 and the 3232 report completed.

4 And he'd like to thank all the staff that worked
5 on these important milestones for our building
6 decarbonization agenda. There's a lot more work to do, but
7 these accomplishments represent a big step forward for
8 building decarbonization. And it would not be possible
9 without Commissioner McAllister's dedication and
10 leadership.

11 So I think we all thoroughly join in that
12 sentiment. And thank you, yep. All right, so --

13 COMMISSIONER MCALLISTER: Aw shucks.

14 COMMISSIONER DOUGLAS: -- Commissioner
15 McAllister?

16 COMMISSIONER MCALLISTER: I'll just say aw
17 shucks, that's what we're here to do. You know, I just
18 think we all have spent a lifetime learning what we need to
19 know, to be able to do what we think is the right thing.
20 And take advantage of the positions that we're in and do it
21 responsibly. So that's all I think I'm doing and I know
22 you're all doing the same thing in your realm. So yeah,
23 but thank you.

24 And really all the kudos go to staff really in
25 fact.

1 COMMISSIONER GUNDA: Commissioner Douglas, can I
2 just make one quick comment?

3 COMMISSIONER DOUGLAS: Yeah.

4 COMMISSIONER GUNDA: Yeah, I kind of wanted to
5 make sure that I did not mention 3232 and a bunch of other
6 things I knew Commissioner McAllister was going mention.
7 That and the SB 100 efforts.

8 The two of you have been -- you and Commissioner
9 McAllister have been the closest that I've been working on
10 in terms of the SB 100 effort and the 3232. And I know we
11 -- and you and Commissioner McAllister are extremely
12 modest, and so is Commissioner Monahan. But today I just
13 want to focus on both of you.

14 Thank you so much for, Commissioner McAllister,
15 your work on 3232. I mean, I was staff back then. Thank
16 you for helping guide me and the team to develop a robust
17 analysis that really kind of sets the stage for the future
18 of building decarbonization analytical work at CEC. And
19 I'm incredibly thankful for your leadership. And just in
20 complete awe on how much you can take on and continue to
21 kind of finish.

22 So to your to office as well as I think I was
23 really grateful that you mentioned every single name.
24 Because it's kind of like I feel kind of stressed that I'm
25 reciting names, because I'm going on too long. But I just

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1 want to call out a couple: Mark Kootstra and Angela
2 Tanghetti, who was also instrumental in the (indiscernible)
3 work. So kudos to all of them.

4 And Commissioner Douglas kind of passed over the
5 SB 100 coordination work like it was like a simple thing
6 over like a couple of seconds. And I've been watching her
7 in action over the last month in trying to really develop a
8 statewide partnership with tons of stakeholders and getting
9 everybody on the same page to kind of think about how do we
10 implement SB 100? How do we think through land use,
11 transmission analysis, big, big projects, long-term
12 projects. How do we think through some of the long-
13 duration storage issues, offshore wind? I

14 So I just want to give kudos and thank you
15 Commissioner Douglas for her leadership on pushing forward
16 on the SB 100. I'm glad to be a part of your team on both
17 of them.

18 And the Chair, fabulous work on reliability and
19 is always behind the scenes. And he lets me be in the
20 front, but I just have gratitude for him for pushing that
21 forward. Thank you.

22 COMMISSIONER DOUGLAS: Thank you, Commissioner
23 Gunda.

24 All right, I think we will move on to Item 16
25 now, Executive Director's Report.

1 MR. BOHAN: Greetings, Commissioners. I have no
2 report this afternoon, thank you very much.

3 COMMISSIONER DOUGLAS: Thank you.

4 Item 17, Public Advisor's Report.

5 MS. GALLARDO: Hi, there. This is Noemi. I said
6 a mouthful earlier, so I just have a couple of quick
7 things.

8 First, I participated in the mPower Innovation
9 event on a Monday. And I wanted to uplift the Research and
10 Development Division, and in particular in the EPIC and
11 mPower Innovation teams for the great work they did to
12 really make it a community-centered event where they
13 focused on getting all this great feedback from community
14 members. So and leaders and whatnot.

15 So I'm hoping that those types of approaches can
16 also be applied in other areas. And one of the things I'm
17 going to be doing is trying to make sure that we break
18 silos and can communicate across divisions. Sometimes we
19 just get bogged down with what we're doing and it's hard to
20 do. So I'm going to try to help out there.

21 And then second, is the Clean Energy Hall of Fame
22 we mentioned at the top. Commissioner Douglas, you did a
23 great job promoting that and we want to remind folks to
24 please submit nominations for any candidates. And the
25 deadline is June 25th, so please submit by then.

1 And that's it for me thank you so much,
2 Commissioners, for everything that you do for us.

3 COMMISSIONER DOUGLAS: And thank you, Noemi, for
4 everything you do for us and for the Commission.

5 And I should have brought up the mPower
6 Innovation event in my report, so I'm glad that you did.
7 Thank you.

8 Let's go on now to Item 18. Is there any public
9 comment?

10 MS. GALLARDO: So I'm going to read some
11 instructions first, Commissioner Douglas.

12 This is the period for any person wishing to
13 comment on information items or reports of the meeting
14 agenda or any other item. Each person has up to three
15 minutes to comment and comments are limited to one
16 representative for organization. We may reduce the comment
17 time, depending on the number of commenters. As a
18 reminder, we are not accepting public comment through Zoom.
19 Please call our Verizon line at 888-823-5065. The pass
20 code is "business meeting."

21 After your line is opened, please spell your
22 first and last names, state your affiliation if you're
23 representing an organization. Do not use the speakerphone
24 when talking, because we won't hear you clearly. And if
25 you're also on Zoom, either mute or leave Zoom to avoid

1 feedback.

2 So I'm hoping that gave people a chance to hop on
3 the line. And we do not have anyone on the line for public
4 comment for Item 18.

5 COMMISSIONER DOUGLAS: All right, thank you then,
6 Noemi.

7 We'll go to Item 19, the Chief Counsel's Report.

8 MS. BARRERA: Hi, Commissioners. The Chief
9 Counsel's Office does not have a report today.

10 COMMISSIONER DOUGLAS: All right, thank you very
11 much, Linda.

12 I think, then with that we are finished. So the
13 meeting is adjourned. Thanks everyone.

14 (The Business Meeting adjourned at 2:00 p.m.)

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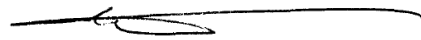
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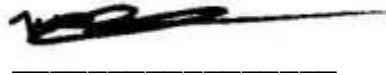
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