

DOCKETED

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BUSINESS MEETING
BEFORE THE
CALIFORNIA ENERGY COMMISSION

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

REMOTE ACCESS ONLY

*The California Energy Commission's August 12, 2020 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 is able to participate and observe the meeting consistent with the direction in these Executive Orders.
Instructions for remote participation can be found in the notice for this meeting and as set forth below in this agenda.*

WEDNESDAY, SEPTEMBER 9, 2020

10:00 A.M.

Reported by:
Peter Petty

APPEARANCES

Commissioners (Via Remote)

David Hochschild, Chair
Janea Scott, Vice Chair
Karen Douglas
Andrew McAllister
Patricia Monahan

Staff Present: (Via Remote)

Drew Bohan, Executive Director
Darcie Houck, Chief Counsel
Noemi Gallardo, Public Advisor
Cody Goldthrite, Secretariat

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a. Pursuant to Government Code section 11126(e), the CEC may adjourn to closed session with its legal counsel to discuss any of the following matters to which the CEC is a party:	
i. In the <i>Matter of U.S. Department of Energy (High Level Waste Repository)</i> , (Atomic Safety Licensing Board, CAB-04, 63-001-HLW); <i>State of California v. United States Department of Energy</i> (9th Cir. Docket No. 09-71014).	
ii. <i>Communities for a Better Environment and Center for Biological Diversity v. Energy Resources Conservation and Development Commission, and California State Controller</i> (Alameda County Superior Court, Case No. RG13681262).	
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iv. <i>Natural Resources Defense Council, Inc., et al. v. United States Department of Energy</i> (Federal District Court, Northern District of California, Case No. 17-cv-03404).	

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- v. *City of Los Angeles, acting by and through, its Department of Water and Power v. California Energy Resources Conservation and Development Commission* (Los Angeles Superior Court, Case No. BS171477).

- vi. *In re: PG&E Corporation and In re: Pacific Gas and Electric Company* (United States Bankruptcy Court, Northern District of California, San Francisco Division, Case No. 19-30088).

- vii. *State Energy Resources Conservation and Development Commission v HyGen Industries, Inc* (Sacramento County Superior Court No. 34- 2019-00252543).

- viii. *Olson-Ecologic Testing Laboratories, LLC v. CEC.* (Orange County Superior Court. Case No. 30-2019-01115513).

- ix. *Interlink Products International, Inc. v. Wade Crowfoot, Drew Bohan, Melissa Rae King* (United States District Court for the District of New Jersey No: 2:20-cv-7654).

- x. *Interlink International Products, Inc. v. Becerra, et al.,* (United States District Court for the District of New Jersey No. 2:20-cv-10566-ES- MAH)

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b.	Pursuant to Government Code section 11126(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 that constitute a significant exposure to litigation against the CEC, which might include personnel matters.	
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P R O C E E D I N G S

10:00 A.M.

WEDNESDAY, SEPTEMBER 9, 2020

CHAIR HOCSCCHILD: Good morning everybody. Today is Wednesday, September 9th, and we're going to begin with our September business meeting.

Please join me in saying the Pledge of Allegiance.

(Whereupon the Pledge of Allegiance is recited.)

CHAIR HOCSCCHILD: Thank you everybody.

Let me just begin by saying we're going through some really extraordinarily challenging times. It's not the first time we have noted that. This morning, I'm here in the Bay Area, and it is ten o'clock in the morning and it looks like midnight. It's dark. And these impacts are happening to varying degrees across the state from the smoke. We have all kinds of challenges that led to the extreme heat storm that's hitting the storm. And the most important thing we can do, all of us together, is support each other and be good neighbors and good colleagues and good family members and good friends to one another and be supportive on a personal level of all of those around you. That's how we get through this together.

1 And with respect to the grid, I want to really
2 recognize all of the incredible conservation that
3 happened this weekend. It was instrumental in our
4 success at keeping the grid up and running this weekend.
5 We got, we estimate, about three gigawatts of
6 conservation. So thanks to all of you who have been
7 following those Flex Your Power alerts and conserving
8 between 3:00 and 10:00 p.m., particularly through Sunday
9 and Monday. So my gratitude and all of our gratitude
10 from the Energy Commission to everyone in California for
11 helping be part of the solution.

12 Again, with the COVID-19 crisis, we're going to
13 just keep saying this as long as we're in this, the
14 COVID-19 crisis, urge everyone to wear a face mask when
15 you're in public, wash your hands frequently, and keep
16 your physical distance. There's more information
17 available on that at covid-19.ca.gov.

18 And, finally, this is the final period we're in
19 for the completion of the census. It was originally due
20 to end at the end of this month. A court has
21 temporarily put that on hold and it looks like it will
22 go through the full October timeframe but that's not
23 certain if that ruling gets overruled. So I wanted to
24 strongly urge all Californians to complete the census.

1 A lot of very important resource allocation decisions
2 are made based on that. And having all of our
3 population be counted, it's really essential that we
4 have an accurate census. Please go online to the Census
5 website and fill that out today if you have not already.

6 Today's business meeting is being held remotely
7 without a physical location for any participant
8 consistent with Executive Orders N-25-20 and N-29-20,
9 and the recommendation from the California Department of
10 Public Health, to encourage social distancing in order
11 to slow the spread of COVID-19.

12 The public may participate and/or observe the
13 meeting consistent with the direction of these executive
14 orders. Instructions for remote participation can be
15 found in the notice for this meeting and set forth on
16 the agenda posted to the Energy Commission website link
17 for this business meeting. Again, we're using a
18 combination of Zoom and Verizon for remote access today.
19 In case Zoom shuts down for both video and audio, we'll
20 be continuing our meeting on a Verizon phone line. That
21 number is (888) 823-5065 and the passcode is "business
22 meeting."

23 Public comment instructions pursuant to the
24 California Code of Regulations, Title 20 Section

1 1104(e), any person may make oral comment on any agenda
2 item. To ensure the orderly conduct of business, such
3 comments will be limited to three minutes per person as
4 to each item listed on the agenda that will be voted on
5 today. Any person wishing to comment on information
6 items or reports, non-voting items, shall reserve their
7 comment for the general public comment portion of the
8 meeting agenda and you'll have three minutes total to
9 state all the remaining comments.

10 All right, so with that, we are going to be
11 approving, if all the items get approved today on the
12 agenda, over \$8 million in grants, yet more help for
13 California's economic recovery. So with that, let's get
14 into the agenda.

15 So I believe, Commissioner McAllister, were you
16 going to make a comment on item 1a?

17 COMMISSIONER MCALLISTER: Yeah. Yes. Thank
18 you, Chair.

19 I'd like to ask that Item 1a, the National
20 Association of State Energy Officials, be voted on
21 separately. I want to recuse myself from that item on
22 the consent agenda because I am Chair of the Board of
23 NASEO, the National Association of State Energy
24 Officials. So I'll leave the room and I'll mute myself

1 but I'll keep my video on so people can see that I have
2 left. And then the Public Advisor will text me after
3 the rest of you vote on that item and I'll return.

4 CHAIR HOCSCCHILD: Thank you, Commissioner. That
5 request is granted.

6 So let's address Item 1a, now, the National
7 Association of State Energy Officials, NASEO.

8 Any public comment on this Item 1a? Madam
9 Public Advisor, is there any public comment on that
10 item?

11 MS. GALLARDO: Thank you, Chair. Sorry about
12 that. There is no public comment.

13 CHAIR HOCSCCHILD: Any Commissioner discussion on
14 that item? Let me just call everyone one by one.

15 Commissioner Monahan, any comment on that?

16 COMMISSIONER MONAHAN: No comment.

17 CHAIR HOCSCCHILD: Okay.

18 Commissioner Douglas, any comment?

19 COMMISSIONER DOUGLAS: None.

20 CHAIR HOCSCCHILD: Vice Chair Scott, any comment?

21 VICE CHAIR SCOTT: No comment.

22 CHAIR HOCSCCHILD: Okay. And I have no comment.

23 So let's go ahead and make a motion.

24 Is there a motion for Item 1a?

1 Vice Chair Scott?

2 COMMISSIONER DOUGLAS: Move approval. Oh,
3 sorry.

4 CHAIR HOCSCCHILD: Okay. How about --

5 VICE CHAIR SCOTT: And I will second the
6 approval.

7 CHAIR HOCSCCHILD: Okay. Moved by Commissioner
8 Douglas, seconded by Vice Chair Scott.

9 All in favor, say aye.

10 Vice Chair Scott?

11 VICE CHAIR SCOTT: Aye.

12 CHAIR HOCSCCHILD: Commissioner Douglas?

13 COMMISSIONER DOUGLAS: Aye.

14 CHAIR HOCSCCHILD: Commissioner Monahan?

15 COMMISSIONER MONAHAN: Aye.

16 CHAIR HOCSCCHILD: And I vote aye as well. That
17 item passes four-to-zero with Commissioner McAllister
18 abstaining.

19 Let's move on to the remaining consent calendar
20 items, Item 1b through 1e, and we'll vote on these as a
21 group.

22 Are there any public comments on these items,
23 Madam Public Advisor?

24 MS. GALLARDO: This is Noemi Gallardo, Public

1 Advisor. No comments.

2 CHAIR HOCSCCHILD: Okay. Any comments from
3 Members of the Commission?
4 Vice Chair Scott?

5 VICE CHAIR SCOTT: No comment.

6 CHAIR HOCSCCHILD: Commissioner Douglas?
7 COMMISSIONER DOUGLAS: No comment.

8 CHAIR HOCSCCHILD: Commissioner McAllister?
9 COMMISSIONER MCALLISTER: No comment.

10 CHAIR HOCSCCHILD: comment?
11 COMMISSIONER MONAHAN: No comment.

12 CHAIR HOCSCCHILD: Is there a motion, Vice Chair
13 Scott?

14 VICE CHAIR SCOTT: Yes. I will move approval of
15 Items 1b through 1e.

16 CHAIR HOCSCCHILD: Okay. Commissioner
17 McAllister, would you be willing to second that?

18 COMMISSIONER MCALLISTER: I will second, yes.

19 CHAIR HOCSCCHILD: Okay. All in favor, say aye.
20 Vice Chair Scott?

21 VICE CHAIR SCOTT: Aye.

22 CHAIR HOCSCCHILD: Commissioner Douglas?
23 COMMISSIONER DOUGLAS: Aye.

24 CHAIR HOCSCCHILD: Commissioner McAllister?

1 COMMISSIONER MCALLISTER: Aye.

2 CHAIR HOCSCHILD: Commissioner Monahan?

3 COMMISSIONER MONAHAN: Aye.

4 CHAIR HOCSCHILD: And I vote aye as well. That
5 item passes unanimously.

6 Let's move on to item two, discussion of Energy
7 Commission Progress on Joint Agency Report, Charting a
8 Path to a 100 Percent Clean Electricity Future, Senate
9 Bill 100.

10 And welcome Terra Weeks to present.

11 MS. WEEKS: Good morning, Chair and
12 Commissioners. I'm Terra Weeks, Senior Advisor to Chair
13 Hocschild and the Project Manager for the 2021 SB 100
14 Joint Agency Report. I'm joined by Liz Gill from the
15 Energy Assessments Division, who is one of our modeling
16 leads for the report and will walk through a couple of
17 slides on our modeling results in a moment.

18 And today, we'd like to provide you with a
19 summary of the Joint Agency SB 100 Draft Results
20 Workshop, which the Energy Commission co-hosted last
21 week with the Public Utilities Commission and Air
22 Resources Board. So thank you to Chair Hocschild,
23 Commissioner McAllister and Commissioner Douglas for
24 attending our workshop. And I'll also provide a quick

1 update on timeline and next steps for the report.

2 Next slide please.

3 So first, in alignment with our new business
4 meeting template, a review of the benefits to
5 California.

6 So under Senate Bill 100, renewable energy and
7 zero-carbon resources shall supply 100 percent of
8 electric retail sales and electricity procured to serve
9 state agencies by December 31st, 2045. And
10 implementation of this policy presents benefits to
11 public and environmental health by reducing greenhouse
12 gas emissions and air pollution from the electricity
13 sector. And the development of clean energy resources
14 needed to meet the goal also provides a substantial
15 economic and workforce opportunity.

16 Next slide please.

17 So now, a brief overview.

18 And as I believe you're all aware, the Energy
19 Commission, Public Utilities Commission, and Air
20 Resources Board are developing the SB 100 Report, due to
21 the legislature January 1st of 2021. And this is the
22 first of a series of reports that will be published
23 every four years. The report will include a review of
24 the policy, including alternative scenarios in which the

1 policy can be achieved, and recommendations for planning
2 and implementation.

3 And just to orient you in terms of where we are
4 in the report development process, we kicked off the SB
5 100 effort almost exactly a year ago, last September,
6 with a workshop in Sacramento, and then held three
7 scoping workshops around the state in Fresno, Redding,
8 and Diamond Bar to solicit public and stakeholder input
9 on the scope of the report. (Clears throat.) Excuse
10 me. The air pollution is getting to me. And those are
11 followed by two technical workshops on the scope of the
12 analysis.

13 And after reviewing comments from those
14 workshops, we completed the modeling for this report
15 and, last week, we remotely hosted our draft modeling
16 results workshop, which I'll discuss more in a moment.
17 And we also plan to have a draft report workshop this
18 fall which will be held remotely. And the report is due
19 to the legislature on January 1st.

20 Next slide please.

21 So as I -- (clears throat) excuse me -- as I
22 mentioned, we held our draft results workshop on
23 September 2nd. And the workshop was fully remote and
24 quite well attended with close to 400 attendees. And

1 the workshop was broken up into two sessions. So in
2 session one, our CEC team outlined our modeling
3 framework and then ran through the results of our
4 analysis. And the second session consisted of three
5 stakeholder panels to discuss the draft results from
6 various perspectives. The first panel was on the
7 resource requirements needed to achieve the 2045 goal,
8 the second on grid planning implications, and the last
9 on equity workforce and additional considerations for SB
10 100 planning and implementation. And we have our
11 panelists listed here, just to give you a sense of the
12 perspectives that were represented.

13 So now I'll hand things over to Liz Gill who
14 will run through a couple of summary slides highlighting
15 some of the results of our analysis for the report. And
16 this is just a small subset of what was presented at the
17 workshops and only covers a couple of the scenarios that
18 we included in the full analysis. And the full slide
19 deck can be found on the SB 100 page of the Energy
20 Commission website.

21 So with that, I will hand things to Liz.

22 MS. GILL: All right. Thank you, Terra.

23 Next slide please. All right.

24 Good morning, Chair and Commissioners. My name

1 is Liz Gill and I'm on staff in the Energy Assessments
2 Division. I'm going to walk through four slides with
3 the subset of the results from the SB 100 modeling
4 effort. We ran many modeling scenarios, both within the
5 scope of the Joint Agency interpretation of SB 100, and
6 additional study scenarios that go beyond that
7 interpretation. Study scenarios included scenarios like
8 accelerating the 100 percent target and eliminating
9 combustion resources. But today, I'm just going to
10 focus on a couple of those core scenarios.

11 All of the modeling was conducted by our
12 consultant E3 using the California RESOLVE model.
13 RESOLVE optimizes the resource build on a statewide
14 basis to meet policy and reliability constraints. The
15 model can flex from renewable energy resources, such as
16 solar, instate wind, out-of-state wind, offshore wind,
17 geothermal, biomass, and hydrogen fuel cells. It can
18 also select from storage resources, both battery and
19 long duration, shift demand response, and gas resources.
20 It can also economically retire gas resources.

21 So on this slide we have the capacity addition
22 to meet the Joint Agency interpretation of SB 100 for
23 two different demand scenarios, a reference demand
24 scenario in which the demand is an extrapolation of the

1 2019 California Energy Demand Forecast out to 2045, and
2 second is a high electrification demand scenario which
3 is based on a future in which California reaches its
4 economy-wide (indiscernible) goal primarily through
5 electrification.

6 Here we can see that in both scenarios, all of
7 the instate and offshore wind capacity made available to
8 the model is selected. Most of the out-of-state wind
9 made available to the model is selected. And in both
10 scenarios, all of the long-duration storage resources
11 made available were selected. In the reference
12 scenario, 43 gigawatts of solar and 39 gigawatts of
13 battery storage is selected. In the high
14 electrification scenario, 67 gigawatts of solar and 50
15 gigawatts of battery storage is picked up. In total,
16 there is about 145 gigawatts of capacity added in the
17 reference scenario and about 180 gigawatts in the high
18 electrification scenario. Additional, we see between
19 three and six gigawatts of economic gas capacity
20 retirement between these two scenarios.

21 Next slide please.

22 In this slide we have the total resource costs
23 for the 60 percent RPS case, which acted as our
24 counterfactual and the SB 100 core high electrification

1 scenario. The total resource cost is, effectively, the
2 annual revenue requirement resulting from the model. It
3 includes costs associated with the existing system,
4 shown here as baseline costs in gray, and then scenario-
5 specific costs which include annualized new capital
6 investments and operational costs.

7 Looking at the table the SB 100 core scenario
8 resulted in about \$4 billion of additional total
9 resource costs compared to the 60 percent RPS which is
10 an average of about \$0.012 cents per kilowatt hour in
11 the model, or a six percent increase.

12 Next slide please.

13 So given the magnitude of the resource build, we
14 thought it would be valuable to look at the build rates
15 in order to meet these portfolios. On the left we have
16 the average build rate to date. Over the past ten
17 years, California has built, on average, one gigawatt of
18 solar per year and 330 megawatts of wind per year. And
19 we'll ignore batteries for historical purposes. The
20 single year maximum build, shown with the diamond, was
21 in 2013 with 2.67 gigawatts of solar and almost 1
22 gigawatt of wind.

23 Looking forward, what this model projects, to
24 reach the 2030 portfolio, we have similar build rates

1 for the high electrification scenario and the reference
2 demand scenario with about 1.5 gigawatts of solar per
3 year, 0.6 to 0.8 gigawatts of wind per year, and about 1
4 gigawatt of battery storage per year over the next ten
5 years.

6 Looking out further then, to 2045, the 25-year
7 average build rate for the high electrification scenario
8 is 2.7 gigawatts of solar per year, about 1 gigawatt of
9 wind per year, and 2.2 gigawatts of batteries per year
10 for the next 25 years. And so this is about on par with
11 that ten-year historical average -- or the, sorry, the
12 single year maximum build rate.

13 And it's important to note that when we look at
14 this 25-year build rate, if we only built at the rate
15 needed for 2030 the 2030 to 2045 build rate would be
16 higher than these numbers and we'd be, effectively,
17 playing catchup.

18 Next slide please.

19 Here are some key takeaways from the study.
20 First, SB 100 is achievable with existing technologies.
21 However, cost reductions and innovation in zero-carbon
22 technologies, as well as demand flexibility and energy
23 storage development, can further reduce implementation
24 costs. Portfolio diversity, both technological and

1 geographical, is generally valued by the model.
2 Sustained record-setting build rates will be required to
3 meet SB 100. And natural gas capacity is largely
4 retained by the model but statewide utilization
5 decreases by 50 percent compared to a 60 RPS future.

6 However, cost reductions and innovation in zero-
7 carbon firm resources and storage resources economic gas
8 fleet retirement.

9 Thank you. And I will pass it back to Terra.

10 MS. WEEKS: Thank you, Liz.

11 So we received quite a lot of feedback on the
12 draft results during the workshops through our
13 stakeholder panels, as well as through public comment.
14 And we're still reviewing written comments in the
15 docket, which is not yet closed, but I wanted to
16 highlight a couple of themes that we heard throughout
17 the day.

18 So one key comment that we heard from industry
19 representatives was that achieving SB 100 is possible
20 but will be a big push. And it will require a
21 coordinated regulatory environment for system planning
22 and to address bottlenecks, such as permitting and
23 transmission and distribution system investments.

24 Another top comment was that these results are

1 directionally useful but more work is needed to better
2 address specific implications, such as reliability, land
3 use and the location of resources, and equity
4 considerations. In particular, balancing authorities
5 and others underscored the need for a full reliability
6 assessment, which we are planning as a next step in this
7 effort.

8 We also heard comments to better capture
9 resource potential of emerging and non-generation
10 resources, such as hydrogen, new lower-cost geothermal
11 technologies, behind-the-meter storage, long-duration
12 energy storage, and demand flexibility. Some of the top
13 comments we received from equity stakeholders were to
14 incorporate social costs and non-energy benefits into
15 our analysis, and to explore opportunities to use
16 additional zero-carbon firming resources to further
17 reduce the amount of gas that remains on the system, as
18 well as to prioritize gas retirements in disadvantaged
19 communities.

20 Another is that effective workforce training
21 programs require strong partnerships, especially with
22 employers, and pre-apprenticeship programs have been a
23 successful model to look to.

24 And lastly, stakeholders noted that SB 100

1 provides a helpful forum to discuss a range of topics
2 across agencies. Stakeholders also encouraged us not to
3 wait four years, until the next report, to continue this
4 work. So that's something that we're discussing
5 internally.

6 Next slide please.

7 And just to close, as next steps, Staff will
8 continue reviewing written comments, which are due
9 September 15th, and continue working with the Joint
10 Agency to develop the full draft report. And we're
11 planning to hold the draft report workshop later this
12 fall which will be our final workshop for this report.

13 And just before I close, I'd like to say a big
14 thank you to our Joint Agency colleagues and to Siva
15 Gunda and our internal team here, especially Alicia
16 Gutierrez, Liz Gill, Mark Kootstra and Jim Bartridge,
17 who were all hands on deck for everything leading up to
18 and during the workshop.

19 Also a huge thank you to Noemi Gallardo, Dorothy
20 Murimi, and Patty Pham for ensuring the whole remote
21 workshop went smoothly, which is certainly not an easy
22 task.

23 And then, lastly, Noemi and Alicia were also
24 instrumental in helping us engage more closely with our

1 equity and EJ stakeholders. And we were really pleased
2 with the robust discussion on equity and workforce that
3 they helped facilitate at the workshop.

4 And with that, thank you, and I'd like to open
5 it up to any questions and discussion.

6 CHAIR HOCSCHILD: Thank you so much, Terra. And
7 I know I speak for all of us Commissioners when I say,
8 we're just really, really pleased and proud of the
9 performance of the whole Energy Commission team, Liz,
10 Terra, Mark, Alicia, Siva, I mean, the whole team. It's
11 a really, really complex undertaking and it's a multi-
12 agency effort. And we just are really, really gratified
13 for all your work.

14 So let's turn over the discussion to Commission
15 discussion. Let's begin with Commissioner McAllister.

16 COMMISSIONER MCALLISTER: Did we want to ask for
17 public comment at all on this item?

18 CHAIR HOCSCHILD: This is a non-voting item.

19 COMMISSIONER MCALLISTER: Um-hmm.

20 CHAIR HOCSCHILD: So we don't --

21 COMMISSIONER MCALLISTER: Okay.

22 CHAIR HOCSCHILD: -- specifically vote on it.

23 COMMISSIONER MCALLISTER: Okay. I will say, I'm
24 encouraged or really heartened by all the public comment

1 that we got on the day of the workshop. That was really
2 good, that engagement, and we want to keep -- continue
3 to encourage folks to participate because that's what
4 the public process, you know, what the process is for,
5 to have these workshops and gather, you know,
6 particularly, you know, knowledgeable stakeholders that
7 have a wide variety of opinions on this topic.

8 So, first of all, I just wanted to reiterate
9 your thanks to Terra and the rest of the team, as well,
10 Liz and Siva and the whole team in Assessments Division.
11 You guys have really been knocking it out of the park in
12 both doing the analysis and, also, managing the work
13 across agencies. I think, you know, there's a lot of
14 different skills required to navigate a project of this
15 complexity, so thanks very much for that.

16 I really just have a few comments. I mean, I've
17 been paying pretty close attention to this along the
18 way. And I've really been impressed with the work to
19 date. There's been a lot of thoughtful discussion
20 across the agencies at the principal level and, also,
21 just at all the staff level, senior staff on down,
22 across the agencies. And I think that's very healthy
23 and good for any number of reasons for this project and,
24 more broadly, with all the challenges that we have in

1 the state that we have to address.

2 As that one point, you know, made early in
3 Terra's presentation that, you know, the stakeholders
4 really expect and need us for many reasons to align our
5 regulatory environment and coordinate in a way that
6 removes barriers and really gives the marketplace the
7 right signals to move forward and develop the clean
8 technologies we need for SB 100 achievement and for many
9 other reasons.

10 Let's see, so I just want to thank, actually,
11 the principals with the other agencies. I mean, I
12 think, you know, the PUC and the ARB, Chair Nichols with
13 the ARB and Commissioner Randolph at the PUC, and all of
14 the core teams there have really been great partners on
15 this.

16 And then, let's see, I guess the substantive
17 comments I have, just I wanted to highlight, you know,
18 really the fact that we have the core scenarios, which I
19 think are the right ones, and then we have a fair amount
20 of flexibility slightly beyond that to ask different
21 questions, you know, the different scenarios, the no
22 combustion scenario.

23 The load flex scenario is one that I'm super
24 interested in and I'll just sort of take this

1 opportunity to, you know, sharpen that axe a little bit.
2 I do think that load flexibility is a core
3 decarbonization strategy and optimization strategy and
4 cost reduction strategy for the grid of the future.
5 It's not just about, you know, behind-the-meter storage
6 or distributed storage, you know, within the
7 distribution grid, small scale, aggregatable. All the
8 diversity of resources that could qualify, that do
9 qualify, that does qualify as load flexibility is very -
10 - is great; right? And we've got a number of
11 initiatives at the Energy Commission that are going to
12 encourage that ecosystem to establish and grow and
13 thrive.

14 And so, you know, load management standards, the
15 appliance flexibility standards, the Building Code
16 itself, really getting a handle on how best to mobilize
17 the, really, billions of potential points of load
18 flexibility, if we had had a few thousand megawatts of
19 easily-accessible cheap load flexibility over the last
20 month, you know, some of the capacity shortfalls that we
21 saw would have been a non-issue.

22 And so I think those resources are really key.
23 And we're seeing, you know, Steve Berberich and other
24 principals across the other agencies are kind of tuning

1 into this, as well, and I think we have a really great
2 moment to make this happen.

3 So I want to just sort of keep -- you know, it's
4 not just about big technology, it's also about smart
5 operation. And that can be the cheapest resource that
6 we have. And that's going to be good for ratepayers for
7 the long term and help all of our reliability issues and
8 bolster the good itself, so anyway, enough of that.

9 But, again, I think the point of -- that Liz
10 made about the firm resources, the zero-carbon firm
11 resources, and that can include a diverse, you know,
12 array of technologies, as well, along with load
13 management and demand response and other load flex
14 technologies, those really are going to be key
15 innovations that I think California can bring to the
16 world that will solve these problems going forward.
17 And, you know, it's all about addressing climate change
18 and maintaining a reliable grid.

19 With that, I just want to thank the staff for
20 all the great work again and pass it to my colleagues.

21 CHAIR HOCSCCHILD: Thank you, Commissioner. And
22 I think this highlights, again, your terrific work to
23 advance load management standards, which are another
24 really important tool to advance flexibility.

1 Let's turn to Commissioner Douglas.

2 COMMISSIONER DOUGLAS: Sorry. I had to get off
3 mute, so thank you, and I just have a few brief comments
4 on this item.

5 I really want to join Commissioner McAllister in
6 thanking the staff team for this work. I want to thank
7 Terra for the fantastic job she's done so far -- great
8 job, Terra -- Siva, and really all of the talented
9 analytical staff in the Energy Assessments Division, the
10 Step (phonetic) Division, who are contributing to this
11 effort.

12 And I really enjoyed seeing the great
13 contributions, as well, from staff and leadership at the
14 CPUC and the Air Resources Board and their collaboration
15 and contribution to this interagency effort.

16 I enjoyed the workshop last week. Liz Gill did
17 a really nice job, you know, presenting it, not only
18 here but at the workshop in terms of the modeling
19 results. We had a really nice discussion. And it
20 definitely leaves us with a picture of what steps we
21 need to take and how we need to plan and how we need to
22 move forward to meet these goals. And I think we're
23 going to continue to refine our understanding of the
24 opportunities and constraints and steps that California

1 is going to need to take. And analyses like this are
2 what will allow us to do that.

3 So I'm really looking forward to reviewing the
4 report when it's ready and working with and hearing more
5 from the broad cross-sector stakeholders who have been
6 on this journey with us and commenting and
7 participating.

8 So, again, thank you and that's all I have for
9 today.

10 CHAIR HOCSCCHILD: Vice Chair Scott, and then
11 Commissioner Monahan, any comments?

12 VICE CHAIR SCOTT: I do have a couple of
13 comments.

14 And, Terra and Liz, I'll have a question for you
15 in just a moment. I appreciate the excellent
16 presentation. It's really great for us to get these
17 updates, I think, at the business meetings, and also
18 have a chance for the Commissioners to speak with one
19 another about the topic as well.

20 And so I just want to say thank you very much to
21 the entire team. It is certainly a team effort. And
22 when you look at the analysis that's been done here, and
23 the assessment, I think it is really quite impressive.
24 It's high caliber and it's exciting. And it matters a

1 lot, right, for California figuring out, how do we get
2 to 100 percent clean energy standards in the most
3 efficient and effective ways? So I just really do
4 appreciate that depth of analysis and all of the care
5 that has gone into this by the team.

6 I'm sorry that I wasn't able to join you all.
7 We had an EPIC forum at the exact same time. So I was
8 bummed to miss the SB 100 but appreciate this
9 presentation.

10 Liz and Terra, the question that I have for you
11 is, Liz, you presented a slide that talked about the
12 buildout and what's it's going to -- how much we need to
13 build out in each of the different technologies. And
14 then, Terra, you mentioned in your closing remarks that
15 it's going to be a little bit of a challenge for us to
16 get there and get there as quickly as we need to.

17 And I'm wondering if, as part of this
18 assessment, we will be looking into some of the -- you
19 know, whether it's more incentives, other policies, what
20 is it that we might need to do to accelerate this and
21 get it moving as quickly as we need it to? And so it's
22 not a question about, you know, please tell me all the
23 things we're going to do to accelerate it but is part of
24 the assessment looking at some of the options that we'll

1 have to help us move as quickly as we need to get there?

2 MS. WEEKS: That's a really good question. And
3 I think at this point it's hard to say, definitively,
4 what will be included in the recommendations in the
5 report.

6 But, really, the goal for this analysis in this
7 report is to just establish a directional foundation,
8 kind of get an order of magnitude of where we're going.

9 And, again, this is just the first of a long
10 road of reports ahead. And so I think we're really just
11 highlighting where some of the challenges might be, what
12 bottlenecks might exist, and then, of course, looking at
13 the opportunity, too, and making sure to leverage the
14 economic and workforce opportunity.

15 So I think, really, the goal for this report is
16 to just highlight these areas. But we will be thinking
17 through what specific recommendations we also want to
18 include in the report, so we'll be continuing the
19 discussion with our principals and getting further
20 direction on that.

21 VICE CHAIR SCOTT: Great. Thank you for that.
22 Thank you guys for the excellent update today. I
23 appreciate it. Thank you.

24 CHAIR HOCSCCHILD: Commissioner Monahan, any

1 comments or questions?

2 COMMISSIONER MONAHAN: Well, I want to continue
3 the chorus of thanks to the team. Really great job and
4 just appreciate the collaboration across agencies.

5 I do think this report is so foundational for
6 California being able to demonstrate it has a pathway to
7 reach a zero-carbon grid by 2045, and especially as we
8 electrify more and more. I mean, transportation, I
9 would say, is the camel's nose under the tent. There's
10 still being electrification that's accelerating and we
11 just -- so this analysis is going to be so important for
12 setting the stage for success.

13 I had, maybe, a comment, maybe a question. I'm
14 not sure if you can answer this. I, too, like Vice
15 Chair Scott, have been unable to join because there's
16 been so many IEPR workshops on transportation. But
17 those are coming to an end, so I'm hoping to go to the
18 next SB 100 workshop to learn more.

19 You know, we're -- in the transportation side,
20 there's a lot of questions about how -- you know, what's
21 the role of hydrogen, especially for medium- and heavy-
22 duty vehicles. I think that we're going to have some
23 challenges where batteries may not be able to accomplish
24 everything that we need and fuel cells have some

1 distinct advantages. But we're also hearing in German,
2 in particular, interest in having hydrogen being used,
3 you know, for combustion purposes, actually, for their
4 grid climate goals.

5 And I'm curious about the level of investment
6 that we're doing right now in understanding the role of
7 hydrogen for our electricity needs. And I mean, both --
8 I mean, you could use hydrogen for storage, hydrogen
9 directly. You could use fuel cells in some capacity.
10 Is that analysis part of this SB 100 cross-agency
11 analysis or is that something that we'll be looking to
12 more in the future?

13 MS. WEEKS: That's also a really good question.

14 So for this analysis, we really erred on the
15 side of existing technologies, so really looking at
16 commercialized technologies with really robust and
17 publicly-vetted cost and performance data. So there
18 were a couple of technologies that we thought could meet
19 the zero-carbon criteria but were excluded from this
20 round of modeling for various purposes. And so some of
21 them were because we just weren't confident in the data
22 that's available.

23 We did include in our study scenarios, which
24 Commissioner McAllister mentioned, which are kind of

1 either outside of our core interpretation of the statute
2 or looking at technologies that weren't as confident in
3 the available data for. So we do include some generic
4 firm resources which could be proxies for things like
5 hydrogen, like biomethane or advanced nuclear imports.
6 And so we're trying to get kind of a sense of the
7 impacts those technologies could have. But I think
8 actually doing a higher resolution look is something
9 that we'll have to incorporate into future work.

10 COMMISSIONER MONAHAN: I think that makes sense.
11 I think as we look forward, we may want to think about
12 strategies for engaging lead countries. I mean,
13 California's leadership is global in so many ways on
14 clean energy. And the transportation space is
15 unparalleled in this state. And just making sure that
16 as we are developing solutions here in California we're
17 providing a pathway for migration to other countries but
18 we're also providing an opportunity for us to learn
19 what's going on in lead countries, and I would put, you
20 know, Germany in that category.

21 COMMISSIONER MCALLISTER: Can I chime in and add
22 to that point --

23 CHAIR HOCCHILD: Yeah. Go ahead.

24 COMMISSIONER MCALLISTER: -- actually, Chair?

1 CHAIR HOCSCHILD: Go ahead.

2 COMMISSIONER MCALLISTER: Yeah, so I completely
3 agree with Commissioner Monahan on this. And actually,
4 when I was the COP in Madrid last year, met with a few
5 countries that were along the -- including Germany, but
6 also Scotland, you know, Japan who is, obviously, trying
7 to be a leader in this space as well. There are entire
8 countries.

9 You know, Europe and Japan, I'd say, are the,
10 you know, the farthest kind of out in their thinking,
11 and for slightly different reasons than we have here.
12 But, you know, they obviously have really tight
13 constraints on their ability to access natural gas. And
14 their access to the global natural gas market is
15 different from ours in the U.S.

16 And so -- but they have -- they really see
17 hydrogen as a core grid resource, you know, for bulk
18 generation, as well as transportation, and are trying to
19 capitalize on that synergy. And I do think that we're a
20 little bit behind on that conversation.

21 LADWP has got a really beautiful project for,
22 you know, repurposing their power plant and
23 (indiscernible). And, you know, they own a lot of the -
24 - it's got a really nice set of characteristics that

1 allow -- you know, with underground storage, with a lot
2 of space for solar, with access to water rights, and an
3 existing transmission line that goes right to the site
4 of their existing combustion power plant. And so they
5 are planning to move forward with a large hydrogen
6 project that could really, I think, change the game.

7 But as Terra said, the costs going forward are
8 pretty uncertain. Electrolyzers have to come down and
9 there's a lot of detail there that doesn't quite, you
10 know, create the conditions to be able to do that core
11 assessment now, today. But I think -- I certainly would
12 anticipate, I certainly would hope, that the, kind of,
13 planets align a little bit to be able to do that in the
14 not-distant future. So I completely agree with your
15 urgency there.

16 CHAIR HOCSCCHILD: Great. Well, thank you
17 everybody for the update and for all the good work.

18 Let's move on to item three, the Zero-Emission
19 Vehicle and EV Charger Dashboard.

20 I will just say, by way of introduction, this is
21 precisely the kind of capability that the Energy
22 Commission is going to be doing a lot more of. And it's
23 a great example of a successful process to get, you
24 know, really, really difficult to -- you know, this data

1 has not been compiled like this before. And I want to
2 just thank all the team that did this and turn it over
3 to Siva Gunda to present.

4 MR. GUNDA: Good morning, Chair, Vice Chair and
5 Commissioners. Thank you for the opportunity today to
6 highlight the Zero-Emission Vehicle (indiscernible)
7 Dashboard that the Energy Commission recently launched.
8 I'm Siva Gunda, Deputy Director for the Energy
9 Assessments Division. And while I have the opportunity
10 to present today, this item was a collaborative work
11 between the Assessments Division and the Fuels and
12 Transportation Division with support from Media and the
13 Web teams.

14 I would like to moment to recognize Liz Pham,
15 Jesse Gage, Thanh Lopez, Heidi Javanbakht, Matt
16 Coldwell, and Mark Wenzel for their leadership in
17 developing this dashboard.

18 The dashboard is part of a larger effort at the
19 Energy Commission, focused on reimagining and
20 modernizing the way data is collected, analyzed, and
21 made accessible to a broad area of stakeholders and the
22 public. The dashboard is embedded in a webpage for
23 which the link is included in the presentation. We
24 developed this in collaboration with DMV, who provided

1 the vehicle registration data, and the Air Resources
2 Board.

3 The team would like to thank the Chair,
4 Commissioner Monahan, and Commissioner McAllister for
5 your guidance in developing the product, as well as the
6 broader data Staff.

7 With that, next slide please.

8 The webpage contains a tabular dashboard to
9 track ZEV and EV chargers statistics to track progress
10 toward some of the key state goals which include a
11 million-and-a-half ZEVs on the road by 2025, 5 million
12 ZEVs by 2030, as well as the charging infrastructure
13 targets laid out by the assessments in AB 2127. The
14 datasets underpinning the dashboards will be updated as
15 new data becomes available. And here's the link for
16 anybody who wants to access it.

17 With that, I will go to the next slide.

18 We have a short recorded demo of the dashboard
19 by Heidi that supervised the development of the
20 dashboard.

21 (Pause)

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

24 We are not hearing the demo at this point, so

1 let us try again.

2 Sorry about that, Siva.

3 MR. GUNDA: No problem. Yeah, I think I could -
4 - if you could just hold there for a second on that
5 picture, I could just provide a high-level?

6 So the dashboard has three components. There is
7 a ZEV dashboard, essentially the sales and the
8 cumulative sales, which is highlighted at the top where
9 you see the vehicle population that's highlighted. And
10 then you also have the new ZEV sales, and then EV
11 chargers. Each one of them is a button that you could
12 hit on and then there are different dashboards that will
13 show up.

14 On the vehicle population that we're currently
15 on, as you see there, there is the left-hand top corner,
16 you have the ZEV population. And the right-hand side
17 you have the non-ZEV population as well. But as you go
18 down to the right of the dashboard, you have a variety
19 of filters that you could use to look at vehicle counts
20 by MSAs, counties, as well as the zip codes. And then
21 for every year you could, basically, select the split by
22 vehicle make and model.

23 So the next slide, the next part of this
24 presentation, which is now kind of muted but I'm going

1 to just keep going, which is the new ZEV sales, when you
2 hit that dashboard, it is very similar to the vehicle
3 population but it just shows the ZEV statistics.

4 And finally, the EV charger layout, which we'll
5 post in our presentation the different shots for that,
6 has both information on both the public chargers, as
7 well as shared chargers. And this information will be
8 regularly updated.

9 With that, Noemi, I'd request that we pass the
10 media and go to the next slide. Thank you, Noemi.

11 So finally, I just want to leave the leadership
12 with some next steps.

13 We will be updating the ZEV dashboard, the three
14 dashboards, as new data become available. The ZEV data
15 dashboard will be updated quarterly. And the next
16 update will occur at the end of October. The EV charger
17 dashboard will also be updated quarterly. The dashboard
18 will evolve as we receive input and feedback from users.

19 And again, before I close, I want to take this
20 opportunity to thank DMV for their collaboration,
21 without which this would not have been possible.

22 Sorry about the recording that cut off the audio
23 but, hopefully, people can reach out and then see the
24 dashboard for themselves.

1 Thank you.

2 CHAIR HOCSCCHILD: Great. Thank you so much,
3 Siva and team.

4 Let's turn it over to Commissioner Monahan.

5 COMMISSIONER MONAHAN: So I love this product so
6 much. I have a deep emotional attachment to this
7 because, in my previous life, I used to have to pay for
8 this data, and through the nose, and it's expensive, and
9 so there's this.

10 As we lead in California on zero-emission
11 schedules, I think it's really important that we're
12 transparent with the data. And Siva and his team,
13 Heidi, really worked hard, together with the folks in
14 the
15 Fuels and Transportation Division and DMV, and the Air
16 Resources Board. Siva
17 didn't mention, there was a lot of discussion with the
18 Air Resources Board. Three different divisions use that
19 data. They were using different ZEV data.

20 I mean, it was very complicated, actually, to
21 get interagency alignment on this and to make sure the
22 data is accurate, and then to give it to Belows
23 (phonetic). I mean, Belows is really the, I think, the
24 mouthpiece for the summary data. But in terms of being

1 able to dive deep and really diagnose in different
2 regions of the state the level of penetration, where
3 chargers are, and provide this access to researchers and
4 to the media and interested members of the public is
5 really just a great role for the Energy Commission.

6 I think, you know, Siva and his team are
7 planning a whole -- you know, a much deeper amount of
8 energy analysis that's going to be made available to the
9 State of California. This is the first in a series of
10 data reveals. And it's just such a great role for the
11 Energy Commission to be the home for this data. I mean,
12 we all, I think, those of us working in energy analysis,
13 are constantly going to EIA and DOE and getting data.
14 And that's what we want to be too. The Energy
15 Commission should be that same source of data for
16 California. And the fact that this data is presented
17 graphically and it's easy to manipulate, it's just a
18 beautiful tool, so I'm very excited that we're doing
19 this.

20 And just, really, congratulations to all the
21 folks that have worked to make this happen, and the
22 folks that are going to -- I mean, the data analysis is
23 non-trivial. So on a quarterly basis there's data
24 analysis, as Siva said. At least on an annual basis the

1 analysis of the on-road vehicles is particularly
2 challenging and will take a lot of work, so it's a
3 commitment from the team, an ongoing commitment to keep
4 doing this data analysis and providing it to the public.

5 CHAIR HOCSCCHILD: Thank you, mon.

6 Any other Commissioners wishing to comment on
7 this item?

8 Yeah, Vice Chair Scott. Go ahead.

9 VICE CHAIR SCOTT: Hi. Yes. I just really,
10 also, wanted to say how much I love seeing this data in
11 this format. It is fantastic. And it's something that
12 I have also been talking about a little bit. And I just
13 love seeing how Siva and Heidi and their team have
14 pulled it together in this format where -- because the
15 Energy Commission has tons and tons of data, and it's
16 really useful, but it's only useful when you can have it
17 in this kind of layer, this data vision that they have
18 with the webpage and a way to like easily access it.

19 And then we can take it and use it; right? You
20 can pull up a county and look and see, where are the
21 chargers? Where are counties that need more chargers?
22 Where are counties that might have plenty of chargers;
23 right? You can take that data and put it in a place
24 that lets you move forward with your policy and the

1 types of things that we're trying to carry out.

2 And so I really love seeing this in this way. I
3 appreciate very much that they pulled it together like
4 this. And I also look forward to some of the other data
5 layers that we will be seeing as well; right? Because
6 the Energy Commission does have an incredible amount of
7 really powerful data. And to put it in this way where
8 it's actionable, where it's useful, where you can see it
9 and really understand it is just so important.

10 So my hat's off to Siva and Heidi and the whole
11 team for pulling this together. I'm delighted to see it
12 and can't wait to see more.

13 CHAIR HOCSCCHILD: Thank you, Vice Chair Scott.
14 Anyone else wishing to comment?

15 Commissioner McAllister?

16 COMMISSIONER MCALLISTER: Yeah, I do. Yeah, for
17 sure.

18 So thank you. This is great. And I want to
19 just reiterate thanks to Siva and the whole team, Heidi.
20 And maybe I agree that this is a fantastic tool and for,
21 you know, interested and knowledgeable stakeholders, all
22 the way just members of the public that want to kind of
23 know what their world looks like in this sphere, it's a
24 great resource. And it reflects the fact that we have

1 access to all this wonderful data that really allows the
2 Energy Commission, whether it's through this tool or
3 independently, even just with the raw data, to do
4 analysis that informs our recommendations on policy and
5 our insights about where the state needs to go and how
6 we need to -- how we can help inform the legislature and
7 the governor's office and other stakeholders, our own
8 processes in the forecast and all of these different
9 processes that we have, rulemakings, to really make sure
10 that they're grounded in the science and the factual
11 basis.

12 And so I think there's a broader kind of effort
13 that I just wanted to highlight. And, you know, all of
14 you know about and, certainly, are involved in bits and
15 pieces in some depth.

16 But I think, you know, another example of a tool
17 like this is the building benchmarking database. You
18 know, we went and we got AB 802, you know, helped the
19 legislature work through the details of that and got a
20 piece of legislation that enabled us to -- that really
21 kind of fortified our data access authority on one hand,
22 which we've had since the beginning, but it kind of
23 helped sort of level set again today, and then
24 authorized us to create a building benchmarking

1 mandatory program for large multifamily and
2 nonresidential buildings. So now we have, you know,
3 analogous to the DMV data, we have benchmarking data
4 coming in for all these big buildings across the state,
5 pretty good compliance so far, and with a year delay
6 between the benchmarking requirement and the public
7 reporting of those benchmarking data.

8 And so now anybody can go online and do a search
9 for a CEC building benchmarking data and you get a tool
10 that looks a lot like this one for the transportation
11 side. And you can slice and dice those buildings and
12 see which are the higher performers and which are the
13 lower performers. If you're a tenant looking to rent
14 space in a commercial building, if you're just, you
15 know, trying to understand the landscape in your
16 particular place, you get a rich data. And the
17 underlying data behind that is also of use to us to
18 shape policy for multifamily retrofits, for commercial
19 buildings. So again, that's another sort of use case
20 for the great data that we have.

21 We're starting to get the individual meter-level
22 data for the big utilities in the state, as well, and
23 that's a huge resource for doing load shaping, for
24 really doing trending analysis, even granular impact

1 assessment of different local jurisdiction programs over
2 time. So, you know, producing these longitudinal
3 datasets that allow such insight is a huge opportunity
4 for the Energy Commission to inform the public of this
5 course and to do better analysis within our agency and
6 across the agencies.

7 You know, I really think, you know, back when I
8 first started interfacing with the Commission, you know,
9 it was back in the late '80s, early '90s. And, you
10 know, it was all dot matrix printed reports that you had
11 to get off the shelf, you know? And it was -- we were
12 not in the digital age. And -- but it was a treasure
13 trove and the place you went for the kind of energy
14 information for any sort of serious research was the
15 Energy Commission. It was the library for this kind of
16 information. And, obviously, we didn't have the kind of
17 detailed granular info that we have now.

18 But the sort of restoring that position of the
19 Energy Commission, I think, will do the state is really
20 the ultimate goal of our big data project. And I think
21 it will help the state grapple -- you know, early on the
22 SB 100 item, we were talking about, okay, we need
23 alignment, we need regulatory consistency, we need to
24 sort of figure out where the barriers are, work across

1 agencies. Well, that starts with understanding where
2 these individual sectors in the marketplace actually
3 are?

4 And so we're in a position to gather that kind
5 of information and establish that consistent foundation
6 of understanding and information that's going to bolster
7 all of those conversations. And so I'm really hopeful
8 we'll be able to -- whether it's in electricity
9 consumption, natural gas trends, you know, the fuels and
10 transportation, buildings, decarbonization, all of these
11 different areas, I think, you know, we can be a really
12 core resource, not only for our worn work but, also,
13 across the agencies and then pushing out to the local
14 governments and other important stakeholders.

15 So with the energy insights library that, you
16 know, exists now and will grow -- and thank you, Chair,
17 for your leadership on that -- you know, I really think
18 that having a portfolio of these kinds of products, you
19 know, around the HERS database, a repository for that,
20 just, you know, we could call name ten use cases that
21 would be important to us and our staff. I think having
22 that consistent longer-term vision over the next, you
23 know, five to ten years, we'll be in a very different
24 place that will be very rich and, I think, well grounded

1 in the realities on the ground as we confront all of
2 these challenges that, obviously, we're seeing every day
3 now.

4 So, anyway, I wanted to pull back and give a
5 little bit of a long-term vision there because I think
6 it's super important. And we're in a great position to
7 provide a ton of value to the state and really bolster
8 our leadership.

9 CHAIR HOCSCHILD: Thank you, Commissioner.

10 Commissioner Douglas?

11 COMMISSIONER DOUGLAS: I just wanted to say that
12 I'm really pleased to see the launch of this dashboard.
13 Like Commissioner McAllister and, really, all of us, I
14 think, I'm really excited to see how we have bolstered
15 our ability to provide this kind of information to the
16 public and to stakeholders in a way that's easy to see,
17 easy to use, interactive, easy to take this data and
18 draw meaning from it and inform decisions with it at all
19 levels. And so I just want to thank the team for their
20 work on this.

21 CHAIR HOCSCHILD: Great. Yeah.

22 The only other closing thought I would make is
23 that, you know, I think what happened in this instance
24 is probably what can happen and will happen with others

1 which is the raw data was held by DMV but they didn't
2 have the staff or the time or, really, the conception of
3 what to do with that. And that's where our partnership,
4 you know, with agencies like DMV around the state can be
5 really, really helpful because we want to be doing this
6 energy storage and all sorts of other resources.

7 So thank you, again, Siva and team. Terrific
8 work.

9 COMMISSIONER MCALLISTER: Can I --

10 MR. GUNDA: We do appreciate that.

11 COMMISSIONER MCALLISTER: I want to just,
12 actually, make sure to thank Drew for the support for
13 this overall data activity.

14 MR. GUNDA: Yeah.

15 COMMISSIONER MCALLISTER: And, also, Jason
16 Harville, who has been a really key resource --

17 MR. GUNDA: Absolutely.

18 COMMISSIONER MCALLISTER: -- in building a great
19 team to help us accomplish all of this.

20 CHAIR HOCSCHILD: Yeah. Great point.

21 Siva, you were going to say something?

22 MR. GUNDA: No, just that I wanted to thank --
23 just, if there is one final comment? Commissioner --
24 Vice Chair Scott asked us to do this about two years

1 ago.

2 So thank you, Vice Chair. Hopefully you're
3 happy.

4 So with that, thank you.

5 CHAIR HOCSCCHILD: All right. Thank you again.

6 Let's move on to -- item four, we're going to
7 defer to a later meeting. That's the Modification of
8 Regulations Specifying Enforcement Procedures for the
9 RPS. And that we'll take up at a later meeting.

10 Let's move on now to item five, Local Ordinance
11 Applications.

12 MS. DROZDOWICZ: Good morning, Chair and
13 Commissioners. I am Danuta Drozdowicz. I work in the
14 Energy Division, Building Standards Office, and I'm here
15 to present local ordinances from jurisdictions that are
16 applied to the CEC for approval. Joining me today is
17 Jacqueline Moore from the Chief Counsel's Office.

18 Next slide please.

19 Regarding the benefits to California, local
20 ordinances, or Reach Codes, benefit California by giving
21 local jurisdictions the opportunity to participate
22 directly in the state's effort to address climate
23 change.

24 Next slide please.

1 For a local standard to be enforceable the
2 jurisdiction must file with the CEC its determination
3 that its standards are cost effective. The CEC must
4 then find that the local standards will require a
5 reduction of energy consumption levels compared to the
6 current statewide Energy Code.

7 Next slide please.

8 To date, 29 jurisdictions have submitted local
9 ordinances under this code cycle and 27 have been
10 approved. One in three Californians currently lives in
11 a community with an Energy Code exceeding state
12 standards.

13 Next slide please.

14 Two jurisdictions have submitted applications
15 for Commission consideration at this business meeting.
16 They are the town of San Anselmo and the County of San
17 Mateo.

18 Next slide please.

19 The Town of San Anselmo requires that newly-
20 constructed buildings are all-electric or, if mixed
21 fuel, meet higher efficiency standards than the 2019
22 Energy Code. Prewiring for future electric equipment
23 and appliances is required where gas-fueled equipment
24 and appliances are installed.

1 Next slide please.

2 The County of San Mateo requires that newly-
3 constructed buildings are all-electric with exceptions
4 allowed for laboratories, commercial kitchens, publicly-
5 owned emergency shelters, and buildings for which there
6 is no all-electric compliance pathway.

7 Prewiring for future electric equipment and
8 appliances is required where gas-fueled equipment and
9 appliances are installed.

10 In addition, photovoltaic systems are required
11 on all buildings not subject to the provisions of the
12 Energy Code with exceptions allowed for buildings with
13 vegetative roofs or limited solar access.

14 Energy related but not subject to CEC approval,
15 both the Town of San Anselmo and San Mateo County
16 include provisions for electric vehicle charging
17 infrastructure.

18 Next slide please.

19 Staff posted the complete applications,
20 including the local ordinances and adopted cost
21 effectiveness analysis, on the CEC's website under
22 Docket 19-VSPP-06 (phonetic) for the required public
23 comment period.

24 Staff reviewed the applications to determine if

1 these local ordinance standards will result in the
2 reduction of energy consumption that was permitted by
3 the 2019 Energy Code as per the requirements in the
4 Public Resources Code. Staff finds that the standards
5 will reduce the amount of energy concerned and were not
6 linked to increases in energy consumption inconsistent
7 with state law. Staff further confirms that each of the
8 jurisdictions publicly adopted a finding of cost
9 effectiveness for the standard.

10 Because Staff has found that the applications
11 meet all the requirements of the Public Resources Code,
12 Staff recommends approving enforcement of the
13 ordinances.

14 This concludes my presentation. I am available
15 to answer any questions you may have.

16 CHAIR HOCSCCHILD: Thank you so much, Danuta.

17 And let me, also, just thank Vice Chair Scott
18 again for -- as we're doing these Zoom meetings, we're
19 getting better and better. Now all the staff
20 presentations, people are able to see the staff
21 presenting rather than just hear them.

22 So thank you, Vice Chair Scott, for that.

23 Let's go now to public comment on item five.

24 Madam Public Advisor, do we have any public

1 comment on item five?

2 MS. GALLARDO: Thank you, Chair. This is Noemi
3 Gallardo, the Public Advisor.

4 We do have about 11 people on the phone line to
5 make comment. We also have three written comments.
6 We're going to start off with the people on the phone
7 line.

8 First speaker will be Lauren Cullum of the
9 Sierra Club of California. Please open her line.

10 And, Lauren, make sure to un-mute and you can
11 begin.

12 MS. CULLUM: Thank you. Can you hear me?

13 MS. GALLARDO: Yes, we can, Lauren. And if you
14 could spell your first and last name, as well, and state
15 your affiliation? That would be helpful.

16 MS. CULLUM: Will do. Thank you, Noemi.

17 Lauren Cullum, L-A-U-R-E-N C-U-L-L-U-M, Policy
18 Advocate with Sierra Club California. Good morning,
19 Chair and Commissioner.

20 So I'm, yes, I'm Lauren Cullum with Sierra Club
21 California, representing 13 local chapters in California
22 and half-a-million members and supporters throughout the
23 state. And I'm speaking to express our strong support
24 for the local ordinances before the Commission today.

1 These Reach Codes are the result of a statewide cost-
2 effectiveness analysis and extensive stakeholder
3 engagement process. And this local democratic process
4 is leading the way for the state to implement
5 decarbonization solutions that are critical to combat
6 climate change, reduce air pollution, and improve
7 housing and energy affordability.

8 All-electric buildings are necessary to achieve
9 a cleaner, healthier, safer California, which is why we
10 support the Commission's approval of these Reach Codes
11 to encourage all-electric construction, and which is why
12 we also see a clear nexus between our support for these
13 Reach Codes and our support for an all-electric baseline
14 the 2022 Code. It's simple: we need more all-electric
15 buildings.

16 Building electrification is an essential
17 strategy for reducing air pollution and improving our
18 public health. Californians are already breathing the
19 dirtiest air in the nation with the housing sector
20 exacerbating the problem, with wildfires worsening the
21 air quality every year. In this summer alone, we've
22 seen air quality reaching hazardous levels across the
23 state.

24 I don't think I'm alone here but the first thing

1 that I've done every morning over the past couple of
2 months has been to pull up the app on my phone which
3 tells me what the air quality is outside so I know
4 whether I can go outside or how much time I can spend
5 outdoors at that time. And I'm someone that doesn't
6 already have asthma or respiratory problems and I'm
7 still scared. And I'm sure many of you woke up this
8 morning and saw the sky with this unsettling orange-
9 yellow color due to the smoke from the wildfires. This
10 is clear evidence that our climate policies are not
11 strong enough.

12 The longer we wait the worse our air quality
13 gets and the more damage we're causing to our health.
14 And we know all-electric buildings will lead to better
15 air quality and healthiness.

16 The Commission has an opportunity here to help
17 to reduce air pollution, to protect our health by
18 building on local leadership and facilitating the
19 transition of new buildings away from gas by changing
20 the baseline in the 2022 Building Code to be based on an
21 efficient and all-electric home. Fossil fuel-free homes
22 and buildings are already becoming standard in
23 California. Cities representing ten percent of the
24 state's population have committed to gas-free new

1 construction, with more cities joining all the time.
2 And we need for the Commission to build on this and
3 extend these measures statewide through an all-electric
4 baseline in the 2022 Code.

5 Thank you so much for the opportunity to provide
6 these comments.

7 CHAIR HOCSCCHILD: Thank you.

8 MS. GALLARDO: This is Noemi Gallardo, the
9 Public Advisor.

10 Cody will let us know who the next speakers are.
11 Cody, please speak up.

12 MR. GOLDTHRITE: The next speaker will be Cheryl
13 Weiden with 350 Silicon Valley.

14 MS. WEIDEN: Can you hear me? Hello. Can you
15 hear me?

16 MS. GALLARDO: Yes, we can.

17 MS. WEIDEN: Oh. My name is Cheryl Weiden and I
18 live in Los Altos. And I am with 350 Silicon Valley.

19 I support the adoption of the Reach Codes in San
20 Anselmo and San Mateo. And it's time for the CEC to
21 build off local leadership to take electrification
22 further by setting an all-electric baseline for the new
23 construction in the 2022 Building Code.

24 Commissioner Hocschild mentioned at the

1 beginning of this meeting that it is dark outside. It
2 is really scary. The sky is so dirty brown with smoke,
3 it's a weird duck. The fires and unbearable heat are
4 record-breaking and historic.

5 This morning's *Washington Post* headlines, "Much
6 of the American West is burning, illustrating the
7 dangers of climate change."

8 This is climate change. And unless you are a
9 climate change denier, and you guys aren't, you know,
10 the heat and fires are caused by the changes in the
11 climate which are caused by the fossil fuel emissions.
12 We must stop our death spiral. More fossil fuel
13 emissions, more heat, more air conditioning required
14 continues the spiral. And I'm not telling you anything
15 you don't know.

16 I live in Los Altos. Last Monday a leaking gas
17 meter exploded at a home in Los Altos, causing a house
18 fire, requiring the neighboring homes to be evacuated.
19 The homes in Los Altos are generally 70 years old. And
20 you know there are many more leaking gas meters. As
21 these homes are replaced and as new homes are built,
22 would it not be prudent to replace them with safer all-
23 electric new construction?

24 I, personally, have been working on getting

1 Reach Codes, all-electric Reach Codes, passed in Los
2 Altos for a year. It has been awesomely touch. And I
3 have met with the primary objections, cost, reliability
4 and choice. And most of these objections come from a
5 lack of awareness.

6 Doesn't that summarize them? The first two have studied
7 scientific answers. The third is a matter of political
8 and personal will, like making the personal choices for
9 the greater good, like wearing a mask.

10 Instead of taking this battle to individual
11 cities, as we are now, you have the power to make the
12 effort a lot easier. As Terra Weeks and Liz Gill just
13 reported, SB 100 is possible but it will be a big push.
14 And, yes, the report knocked it out of the park, I
15 agree.

16 Commissioner Scott asked how to get this moving?
17 One answer is for the Energy Commission to now step in
18 and take this policy statewide with an all-electric
19 baseline for the 2022 ordinances.

20 Thank you.

21 MS. GALLARDO: This is Noemi Gallardo, the
22 Public Advisor.

23 Cody, who is our next speaker?

24 MR. GOLDTHRITE: The next speaker is David

1 Moller with Marin/Sonoma Building Electrification Squad.

2 MR. MOLLER: Good morning. Can you hear me
3 okay?

4 CHAIR HOCSCCHILD: Yep. Good morning.

5 MS. GALLARDO: Yes, we can.

6 MR. MOLLER: Thank you. Good morning, Chair and
7 Commissioners.

8 As stated, my name is David Muller. I live in
9 Larkspur in Marin County, right next to San Anselmo.
10 And I'm working with several San Anselmo residents and
11 others as the Marin/Sonoma Building Electrification
12 Squad. And our goal is to get all Marin and Sonoma
13 jurisdictions to adopt building electrification Reach
14 Codes. And I want to state very clearly, we strongly
15 support adoption of Reach Codes for San Anselmo and San
16 Mateo as a key element in combating climate change.
17 Simply put, we can't afford to wait to power our
18 buildings with renewable electricity. We need to do it
19 now.

20 I think you know that gas appliances are
21 responsible for over 50 million tons of greenhouse gas
22 pollution annually. And there's just no way we can hit
23 our climate targets while continuing to burn gas. I
24 understand that gas is now overtaken coal as the number

1 one source of climate-warming pollution nationwide.

2 A recent analysis has shown that (indiscernible)
3 years would result in an additional (indiscernible)
4 emissions by (indiscernible). And just to kind of --
5 you know, these tons are sort of hard to track but
6 that's the equivalent of putting 650,000 more cars on
7 the road.

8 I think you know that moving to electric
9 appliances is popular in California. A recent statewide
10 poll found that 70 percent of Californians prefer all-
11 electric appliances powered by clean electricity to
12 appliances powered by fossil fuels.

13 So gas-free homes are already becoming standard
14 in California. We heard the staff report that cited
15 one-in-three Californians are now under such
16 jurisdictions for new homes. And more cities are
17 joining on all the time. These cities have proven
18 there's a demand to move off of gas in favor of
19 renewables.

20 What we need is for the Energy Commission to
21 step in and take this policy statewide. And that's
22 really about creating consistency from jurisdiction to
23 jurisdiction. In our work in Marin and Sonoma we found
24 that the number one thing with the building community is

1 consistency of policy from jurisdiction to jurisdiction.

2 We also need to align our Building Code with our
3 climate policies. California has already found gas to
4 be incompatible with our climate targets. And the
5 Public Utilities Commission has kickstarted a project to
6 guide that transition. Locking in more fossil fuel
7 infrastructure to deliver gas to homes through the 2020s
8 just runs counter to the state's climate targets and
9 drives up costs that will fall disproportionately on
10 low-income Californians. Another three years of
11 building gas infrastructure, I think, would be a failure
12 of leadership to protect our public health and safety.

13 And I have to say, there's been several comments
14 about looking out the windows this morning. I'm in the
15 Bay Area too. And I think sitting here we all know that
16 ten years from now we'll be looking back at this time
17 and wondering why we didn't do more and do it faster.

18 Thank you.

19 MR. GOLDTHRITE: So next on the line we have --
20 it was David Moller. It was --

21 MR. MOLLER: Yes. I'm sorry.

22 MR. GOLDTHRITE: Sorry. It was
23 D-A-V-I-D. And then the last name is
24 M-O-L-L-E-R.

1 And then next on the line we have Carol Cross
2 from Fossil Free Mid-Peninsula.

3 MS. CROSS: Hi. My name is Carol,
4 C-A-R-O-L, Cross, C-R-O-S-S. And I bring greetings from
5 Fossil Free Mid-Peninsula. Despite of our name, we're
6 based mostly in Redwood City, honestly.

7 I'm not a fan of redundancy so I'll cut to the
8 chase. Why not go for all-electric Building Code in San
9 Mateo County and all counties with the exceptions
10 listed? Although, I question the exemption for
11 commercial kitchens since safer, faster and more
12 efficient technologies for kitchens are now available
13 that don't require gas.

14 In addition to even PG&E calling for an end to
15 gas hookups in new construction, the energy supply is
16 becoming greener and greener. Building, without have to
17 put gas infrastructure in, is cheaper. Air quality
18 inside an all-electric home is healthier. Eliminating
19 gas lines makes us all safer. And oh, yeah, it reduces
20 carbon emissions of a home to near zero.

21 All-electric Building Codes now, also, mean
22 fewer buildings that have to be retrofitted down the
23 line. It's a winning decision all around.

24 Without the obvious, Fossil Fuel Mid-Peninsula

1 urges you to vote for all-electric, not just in San
2 Mateo County but in all counties for 2022.

3 Thanks.

4 MS. GALLARDO: This is Noemi, the Public
5 Advisor.

6 I just wanted to remind all our speakers to
7 please spell your first and last name. And if you have
8 an affiliation, please state that. Thank you so much.

9 And, Cody, we can go to the next speaker.

10 MR. GOLDTHRITE: Next on the line we have Rita
11 Clement with San Diego 350.

12 MS. GALLARDO: Rita, we cannot hear you. Make
13 sure you're un-muted and begin speaking.

14 MS. CLEMENT: Good morning, Commissioners. My
15 name is Rita, R-I-T-A, Clement, C-L-E-M-E-N-T. I am
16 speaking on behalf of San Diego 350.

17 San Diego 350 supports adoption of these Reach
18 Codes. It's time for the CEC to support local
19 leadership and take electrification further by setting
20 an all-electric state (indiscernible) for new
21 construction in the 2022 Building Code.

22 Gas stoves fill homes with much of the same
23 pollutants contained in car exhaust. Children living in
24 the homes with gas stoves have a 42 percent increased

1 risk of asthma. Levels of nitrogen dioxide in homes
2 with gas stoves are up to 400 percent higher than in the
3 homes with electric stoves.

4 We are asking the Energy Commission to do the
5 right thing and help to make healthy homes and buildings
6 in California.

7 Researchers have tied a modest increase to
8 nitrogen dioxide exposure to a markedly higher gas rate
9 from COVID-19. This study is still under peer review
10 but it raises urgent questions. If homes with gas have
11 400 percent higher levels of nitrogen dioxide than homes
12 without gas, this could be, potentially, putting
13 millions of people at increased risk.

14 Clean natural gas is not clean. This is a
15 fossil fuel called fracked gas. We can build more
16 housing more quickly and more affordably by avoiding
17 this polluting gas.

18 The state's housing affordability crisis demands
19 that we make every effort to reduce building costs while
20 speeding up housing production. Foregoing gas hookups
21 allows for a faster building process. And developers
22 can save tens of thousands of dollars in up-front costs
23 to install gas lines and on energy staging by choosing
24 to build without gas.

1 The Energy Commission must now step in and make
2 this policy statewide to create consistency. We must
3 align our building codes with our climate policy.
4 Californians know that we cannot meet our climate goals
5 unless we stop using fracked gas. We cannot afford to
6 wait to power our buildings with renewable electricity.
7 Gas appliances are responsible for over 50 million tons
8 of greenhouse gas pollution annually. We must stop
9 burning gas in order to reach our climate action goals.

10 Please adopt these Reach Codes.

11 Thank you.

12 MR. GOLDTHRITE: So next on the line we have
13 Sassan Saadat with Earth Justice.

14 MR. SAADAT: Hi. Yes. Sasan, S-A-S-A-N, last
15 name Saadat, S-A-A-D-A-T, with Earthjustice, calling in
16 support of the Reach Codes. I'm also calling you from
17 my home in Berkeley, California, where we have the
18 lights on in our house because there's no sunlight.

19 I'm 25. And more than half of all anthropogenic
20 greenhouse gases were emitted during my lifetime. We
21 have less than half of that timeline to remake the world
22 so that it can withstand and, hopefully, avert to be
23 even worse than what we're seeing today.

24 The orange skies in Berkeley are solemn but

1 they're nothing compared to the smoke and heat choking
2 farm and construction workers in the Central Valley or
3 the rural communities being displaced, perhaps for the
4 last times, from their homes. This is not the outlier.
5 It is the trend. Small changes will mean millions of
6 livelihoods and entire ecosystems will continue to
7 collapse. To bend the curve of climate destabilization
8 the only remaining options are dramatic unprecedented
9 action.

10 In the Title 24 Code, you all have an
11 opportunity to do something bold, halt the expansion of
12 gas reliance on buildings -- in buildings. And I know
13 you may be thinking, well, the changes necessary are
14 broader in scope and scale than what the CEC has
15 jurisdiction over. The pollution from buildings in
16 California may be just a drop in the bucket in the
17 global scheme of our emissions, so we should wait until
18 we can get it just right, maybe in the next code cycle.

19 Young climate activists have heard a version of
20 this response our entire lives. And, as a result,
21 emissions are outpacing our progress. What we need is
22 for every decisionmaker to maximize the full extent of
23 action that they are positioned to take today. And you
24 all have this opportunity on your lap to set a new

1 precedent for the end of fossil fuels in our broken
2 environment.

3 Again, I implore you to consider what power you
4 have to steer this ship back on course? By committing
5 to an all-electric code for buildings in this code
6 cycle, we can wrench forward the tipping point when
7 clean energy technologies, like heat pumps, will reach
8 scale and zero-emission buildings become a norm. And
9 this will help diffuse policy and technology across the
10 world, which is the proven formula of California's
11 climate leadership. But the stakes are getting higher.
12 We're falling behind schedule. And we cannot afford to
13 let (indiscernible) opportunities that make impacts slip
14 past us.

15 And I know that the CDIA has submitted comments
16 objecting to more stringent codes. I hope they'll
17 reconsider how history will look on the position they
18 took while California was up in flames.

19 Builders have an opportunity to step up to the
20 unprecedented challenges we face and be part of
21 California's climate leadership. So we hope they will
22 meet this moment with courage and confidence and that so
23 will you.

24 Thank you.

1 MR. GOLDTHRITE: Next on the line we have Jenny
2 Green with Mother Out Front.

3 MS. GREEN: Hi. Can you hear me?

4 MS. GALLARDO: Yes, we can.

5 MR. GOLDTHRITE: Yes.

6 MS. GREEN: Okay. Hi. So I'm Jenny Green with
7 Mothers Out Front. And my name is -- my first name is
8 J-E-N-N-Y. My last name is G-R-E-E-N. And Mothers Out
9 Front is my organization. I'm from the Silicon Valley
10 Chapter. And we're a national organization of mothers
11 who are working to ensure a livable climate for our
12 children. And here, in California, we have about 6,000
13 members. And we support adoption of the Reach Codes in
14 San Mateo County and the City of San Anselmo.

15 What I wanted to say on behalf of all the moms
16 that I represent is that we've been working really hard
17 to get Reach Codes passed on the local level. But what
18 we are asking is that the state of California should
19 implement an all-electric Building Code in 2022 and not
20 wait for the following cycle. We need to mitigate the
21 climate crisis.

22 So I'm attending this meeting on behalf of all
23 our moms, since you can only take one comment per
24 organization. We want to remind you of the goal that

1 unites us all, just the survival and safety of our kids
2 and our grandchildren and their descendants. This is
3 not just about what's happening right now, though it
4 effects, obviously, the climate. It's already affecting
5 us.

6 But on behalf of mothers across California, we
7 want to ask that you should set an all-electric baseline
8 for new construction as soon as possible because the
9 longer we wait, the worse the climate crisis will get.

10 And I wanted to share with you a personal story,
11 also, about why it would be better to do this sooner
12 than later.

13 So my family had an old gas water heater, which
14 we recently had to replace, and we went ahead and we
15 replaced it with an electric heat pump model but I was
16 pretty expensive. We had to upgrade our electrical
17 panel. We had to have the gas line taken out, so it
18 wasn't as cheap as if we had just replaced it with
19 another gas water heater. So, obviously, I'm in Mothers
20 Out Front. I'm pretty, you know, dedicated to fixing
21 climate change. So, of course, we went with the
22 electric heat pump model, even though it was harder and
23 more expensive.

24 But my kids were asking, you know, "Why don't we

1 replace our gas furnace? Why don't we replace our gas
2 stove?"

3 And my husband and I had to say, "Well, we can't
4 right now. It's expensive to change out your
5 appliances. It's expensive to take out the gas
6 pipeline."

7 And so if we would just start building all-
8 electric homes now, you're going to save families so
9 much money in the future because it's expensive if you
10 have to build that stuff and then take it out. It's
11 much cheaper for families if you just build their house
12 all-electric in the first place, so please consider that
13 as you're thinking about when to change the Building
14 Code.

15 Thank you.

16 CHAIR HOCSCCHILD: Thank you.

17 MR. GOLDTHRITE: Next on the line we have Erik
18 Mebust with The Sunrise Movement.

19 MR. MEBUST: Hi everyone. My name is Erik, E-R-
20 I-K, Mebust, M, as in Mary, -E-B-U-S-T. I'm 24 years
21 old. I woke up at 6:00 a.m. this morning waiting for
22 the sun to rise and it never did.

23 I am here to speak in support of the Reach Codes
24 and encourage the Commission to adopt an all-electric

1 baseline for the '22 Building Codes. And I'm really
2 just here to say that we are currently on track for four
3 degrees of warming. That's not far from the threshold
4 at which the oceans turn the same color that the sky is
5 outside of my San Francisco window right now.

6 There is ample reason that's been laid out
7 before you today to adopt an all-electric Building Code
8 across the street -- across the state. I have a degree
9 in economics and even I know at the bachelor level that
10 civility is a basic requirement of an effective
11 regulatory environment.

12 And I am asking you on behalf of my generation,
13 on behalf of children that you may have or hold dear to
14 your heart, that we need you to move the market forward
15 on this. We need you to require this going forward so
16 that the
17 market -- we can start making these investments now.
18 These changes would pay for themselves in reduced health
19 costs, even looking leaving aside the climate change
20 implications.

21 And I've heard some folks mention that a
22 possible thought that might be going through your mind
23 is you're not sure if this is going to be enough, if you
24 have enough power to make a real difference? Maybe you

1 should just wait until the next cycle?

2 And I wanted to share with you something that
3 the writer and the, you know, Treasurer of California,
4 Rebecca Stillnet (phonetic), once told me. She said
5 that when she was reporting on Hurricane Katrina, she
6 saw people get into the boats and drive into the storm,
7 into danger, to save people who were trapped and who
8 were stranded at their homes by Hurricane Katrina. And
9 they knew, the people who got in those boats, they knew
10 that they couldn't save everyone but they got in the
11 boats anyway and they did what they could. And they
12 saved hundreds and hundreds of people. And those were
13 ordinary people, like you and me.

14 And the climate crisis is exactly like that.
15 Every 0.1 degree that we prevent of warming, is
16 hundreds, is thousands, is potentially millions of lives
17 that you have the opportunity to save. And I need you
18 to be -- have the courage of those ordinary folks who
19 got in those boats that day in Hurricane Katrina.

20 The sky outside right now is what my future
21 looks like. I need you to give me some hope. I work in
22 climate advocacy. But this is never going to get better
23 unless someone fights for me. And that's what we need
24 you to do right now.

1 So, again, I ask you to support the adoption of
2 all-electric baseline for the '22 Building Codes. It's
3 the least you can do. It's a smart move. And I want to
4 thank you for your time.

5 MR. GOLDTHRITE: Next on the line we have Jonny
6 Kocher with the Rocky Mountain Institute.

7 MR. KOCHER: Can you hear me?

8 CHAIR HOCSCHILD: Yes.

9 MS. GALLARDO: Yes.

10 MR. KOCHER: Hello? Cool.

11 MS. GALLARDO: Yes, we can.

12 MR. KOCHER: Good morning and thank you for the
13 opportunity to comment. My name is Jonny Kocher.
14 That's J-O-N-N-Y K-O-C-H-E-R. And I work in the Oakland
15 office of Rocky Mountain Institute, an independent
16 nonprofit working to shift towards a low-carbon future.

17 This morning, I was planning to read some
18 threatening headlines from the past few weeks to
19 reinforce the point that we're in a climate crisis. But
20 headlines, themselves, seem detached from the reality of
21 what I'm literally experiencing.

22 I live in San Francisco. I'm staring out my
23 window right now at a sky which can only be described as
24 a literal hellscape. It's almost noon today and the sky

1 is so dark I still have my bedroom lights on. I've had
2 multiple friends text me and ask me what they can do in
3 order to stop the climate crisis. We're living it right
4 now.

5 The actions and decisions that all of us make
6 today will have profound impacts on the type of a world
7 that we leave for future generations. I understand that
8 is a very heavy burden to bear. But when we share its
9 weight I believe that we can create a better and more
10 thoughtful society in the process.

11 Electrification ordinances that are local
12 governments have passed this year shows the exact type
13 of leadership we need during this unique time in
14 history. The ordinances not only reduce emissions but
15 also create cleaner, safer and healthier communities.

16 The CEC has also shown great leadership to date
17 to address the climate, California's climate, and air
18 quality issues, including passing over 30 local Reach
19 Codes and ordinances for electrification. The next step
20 in leadership would be to help usher in electrification
21 statewide by adopting all-electric baselines in the 2022
22 code cycle.

23 California doesn't have a plan to reduce this
24 building sector emissions. And that's part of the

1 reason why we are not on track to meet our 2030 emission
2 goals. California strives to be a climate leader but
3 we're still adding more gas customers faster than the
4 other states.

5 A recent report by E3 produced for the
6 California Air Resources Board said that building
7 electrification is the least-regrets option for
8 achieving our economy-wide goal of carbon neutrality by
9 2045. In all scenarios in that report at least two-
10 thirds of homes are required to have all-electric
11 heating by 2045 to reach
12 the -- to reach carbon neutrality.

13 If we want to meet our state's climate goals, we
14 need the CEC to act on the results of this report and
15 jumpstart the ship towards all-electric building
16 statewide. If we continue to build mix-fueled
17 buildings, we are locking more carbon emissions and
18 increasing stranded asset risks. If we wait until 2025,
19 we lock in six more years of carbon-emitting fuels and
20 we admit an additional 3 million tons of emissions by
21 2030. That can be avoided if we act now. And we spend
22 \$1 billion on new gas infrastructure, leaving ratepayers
23 to bear hundreds of millions of dollars in stranded
24 asset costs. This doesn't even include the great cost

1 to our health and our planet.

2 It will also be exposing more Californians to
3 health risks from gas pollution, including increasing
4 asthma risks. One-in-eight Californians already have
5 asthma. And the proportion is higher in low-income
6 communities and communities of color. Let's not
7 increase that number.

8 (Indiscernible) San Mateo and San Anselmo
9 County's [sic] Reach Code discussed today, I ask that
10 the California Energy Commission adopt an all-electric
11 baseline in the 2022 code cycle. I'm confident that
12 CEC's leadership in building electrification will
13 achieve a cleaner and healthier California.

14 Thank you for your time and your consideration.

15 MR. GOLDTHRITE: Next on the line we have Debbie
16 Mytels with Peninsula Interfaith Group.

17 MS. MYTELS: Hello. This is Debbie Mytels, D-E-
18 B-B-I-E, last name is Mytels,
19 M-Y-T, like in Tom, -E-L-S, like in Sam. I'm
20 representing Peninsula Interfaith Climate Action. Our
21 members are from 17 different congregations between
22 Redwood City and Sunnyvale. And we are very concerned
23 about what's happening to earth's climate.

24 And I'm asking you to approve the Reach Codes

1 submitted by San Mateo County and San Anselmo. Those
2 communities are working to improve the condition of life
3 in California and throughout our planet.

4 And I want to thank the Commissioners for your
5 efforts to review these local regulation changes. It's
6 an important task to go forward to meet California's
7 goals for greenhouse gas reduction. However, we need to
8 move faster than this city-by-city approach.

9 And I'm asking you, the Members of the
10 California Energy Commission, to incorporate a plan for
11 the elimination of methane gas in the development of the
12 2022 Title 24 update.

13 In addition to the climate (indiscernible)
14 benefits of eliminating gas, we should also consider
15 safety. Exactly ten years ago, on the 9th of September
16 2010, a gas explosion pipeline in San Bruno, California,
17 killed eight people and destroyed 35 homes. That was
18 ten years ago. But San Bruno was not an accident. It
19 was an accident waiting to happen.

20 We have aging gas lines throughout our state
21 that, as someone pointed out, some are over 70 years
22 old. And they're running underneath all of our streets.

23 California is also earthquake country where
24 small shifts in the ground happen regularly. And these

1 many quakes can shake loose these old leaky pipes.

2 In essence, we have a problem with a
3 disintegrating infrastructure. As Cheryl pointed out,
4 as well, we just had an explosion last week in Los
5 Altos.

6 And it's not just here in California. A month
7 ago an explosion in Baltimore killed two people, injured
8 seven, and demolished three homes.

9 We actually have two energy systems serving our
10 communities here in California, electricity and natural
11 gas. But as the public power safety shutoffs that
12 happened this week also show, our electricity
13 infrastructure isn't in good shape either.

14 Why are we trying to support two poor quality,
15 decaying infrastructures? Let's plan to abandon the
16 dirty and dangerous gas system and put our resources
17 into repairing and upgrading our electricity grid.
18 That's what we need to do. And you, on the Commission,
19 have the ability and the responsibility to work on this.

20 The apocalyptic sky that we sit under today is a
21 sign that it's time to make this change. And I really
22 appreciate the work of the Commission and ask you to
23 exercise your responsibility and leadership to begin to
24 move us beyond fossil fuels. We really need to make

1 this change.

2 Thank you.

3 MR. GOLDTHRITE: Next on the line we have Helena
4 Birecki with San Francisco Climate Emergency Coalition.

5 MS. BIRECKI: Yes. Can you hear me?

6 MS. GALLARDO: Yes, we can.

7 MS. BIRECKI: Thank you very much. My name is
8 Helena Birecki, H-E-L-E-N-A
9 B-I-R-E-C-K-I, and I'm with the San Francisco Climate
10 Emergency Coalition.

11 I'd like to take a moment to let the
12 Commissioners reflect on all they've heard today. How
13 would you feel if you were 24 or 25 looking out at the
14 sky? How would you feel if you had a two-year-old child
15 who already has asthma and they can't go out and you
16 have a gas stove, so you're afraid to cook for them?
17 How do you feel as yourself right now?

18 MS. GALLARDO: This is Noemi Gallardo, the
19 Public Advisor.

20 MS. BIRECKI: I am still speaking. Thank you
21 very much.

22 MS. GALLARDO: Okay.

23 MS. BIRECKI: I really want the Commission to
24 reflect on what they can do to make the world a little

1 better because we need every solution right now.

2 If you have a window to look out and you're in
3 California, my guess is the air quality is not very
4 good. My mom called me from the coast of Oregon where a
5 fire just broke out. She said the air quality is 573.
6 She doesn't know what she's going to do. The roads
7 around are closed.

8 We need every solution at hand. And this isn't
9 just in this crazy fire, smoke, hellscape we're in right
10 now. This is for everyday lives. And, yes, the
11 economy.

12 I'm a Pilates instructor. And my students, in
13 their homes via Zoom, right, sessions keep canceling
14 because of the heat, because of the air quality. That
15 means because of climate change.

16 And as I believe one of the callers said, my
17 situation is extraordinarily fortunate. I can't imagine
18 what it's like to be picking crops in the Central Valley
19 right now. I can't imagine what it's like to be working
20 on a construction site.

21 You've heard the data. Building all-electric is
22 cleaner, healthier, and even cheaper, just from
23 traditional economic standards. Add into that the
24 health costs. Add into that the people losing work.

1 Add into that the people afraid they won't get home to
2 take care of their family at night because they have to
3 be outside in their work.

4 Please affirm the San Anselmo and San Mateo
5 County Reach Codes. And then do all you can to make an
6 all-electric baseline in 2022. And make sure that your
7 economic models includes the healthcare costs, include
8 the people who can't not go outside, include --

9 MS. GALLARDO: Speaker, your time is up. This
10 is Noemi Gallardo, Public Advisor. Apologies for
11 interrupting --

12 MS. BIRECKI: Um-hmm.

13 MS. GALLARDO: -- but your time is up.

14 MS. BIRECKI: Thank you very much. I appreciate
15 all of your work.

16 CHAIR HOCSCHILD: Thank you.

17 MR. GOLDTHRITE: Next on the line we have
18 Suzanne Emerson with San Carlos Green.

19 MS. EMERSON: Good morning. My name is Suzanne
20 Emerson, that's S-U-Z-A-N-N-E
21 E-M-E-R-S-O-N, with San Carlos Green. I live in the
22 unincorporated area of San Mateo County. So one of the
23 two Reach Codes that you're considering adopting today
24 would apply directly to my neighborhood. I am excited

1 about the idea that future construction here will be
2 all-electric.

3 I encourage you to adopt the two Reach Codes
4 that have been proposed. And I encourage you to take
5 bold, expeditious actions to make all future
6 construction in California all-electric.

7 I'd like to talk briefly about my concerns about
8 health and safety effects of burning gas indoors.
9 Burning gas in household appliances produces harmful
10 indoor air pollution, including carbon monoxide,
11 nitrogen dioxide, formaldehyde, and ultrafine particles.
12 Using a gas stove to cook a large meal in a small home
13 can easily cause indoor air pollution that would be
14 illegal if it were outdoor air pollution. It would be
15 violative of our outdoor air pollution standards. And
16 it's the young people, the people with asthma, the
17 people with heart and lung disease who are especially
18 vulnerable to the toxic effects of those combustion
19 pollutants.

20 So, for example, pollution from gas stoves
21 doubles the odds that a woman will experience symptoms
22 of lung disease. And it nearly triples the odds that
23 she'll need to take asthma medication. Now layer on the
24 pollution from wildfires and layer on COVID-19 and the

1 probability of someone having negative outcomes from
2 COVID-19, if they experience lung disease or asthma
3 before they get that disease, it's just horrifying.

4 I'm also concerned about safety effects, the
5 safety impacts of having gas lines and how that
6 intersects with living in earthquake country. Natural
7 gas in our homes is responsible for about half of all
8 home fires. And after the Northridge Earthquake, half
9 of the fire that were started, that were triggered by
10 the earthquake, were because of ruptures in gas lines.

11 I encourage you to please take expeditious steps
12 to adopt an all-electric baseline. Go bold so that we
13 can stop installing natural gas lines.

14 Thank you.

15 MR. GOLDTHRITE: Next on the line we have Jean-Guillaume
16 Lonjaret with Sustainability Commission, La Mesa.

17 MR. LONJARET: Hello. This is Jean-Guillaume Lonjaret.
18 J-E-A-N - G-U-I-L-L-A-U-M-E, L-O-N-J-A-R-E-T. I hope that you
19 didn't count in the three minutes. I am with the Sustainability
20 Commission of La Mesa, California. Thank you for listening.

21 I support adoption of these two Reach Codes, of course.
22 I also encourage the Energy Commission to provide clear leadership
23 in greenhouse gas reduction by setting in all electric baseline
24 for new buildings in the next revision of the building code, and

1 also to facilitate retrofits on a large scale. Our electricity
2 sources in mid [indiscernible] and thanks to the Community Choice
3 Aggregators, the parts of renewables in the mix is bound to keep
4 growing. As we struggle to meet our greenhouse gas reduction
5 objectives in crucial sectors, such as transportation, and as most
6 new scientific reports confirm an acceleration of global warming
7 and its consequences, we must seize this new opportunity to
8 eliminate natural gas from buildings and confine that fossil fuel
9 to use it where it replaces petro or coal. Such as co-generation
10 power plants, ships, vehicles, renew your thermo dynamics and
11 entropy burning a fossil fuel for just heat without extracting a
12 chemical power is the most wasteful usage. And if natural gas is
13 not considered too polluting for even buses by the Air Resource
14 Board, then surely it's no longer fit for just space and water
15 heating. This has been recognized by some 40, 45 jurisdictions in
16 California already, and many more are following and will apply for
17 ordinances.

18 Several thorough studies have demonstrated that all
19 electric buildings now can provide savings in both greenhouse gas
20 and bills if aptly designed. And only the consistency provided by
21 Title-24 would ensure that it's always the case. I'm not teaching
22 you anything here. You know the facts and the data better --
23 better than me. Building electrification has been on the radar of
24 state agencies as the CPUC revised its 3-prong approach. The CEC
25 is adapting the code to heat pumps and runs the Build Program

1 under SB1477. With the next Title-24, the CEC can choose between
2 just making it easier and making it happen. The consequence of
3 missing this opportunity would be another 4 years' worth of new
4 buildings with energy and greenhouse gas waste locked in, by
5 design, for 50 years. And with little federal, or even world
6 leadership on climate change, the influence of such a decision by
7 this body would reach far beyond the state and beyond our own
8 greenhouse gas emissions. We count on you. Thank you for
9 listening.

10 MR. GOLDTHRIDE: Next on the line we have Brianna
11 McGuire.

12 MS. MCGUIRE: Hi folks. Thank you for the opportunity
13 to comment. My name is Brianna, B-R-I-A-N-N-A, McGuire, M-C-G-U-
14 I-R-E. Like many commentators today, this morning I woke up and I
15 checked the weather service to figure out what I was waking up to.
16 The National Weather Service tweeted this out, suspended smoke
17 will descend closer to the surface and could lead to darker skies
18 and worsening air quality today. This is beyond the scope of our
19 models. So we rely on your reports. That tweet indicate we,
20 especially those in the frontline communities directly impacted by
21 these fires who are living near oil and gas infrastructure,
22 essential workers outside keeping us going through this pandemic,
23 we are all living in a climate emergency that is beyond the scope
24 of models addressing this emergency as comprehensively,
25 creatively, and boldly as possible is critical. That's why I've

1 called in to ask for the approval and adoption of these San
2 Anselmo and San Mateo Reach Codes, as well as adopting an all-
3 electric baseline in 2022 Building Codes. Adopting these codes is
4 the best decision for our community's health, finances, and any
5 possibility of any sort of predictable future.

6 Thank you for the opportunity to comment and I wanted to
7 say thanks to the folks running the back end of the commenting
8 processes for being so patient and kind.

9 Thank you.

10 MR. GOLDTHRITTE: Next on the line we have Robert
11 Whitehair with Sustainable San Mateo County.

12 MR. WHITEHAIR: Member -- Chairman Hochschild and
13 members of the Commission, thank you for the opportunity to
14 address the Commission today about this very important subject.

15 My name is Robert Whitehair, R-O-B-E-R-T. Last name
16 Whitehair, W-H-I-T-E-H-A-I-R. I am a member of the Board of
17 Directors of Sustainable San Mateo County, a
18 non-profit organization and I am speaking on behalf of the Board
19 on two items. About Item Agenda 5. One is to wholeheartedly
20 support County of San Mateo and its Reach Codes, and secondly to
21 support San Anselmo, and I guess thirdly, to support a baseline
22 for 2022. Many of us on the call had been involved in Reach Codes
23 across San Mateo County over the last year. We started in San
24 Mateo, which we like to call the trailblazer, which adopted the
25 first Reach Code in September of last year. And the interesting

1 thing that's happened in that time is that each new Reach Code,
2 as it's come before the City, has gotten stronger, and stronger,
3 and stronger. The most recent code in Burlingame is almost all
4 no-gas, all-electric Code. So what has happened in a year, the
5 codes have gotten much stronger and much stronger. Meanwhile I
6 was talking to some of the sustainability managers who work for
7 the cities in San Mateo County. Nice to know about six or seven
8 cities so far have adopted Reach Codes. The ones that have not
9 told me that it's a heavy lift to adopt an ordinance, write it
10 themselves with a very small staff, and get it on the agenda.
11 They said the best thing they would like to see done would be have
12 a Reach Code that is baselined now, 2022 all-electric. It would
13 make their lives a lot easier and increase the health of the
14 citizens of their community.

15 I also wanted to add that all of us on the call are
16 personally involved with this and we are doing everything we can
17 in our homes. But I live in a
18 75-year-old home and it's very difficult to retrofit an old home.
19 By adopting all-electric Reach Code now, you will prevent that
20 problem from occurring in the future. But on behalf of the -- my
21 Board and behalf of all of us, please adopt a strong Reach Codes
22 in these counties. And please adopt a baseline for 2022 that is
23 all-electric. We all appreciate it as we sit here in the dark.

24 Thank you so much for your time and appreciate the
25 opportunity to comment.

1 MR. GOLDTHRITE: Next we have Deborah Knuckey with
2 Climate Reality Project.

3 MS. KNUCKEY: Good morning, Commission. My name is
4 Deborah Knuckey. That's D-E-B-O-R-A-H, K-N-U-C-K-E-Y.

5 I'm a resident and have lived in the town of San Anselmo
6 for seven years. I'm half tempted to break out my climate denier
7 talking points, just for some variety. But instead of comic
8 relief I'll double down on the arguments you're hearing from other
9 speakers.

10 I'm the Co-Chair of the Climate Reality Project Bay Area
11 Chapter. We're a non-profit part of a huge global organization.
12 We've got about 1,000 members in the Bay Area and we're committed
13 to taking urgent action on the climate crisis and policy, which is
14 in your hands, as one of the biggest levers out there.

15 I'm joining you today's meeting to express my strong
16 support, not only for the Reach Codes in my own town of San
17 Anselmo, but also San Mateo County, but to really support doubling
18 down by going to that all-electric baseline for new construction
19 in 2022 Building Codes.

20 Taking urgent action is important to me. Not just
21 because I looked out of the window this morning and saw skies that
22 are so reminiscent of everything my family was sending me from
23 Australia over the new year when Australia was devastated by
24 fires, but we can see that climate change isn't theoretical or in
25 the future. And building Electrification Codes are really a

1 critical part of taking that action because we can see it's here,
2 it's affecting the health and safety of every person in
3 California.

4 I know one of the big objections is that everyone loves
5 cooking on gas. Well, I love cooking. I've always said I love
6 cooking on gas. Since learning about the indoor air quality
7 issues related to gas cooking, the linkages to childhood asthma,
8 I've actually kind of investigated induction cooking and really
9 it's not -- it's not that much of a struggle. And I think we can
10 easily move all residential cooking to all-electric without having
11 people feeling like they're making a major compromise. So I think
12 it's important that we look at all-electric homes as not being a
13 compromise but being an upgrade. An upgrade in health, an upgrade
14 in lower costs of electricity.

15 Finally, I would say I lead to help companies that are
16 fighting the climate crisis. I'm a lead AP and have a masters in
17 sustainable deign that focused on building energy technologies.
18 And I work with many leading companies in the clean energy space.
19 I know the technologies already exist. Many of them are cost
20 effective and save the building owner money in the long run. And
21 there's very few exceptions to keep gas -- with very few
22 exceptions there's no reason to keep gas in buildings.

23 In the solar industry, where a lot of my clients are and
24 I used to work daily, we see how variation in permitting from town
25 to town costs the thousands of small businesses in the industry,

1 both financially and in terms of being able to deploy quickly.

2 One more reason to go into that baseline building code
3 in 2022 is that making consistent and very high building code
4 standards throughout the state will enable the acceleration of
5 adoption-able electric codes. It just simplifies everything if an
6 architect, a solar company, a builder, is dealing with the same
7 codes from town to town.

8 Thank you all for your attention to the crisis. I'm
9 very grateful to live in a state that is -- rules by sanity with
10 such great policies. I think we can lead the world. We've done
11 it with vehicles. I'd love to see
12 it --

13 MS. GALLARDO: Speaker, your time is up. This is Naomi,
14 out of the Public Advisor.

15 MS. KNUCKEY: Okay. Thank you.

16 MR. GOLDTHRITE: Next on the line we have Sarah Schear
17 with Climate Health Now.

18 MS. SCHEAR: Thank you, Commissioners. My name is Sarah
19 Schear, spelled S-A-R-A-H, S-C-H-E-A-R. I'm a resident of San
20 Francisco and a senior medical student at UCSF and today I'm
21 speaking on behalf of the organization Climate Health Now,
22 representing over 350 doctors, nurses, and health professionals
23 across California and I'm also speaking on behalf of San Francisco
24 Bay Physicians for Social Responsibility where I am a member of
25 the Executive Board.

1 As health professionals, we strongly support
2 all-electric Reach Codes in California and we urge you to set a
3 statewide all-electric baseline for new construction in the 2020
4 building code. The use of natural gas in buildings poses many
5 risks to health. As a future pediatrician, I want to highlight
6 especially the risk to children of gas stoves. A metanalysis on
7 the association between gas stoves and childhood asthma found that
8 children in homes with gas stoves have a 42% higher risk of
9 experiencing asthma symptoms. Use of natural gas in buildings
10 releases nitrogen dioxide and other air pollutants that are
11 triggers of lung and heart disease. There is no known safe
12 threshold for nitrogen dioxide exposure. Now more than ever it's
13 crucial that we limit harmful indoor air pollution exposure to the
14 people of California. This is so true when our community's
15 frontline workers, and healthcare resources are strained during a
16 respiratory viral pandemic attacking people's lungs in which
17 there's growing evidence that exposure to air pollution leads to
18 higher risks of dying from Covid-19.

19 It's also essential that we protect our indoor air
20 quality when air pollution exposure due to wildfires is becoming
21 more severe and more frequent due to climate change. And cleaning
22 indoor air is a major public health intervention that we have to
23 protect us from wildfire smoke.

24 In addition, locking in more natural gas infrastructure
25 is incompatible with the healthy climate future. As a young

1 medical student training to become a pediatrician, I worry deeply
2 about how the children I care for will live in the world that we
3 are leaving them. We have a moral obligation to lower our carbon
4 footprint in California, to protect people who are most vulnerable
5 to climate change, including low-income communities of color and
6 every child born today. I thank the Commission for your work on
7 this extremely important issue and I urge you to support requiring
8 new construction to be all-electric.

9 Thank you.

10 MR. GOLDTHRITE: Next on the line we have Jonathon
11 Olman.

12 MR. OLMAN: Thank you very much. My name is Jonathon
13 Olman. I'm calling from Santa Barbara, California and I wanted to
14 say that I support the Reach Codes for San Anselmo and San Mateo,
15 but I also believe that we should have the 2022 Building Code be
16 all-electric baseline for new construction. But I want to tell
17 you why and it's very interesting.

18 The history of electric buildings, you know, really
19 started in March of 1956 with the Medallion Homes program. And
20 that was a -- that was a program supported by General Electric And
21 Westinghouse Corporations to build all-electric homes throughout
22 the country. And in many parts of the country, an electric home
23 is a home. Like in Florida. It's all, you know most homes are
24 all-electric and they're doing fine. But in California we have
25 this situation where we have this -- this frack-gas system, which

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1 is endangering our health. But we can do a new Medallion Home
2 Program right now using the best technology, which is the
3 induction stoves, the heat pumps. This is the moment to do a
4 Medallion Program -- Medallion Home Program in California so that
5 we can improve our health and improve our climate. I mean this is
6 the moment. So I would urge you to -- to not just approve, you
7 know, each one of these cities, but just actually take control of
8 this situation.

9 I'm in So Cal Gas area. I can tell you that the people
10 here want an alternative. They are -- they are really -- they
11 don't want to be, you know, beholden to fossil fuels. And we saw
12 that in San Louis Obispo the city just did an All-electric Reach
13 Code. So I'm here to tell you that Southern California and
14 Central California want this and that it's time for us to go -- in
15 California to go all-electric because now we have the sun and the
16 wind. That is what's -- was the difference in the 1950's, they
17 went all electric, but they didn't have the solar and the wind
18 advantages that California has now. So this is the perfect
19 opportunity. I urge you to support this.

20 MR. GOLDTHRITE: So next on the line we have Rachael
21 Londer with County of San Mateo.

22 MS. LONDER: Hello. Hello. My name is Rachael Londer.
23 R-A-C-H-A-E-L, L-O-N-D-E-R. I just wanted to hop on and represent
24 the County of San Mateo and let you know that we're listening and
25 that we're here and that we're honored to be in front of the

1 Commission today.

2 I work for the County of San Mateo in our Office of
3 Sustainability and spearheaded this effort on behalf of the
4 county. The Reach Code is a key strategy in the County of San
5 Mateo producing, you know, our negative impact that our built
6 environment does have on the climate. We know that energies in
7 buildings in our unincorporated San Mateo County area contribute
8 to over 30% of our county's greenhouse gas emissions. This Reach
9 Code would apply to our unincorporated area and some of that area
10 you may have most recently seen on the map for the recent fires,
11 and our hearts and our energies, and our efforts are with our
12 community in Atascadero and on the coast.

13 About a year ago, our Board of Supervisors declared a
14 climate emergency on September 17th, 2019. It's interesting to
15 reflect on where we are today and, you know, we're really excited
16 to have made this bold action towards, you know, reaching the goal
17 outlined in the climate emergency of reaching carbon neutrality by
18 2045, in alignment with this state. And this is, you know, one
19 of, you know, the first actions and we hope to adopt our climate
20 action plan later this year or early next to really outline the
21 rest of the actions we hope to take in our, you know, different
22 sectors within the county.

23 Wanted to just really keep it brief and share my
24 gratitude to the CEC and wanted to express gratitude to Danuta as
25 she really demystified the CEC process and was a quick and clear

1 communicator throughout this process and we really appreciate
2 this opportunity that the State has given for communities to adopt
3 locally specific, locally appropriate, cost effective, Reach Codes
4 for our communities.

5 Thank you.

6 MR. GOLDTHRITE: We're down to our last two callers. We
7 have Katie Davis with Goodland Coalition.

8 MS. DAVIS: Hi. Yes. Katie Davis, K-A-T-I-E,
9 D-A-V-I-S in Goleta, California. It's a small, relatively new
10 city on the coast in Santa Barbara County. And our City Counsel -
11 - first of all, I do support adoption of these Reach Codes and I
12 am urging the CEC to take it further, do it all-electric baseline
13 in the 2022 Building Code.

14 The Goleta City Counsel is on record wanting a Building
15 Electrification Reach Code. I think that they've all signed
16 letters to you to that affect and that's true throughout our
17 region. Santa Barbara has a Strategic Energy Plan that calls for
18 an all-electric building Reach Code. Ventura just -- County just
19 passed a General Plan that calls for an All-electric Building
20 Reach Code. They'll probably have here, like in a small city like
21 Goleta is -- during this pandemic and budget crisis and stuff, is
22 actually implementing an ordinance and going to all the effort to
23 do it. So they're really hoping across our region that you take -
24 - just do a statewide all-electric baseline for all new
25 construction. It would really -- it would really save the --

1 these local cities really want to do it, from having to go and do
2 it on their own. So that's certainly our hope. It would
3 certainly decree greenhouse gas emissions in building sectors such
4 a big source in California, it's critical. In Goleta we've got
5 sea level rise, we've got wildfires. I mentioned looking out on
6 some burned down houses that burned down a couple years ago with
7 this -- a freak fire caused by a freak heat wave. So very much
8 climate related, in fact I fled from it myself and I feel for
9 everybody who's going through that right now.

10 And we actually are also the site of one of the largest
11 and oldest gas storage facilities. The La Goleta Gas Storage
12 Facility, which underlies Goleta Beach and UCSB, and is near our
13 downtown, and I worry about Aliso Canyon type disaster here
14 because it would really shut down the city and our local economy.

15 So it would decrease greenhouse gas emissions. It would
16 also save money because it's less expensive to build if you don't
17 have to have that gas infrastructure. And also efficient electric
18 homes will lower our monthly utility bills as renewable energy has
19 just gotten so much cheaper and more competitive. And it will
20 decrease the indoor air pollution. So it's really a win-win.
21 There are very few things we can do that will really save money,
22 reduce air pollution, and decrease greenhouse gas emissions to
23 that agree. So I would urge you to do that.

24 Thank you so much.

25 MR. GOLDTHRITE: So last on the line we have Elizabeth

1 Nickerson with Environment California.

2 MS. NICKERSON: Hi. My name is Elizabeth Nickerson.
3 That's E-L-I-Z-A-B-E-T-H, Nickerson,
4 N-I-C-K-E-R-S-O-N and I'm here representing Environment
5 California.

6 Environment California supports adoption of these Reach
7 Codes and we want the CEC to build off local leadership and take
8 electrification further by setting an all-electric baseline for
9 new construction in the 2022 Building Code.

10 We experienced record breaking temperatures over this
11 Labor Day weekend. And today the streetlights remained on at 9:00
12 a.m. because the skies were cloudy with smoke here in the Bay
13 Area. The wildfire season in California has been exceptionally
14 bad this year. And extreme heats and wildfires are a consequence
15 of climate change. It is heartbreaking to hear stories of people
16 fleeing their homes or suffering extreme heat, unable to even open
17 their windows due to air pollution.

18 My own father, actually, who has lung disease, faced a
19 double threat recently. He was evacuated from Santa Cruz due to
20 fire but could not return to our hometown in the Central Valley
21 due to extreme heat over 100 degrees and lack of access to air
22 conditioning. In both places though, air quality reached
23 hazardous levels. Levels that made it difficult for him to do the
24 simplest daily tasks. And millions of people are breathing in
25 smoke and unhealthy air. At least 7 people have lost their lives.

1 A
2 hundred -- 136,000 people have been evacuated and more than 1,600
3 structures have been destroyed. Climate change is knocking at our
4 door and we must act now. The only answer is to stop using dirty
5 forms of energy and transition to clean and renewable sources.
6 Fossil gas is the largest source of climate pollution in the US.
7 It's dirty, it's dangerous, and it is driving the climate change
8 that is perpetuating our constant trauma in California.

9 Thank you, Commissioners, for allowing me to give my
10 public comment and I ask that you approve the Reach codes in San
11 Anselmo and San Mateo and go even further to combat climate change
12 by creating an all-electric baseline for new buildings in the 2022
13 Building Code.

14 Thank you.

15 MS. GALLARDO: this is Noemi Gallardo, the Public
16 Advisor. I have two comments to relate. The first comment is
17 from Thida Cornes. That name is spelled T, as in Tom, H-I-D, as
18 in David, A. Last name is C, as in cat, O-R-N, as in Nancy, E-S.

19 Thida says, I support the recommendation for I0tem 5.
20 I'm a board member of Carbon Free Mountain View and speaking on
21 their behalf. I urge you to take action to support local
22 decisions reflected in these ordinances and to make healthier
23 buildings with All-electric Reach Codes throughout California. As
24 you know, Reach Codes require a study that ensures they are cost
25 effective. My son installed an air-quality sensor in our kitchen

1 and whenever we turn on the gas stove or oven the air quality
2 worsens significantly. I have asthma due to the forest fires. I
3 wish an electric stove and oven had been installed originally. It
4 is much harder and more expensive to retrofit.

5 A minority of homes in my area have central air
6 conditioning, yet this week we've been under a heat advisory with
7 105-degree weather and this now happens every summer. Many
8 seniors and people like me with disabilities are suffering. An
9 electric heat pump provides clean air conditioning and heating.

10 Thanks.

11 The second comment is from Roshanak Sirjani. First name
12 is spelled R-O-S, as in Sam, H-A-N, as in Nancy, A-K. Last name
13 is spelled S, as in Sam, I-R-J-A-N, as in Nancy, I.

14 Roshanak says, I am a Berkeley, California resident. I
15 support a vote in favor for item 5, electrification is a
16 necessity. The buildings built without electrification in the
17 coming decade will be uninhabitable by the next two decades as we
18 inevitably shift to renewable energy to prevent mass climate
19 casualty situations. They will have to be upgraded later, which
20 is costly and will likely require government funding or it won't
21 happen. Does the city wish to continue to exacerbate this problem
22 for themselves and their budget knowing that renewable energy is
23 inevitably coming, knowing they will have to pay for
24 electrification down the line, effectively reconstructing
25 buildings that were only recently built. Should the city and the

1 taxpayers pay for this second round? Will we even have the
2 money? It is absolutely clear that electrification in Code will
3 save the local municipality hundreds of billions of dollars of
4 future upgrades.

5 Not implementing electrification in Code now will cost
6 the local municipality hundreds of billions of dollars.

7 That concludes the written comments, Chair.

8 CHAIR HOCHSCHILD: Thank you, Madame Public Advisor.
9 Let me thank all the members of the public who took the time to
10 participate [indiscernible]. I heard a lot of emotion from a
11 number of the speakers and I just want to validate that, their
12 urgency. I think we're all feeling is extraordinary. And I'm a
13 father of two girls and my wife and I are, this morning were
14 talking about nobody has seen things to this degree with this
15 [indiscernible] one extraordinary challenging time, but also a
16 time of great opportunity and with that, let's move over to
17 discussion for item -- let me begin with Commissioner McAllister.

18 COMMISSIONER MCALLISTER: Thank you, Chair. So I wanted
19 to do essentially the same. Thank you for validating all the
20 comments and the feelings. I, you know, I think we all can reach
21 into our families and our personal lives and find examples of
22 hardship and real, you know, personal experiences with health
23 challenges and often wonder, you know, how much they're linked to
24 the indoor air quality or long term exposure to toxics, or just
25 sort of long term issues with our environment. I certainly have a

1 treasured, you know, relationship that I lost to cancer and
2 remain, you know, in the back of my mind, I still look for some
3 kind of reason and exactly to explain what happened and I find it
4 difficult. And I think that unsettled inconclusive, you know,
5 that will remain inconclusive, aspect of the environmental
6 challenges and the climate change challenges that we're facing
7 really do make it personal for everyone. And so I just wanted to
8 express that we are, you know, I certainly, I know we all hear you
9 when you bring those experiences and those -- that urgency to the
10 table because I think we all feel it. And we hear you in the
11 sense of professional sense as well, which is, you know I think
12 there -- those compelling stories, you know, really multiplied and
13 amplified around the state, you know. I think we are committed to
14 developing, you know I think that long-term goal of climate
15 mitigation, adaptation mitigation in this case, is something that,
16 you know, we want to achieve and we're on the same page and so I
17 want to thank you both for valid -- both for your comments on this
18 item, Item 5. You know the Reach Codes for the town of San
19 Anselmo and the County of San Mateo, which is what this specific
20 vote is about. But also for your broader thoughts on the
21 trajectory of the state. And I want to encourage all of you,
22 maybe I don't need to say this, but there is a separate rule
23 making for the, you know, series of workshops and lots of detail
24 analysis and assessment that staff and stakeholders need to work
25 through together in the Title-24 2022 Code update. It covers new

1 construction, both single family low rise residential and multi-
2 family high rise residential and non-residential. I call -- it
3 covers all of those sectors and these conversations are relevant
4 for that and need to be on the record and so I want to just
5 encourage people to put those comments about all-electric 2022 and
6 beyond into that proceeding to make sure that it has integrity, as
7 it must in order to get to, you know, well supported final
8 decisions for the Commission to vote on, you know, in some months'
9 time. So that's really the, I think the critical location for
10 those conversations to happen so all the comments that you made
11 here are, in that regard, are super helpful but, you know, in
12 parallel they need to happen over there in that rule-making as
13 well, function of our process here, and there are good reasons for
14 that process. So I just want to make sure to highlight that.

15 But beyond that, I want to just congratulate these two
16 cities for going through a process locally and bringing this to
17 us. You know I think the -- I have faith in our staff process. I
18 want to also thank Danuta for guiding these and just the fixed
19 division leadership, Mike and the whole team there for evaluating
20 these Reach Codes and bringing them to us for approval.

21 So I, you know with that, I think I would just invite
22 other comments and if there are not any I would move this item.

23 CHAIR HOCHSCHILD: Are there other comments from any
24 other Commissioners?

25 Hearing none, Commissioner McAllister, will you make the

1 motion?

2 COMMISSIONER MCALLISTER: I will move Item 5.

3 CHAIR HOCHSCHILD: Okay. Is there a second?

4 Commissioner Douglas, would you be willing to second.

5 COMMISSIONER DOUGLAS: Yes. I second it.

6 CHAIR HOCHSCHILD: Okay. With that let's take a vote.

7 vice Chair Scott.

8 VICE CHAIR SCOTT: Aye.

9 CHAIR HOCHSCHILD: Commissioner Monahan.

10 COMMISSIONER MONAHAN: Aye.

11 CHAIR HOCHSCHILD: Commissioner Douglas.

12 COMMISSIONER DOUGLAS: Aye.

13 CHAIR HOCHSCHILD: Commissioner McAllister.

14 COMMISSIONER MCALLISTER: Aye.

15 CHAIR HOCHSCHILD: And I vote aye as well.

16 Item 5 passes unanimously. Congratulations to those

17 cities.

18 Let's move onto Item 6. Charge Bliss Demonstrating Long
19 Duration and Title-24 Compatible Energy Storage Technologies.

20 MR. SIT: Good morning, Commissioners. My name's Joseph
21 Sit, and I'm from the R&D Division. Today I'll be presenting an
22 agreement that came out of the Long-duration Energy Storage
23 Solicitation.

24 Where most agreements are presented at the July 2020
25 Business Meeting, just as a refresher, the point of this

1 solicitation was to demonstrate the value of non-lithium ion
2 energy storage technologies and show that they have a capability
3 to provide energy for 10 hours or more. Next slide, please.

4 Just speaking to benefits of California and really the
5 motivation for the solicitation and this agreement. Just a couple
6 things. First, is that most energy storage technologies are
7 designed for four hours of capability so this will extend that
8 functionality.

9 And then going off of that, longer duration energy
10 storage is really needed for two things. One is improved grid
11 resilience and also to really maximize the value of renewable
12 generation. And so before you go to the next slide I'd actually
13 like to speak to current events. Like in the public comment for
14 Item 5, yeah, we can tell that grid resilience is not just a
15 future challenge, but it's a current one. We can see from the
16 ongoing heat waves, the California wildfires, it's a -- it's a
17 pressing challenge that I need to be addressed. It's by
18 developing these new energy storage technologies, we'll not only
19 be able to strengthen the grid, but we'll be able to do it at
20 lower costs, and with a lower carbon footprint. Next slide,
21 please.

22 So going back to the solicitation. It
23 was -- there were several requirements, but these are the three
24 main ones. One was that the project has to demonstrate at least
25 400 kilowatts of power or more, be able to provide at least 10

1 hours of duration, and then also be focused on a non-lithium ion
2 energy storage technology. And so this project with Charge Bliss,
3 Inc., they'll be demonstrating a 800-kilowatt VionX Vanadium redox
4 flow battery. And this will be working in conjunction with onsite
5 solar. This project will be demonstrated at Kaiser Permanente's
6 Ontario Medical Center and this project will be able to show 90%
7 of essential power for 10 hours or more. And then some other
8 benefits, which is just that this specific project there are a
9 couple things. One is that it will be able to support larger
10 loads. Two, it will be able to gather more data around use cases
11 for medical centers, and then lastly it will be able to provide
12 direct comparison against a similar project in Kaiser Permanente's
13 Richmond California facility where that facility is using a
14 lithium-ion energy storage technology. Next slide, please.

15 In terms of staff recommendation, we recommend approval
16 of this agreement along with the supporting CEQA documentation and
17 I'm ready for any questions that the Commissioners might have.

18 CHAIR HOCHSCHILD: Thank you so much.
19 Let's -- are you completed?

20 MR. SIT: Oh, yes. Sorry about that. Yeah.

21 CHAIR HOCHSCHILD: Okay. Let's move to public comment.
22 Do we have any public comment on this item?

23 MS. GALLARDO: This is Noemi Gallardo, the Public
24 Advisory. We have no comments written or on the phone line.

25 CHAIR HOCHSCHILD: Okay. Thank you. Let's move onto --

1 to Commissioner discussion. Vice Chair Scott.

2 VICE CHAIR SCOTT: Sure. And I don't have much to add
3 to Joseph's excellent and detailed presentation for you all. I
4 don't think we need to underscore the importance of storage and
5 understanding how well that can work. The long-duration component
6 to this piece, I think is also incredibly important. And this
7 helps also support larger loads, as Joseph mentioned. So that's
8 another place where I think giving this kind of data and
9 information, these types of projects, are really important.

10 And last but not least, this is on a critical facility,
11 right. And I think all of us know especially how important being
12 able to keep our critical facilities online at any given time is.
13 And so this kind of hits on all of those, and as Joseph mentioned,
14 we have a nice comparison to a previous project that uses a
15 different type of technology. So we'll get some really good data
16 between those two projects.

17 So if there are not comments from other Commissioners, I
18 would be happy to move this item.

19 CHAIR HOCHSCHILD: Okay. So moved. Commissioner
20 McAllister, would you be willing to second?

21 COMMISSIONER MCALLISTER: Absolutely. I'll second this
22 item.

23 CHAIR HOCHSCHILD: Okay. Let's take the roll. All in
24 favor say aye.

25 Vice Chair Scott.

1 VICE CHAIR SCOTT: Aye.

2 CHAIR HOCHSCHILD: Commissioner McAllister.

3 COMMISSIONER MCALLISTER: Aye.

4 CHAIR HOCHSCHILD: Commissioner Douglas.

5 COMMISSIONER DOUGLAS: Aye.

6 CHAIR HOCHSCHILD: Commissioner MONAHAN.

7 COMMISSIONER MONAHAN: Aye.

8 CHAIR HOCHSCHILD: And I vote aye as well.

9 Congratulations.

10 And let's move onto item 7. Approval of the August

11 12th, 2020 Business Meeting and it's -- are there any public

12 comments on those minutes, Madame Public Advisor?

13 MS. GALLARDO: This is Noemi Gallardo, the Public

14 Advisor. No written or verbal comments.

15 CHAIR HOCHSCHILD: Okay. Any Commissioner discussion?

16 Hearing none.

17 Let's take the roll. All in favor say aye. Vice Chair

18 Scott.

19 VICE CHAIR SCOTT: Oh, I'll move approval of the item.

20 CHAIR HOCHSCHILD: Oh, let's give it a --

21 COMMISSIONER MCALLISTER: I'll second.

22 CHAIR HOCHSCHILD: Vice Chair Scott moves, Commissioner

23 McAllister seconds. All in favor say aye. Vice Chair Scott.

24 VICE CHAIR SCOTT: Aye.

25 CHAIR HOCHSCHILD: Commissioner Douglas.

1 COMMISSIONER DOUGLAS: Aye.

2 CHAIR HOCHSCHILD: Commissioner McAllister.

3 COMMISSIONER MCALLISTER: Aye.

4 CHAIR HOCHSCHILD: Commissioner Monahan:

5 COMMISSIONER MONAHAN: Aye.

6 CHAIR HOCHSCHILD: I vote aye as well.

7 Let's move onto the Item 8, Lead Commissioner or
8 Presiding Member Reports. Let's begin with Commissioner Monahan.

9 COMMISSIONER MONAHAN: Well the biggest news, as I think
10 you probably all are aware of, is that the Junior Budget Bill
11 included \$61,000,000 for Light-duty EV Charging Infrastructure.
12 So a big yay for that. That's on its way to the Governor's desk
13 to be signed and really excited to be able to put that money to
14 good use to help both create jobs, you know, and stimulate the
15 economy at this time, but also to advance our goal of meeting the
16 states 1.5 million EV goals by 2025 and the 250,000 charging ports
17 to be able to support that goal, so, charging stations rather. So
18 just been exciting. A lot of folks were involved in helping make
19 that come to fruition.

20 So I had said last time we were going to be bringing the
21 investment plan to our Business Meeting. We actually held it back
22 one Business Meeting, so it will be at the next one. I promise
23 you. It better be. Really looking forward to having you all take
24 a look at that and give us your thoughts and feedback and
25 hopefully approval.

1 We are, you know, the IEPR team has been very hard at
2 work with all the workshops. We actually had just one workshop
3 left on funding programs, which we delayed in order to support
4 electricity conservation. I just want to say Heather Raitt and
5 her team has been phenomenal. Really phenomenal. I think you all
6 know that, and I get to experience it very much firsthand through
7 this process. Also, the many folks in the Fuels and
8 Transportation Division, including Quentin Gee, Charles Smith,
9 Noel Crisostomo, Jim McKinney, Tim Olson, so many others. I can't
10 go through them all, but also we've had help with the Public
11 Advisor's Office, Dorothy and Noemi, a lot of IT folks, Harrison,
12 Patty Pham, Raj Singh. So I'm just really impressed with all the
13 support and now we're getting down to the actual writing, or we,
14 meaning Heather and the Fuel and Transportation Division folks.
15 So that's an exciting evolution.

16 I also wanted to share just a few, kind of like exciting
17 updates in your world of transportation just in case you all
18 aren't as obsessed with it as I am, and the Chair is. So we, my
19 team met with Zoox. Zoox is actually a mobility company. They
20 are -- they're merging with the so called Three Revolutions of
21 Autonomy, Mobility as a service, and Electrification. One of the
22 things that I thought was really interesting about that is, well
23 they're really making some serious progress. Amazon is a major
24 investor now and it has 1,000 employees in California, which I was
25 shocked by. I was like 1,000 employees. Are you kidding me?

1 With a company that hasn't really even gone public yet, so it
2 just shows how many jobs are available, you know. Not just in the
3 pure battery electric, or fuel-cell electric space, but also in
4 the autonomy mobility and the service, you know and bringing those
5 three together is kind of like the holy grail, in terms of clean
6 transportation.

7 There was a recent announcement by Uber, and this
8 followed an announcement by Lyft in June that committed to having
9 100% of their rides be in electric vehicles by 2030. So both
10 companies have made those commitment, at least for certain parts
11 of the world, including the US, Canada, and Europe. So I just
12 think that's a, you know, a really great step forward. You know,
13 shows commitment. I think there still needs, you know, ARB is
14 still working through some regulations on that front, but at least
15 it shows that these companies are really leaning in and thinking
16 about how to make this future electric clean and good to the
17 planet.

18 And then the next big announcement that happened was GM
19 announced that it's going to invest upwards of 2 billion in
20 Nikola, which is a fuel-cell and battery electric vehicle company.
21 Mostly in the heavy-duty space, but a little bit in the -- in the
22 pick-up truck space. So just a lot of exciting announcements, I
23 think, on the electric vehicle front. And we're going to continue
24 to have them. I think it'll -- this is just going to accelerate
25 with time as we're seeing sort of global movement towards

1 electrification.

2 And that's my quick update.

3 CHAIR HOCHSCHILD: Thank you for that, Commissioner
4 Monahan. Let's go onto -- to Vice Chair Scott.

5 VICE CHAIR SCOTT: All right. Well, I am delighted to
6 bring you guys some updates. The most exciting one is that EPIC
7 was renewed for the Energy Commission by the Public Utilities
8 Commission just a few weeks ago, so yeah, another raise the roof.
9 I like it. We are just really, really delighted and I wanted to
10 take a minute to thank again the entire EPIC team. We had a nice
11 chance to celebrate internally, but I wanted to do that external
12 spacing as well. The team has just done an amazing job. They're
13 good listeners, they are smart experts, they are nimble in their
14 implementation of the program. They're always seeking ways to
15 deliver more efficiently and effectively for the people of
16 California. And they're making this work, right. And work really
17 well in these pretty stressful days of Covid and other things. So
18 I think it's a real testament to the strengths and the
19 thoughtfulness of the Energy Commission team. And I'm proud of
20 the work that they carry out each and every day. And I'm also
21 just humbled and honored to be a part of that team. And so I
22 wanted to make sure that we said that in the public sphere.

23 The EPIC program is incredibly important. We did a good
24 job showing the robust benefits that it's brought to the State of
25 California so far, and will continue to bring, especially as we

1 transition to our clean energy economy, making sure we're
2 bringing along low-income, and rural, tribal, and disadvantaged
3 communities as part of that transition and really demonstrating in
4 that space. And so I just -- and also I think the signal of
5 continuity that it sends. The continuity of investment that the
6 State is making in this clean energy space just can't be
7 overstated. And so I'm really just so pleased with the decision
8 by the Public Utilities Commission a couple weeks ago.

9 I want to do a specific thanks to a few of the folks on
10 the EPIC team, which is Laurie ten Hope, and Linda Spiegel, David
11 Erne, Erik Stokes, Gabe Herrera, Linda Barerra, Liza Lopez, Rhetta
12 deMesa, Mona Badie, and Fernando Pina. And there was a ton of
13 folks who pulled this together, but these are the guys and gals
14 who were working on it on a day to day, in and out to really carry
15 the Phase 1 of this EPIC decision across the finish line, so thank
16 you so much to them.

17 I also wanted to give you guys a couple of updates on
18 things that are taking place within EPIC. We just had last week,
19 on Wednesday and Thursday, a forum on Reimagining Buildings for Our
20 Carbon-Neutral Future. This was really fantastic. We had
21 probably about 1,000 folks sign up and at least 800 people on each
22 of the days that we did this forum. And it was just a really nice
23 chance to hear from all kinds of folks around the building
24 industry. What they're working on, how they're working on it, and
25 what's really leaning towards our future of decarbonization in the

1 building sector space.

2 And I really want to thank all of the team for helping
3 put that together, the participants who dialed in and really made
4 it as robust a forum as we can have in these virtual days. And
5 also, Commissioner McAllister for lending his leadership and
6 expertise and providing some excellent moderation, as well as some
7 closing remarks.

8 I wanted to tell you all that we are still doing our
9 virtual tours of some of the EPIC projects. So we had a chance to
10 visit the Cleantech San Diego. We went on
11 a -- our virtual electric bus. More than 530 miles around the
12 state to see some different projects and it's really exciting to
13 see the work that these innovators and these incubators are doing
14 with one another and also the support that they can provide for
15 each other, whether it's technical expertise, financial expertise,
16 just kind of the connections with each other. So I really
17 appreciate it. It was quite the virtual tour, so I want to thank
18 Cleantech San Diego for putting that together for us. Our
19 terrific team of Scott Cox and Aretha on the Comm team are going
20 to get some clips and highlights from that, and so you'll see that
21 on Twitter and other social media spaces.

22 And then, let's see, sorry my notes are a teeny bit
23 messy. Oh, one other -- two other thoughts.

24 I wanted to echo something you heard the Chair mention
25 just a little bit earlier to Noemi Gallardo and her team, and also

1 to Patty Pham and her team. They are continuing to make our
2 virtual Business Meetings more interactive, more engaging. And I
3 really appreciate that. There's a lot of work that goes into the
4 back end to make the meetings look a little more visually
5 appealing than just seeing our PDF of the agenda. And so I do
6 appreciate all of the excellent work that they and their teams are
7 doing. I think we've done a great job. I told them it's like we
8 baked the delicious cake, and now we're just kind of adding some
9 frosting, and putting some sprinkles on it. And so I do
10 appreciate really kind of stepping up to always bring our A-game
11 to how we present to -- what our face looks like for the external
12 world who's watching the work that the Energy Commission does.

13 And the last thing I wanted to say, also, was just
14 again, a sincere thanks to all of our Energy Commission staff.
15 These continue to be challenging days where we're all working
16 through Covid, and children doing school from home, keeping our
17 eye on parents and other things, and then, you know, excessive
18 heat, followed by I'm just kind of, also like everyone else,
19 watching out my window. Watching the light quality continue to
20 change depending on how deep the smoke is. And so there are a lot
21 of challenges that I think people continue to bring their A-game.
22 And I really want to make sure folks know that we appreciate that.
23 We know how much everyone is struggling, but we also know the
24 mission of the Energy Commission is important, right. It helps us
25 get to that clean energy transition that we need. And so I just

1 want to thank the team for their excellent work.

2 And with that, I will conclude my remarks.

3 CHAIR HOCHSCHILD: Thank you so much, Vice Chair Scott.
4 And I just want to reiterate our gratitude, and my gratitude, for
5 you always raising how do we optimize our virtual platform to make
6 it as accessible as possible. And we're getting better, in large
7 part because of you doing that.

8 VICE CHAIR SCOTT: Well yeah.

9 CHAIR HOCHSCHILD: So thank you. Let's go next to
10 Commissioner McAllister.

11 COMMISSIONER MCALLISTER: Well, thanks. I'll try to
12 keep it a little brief here.

13 Just a few comments. I did, I think all of us, it's
14 interesting, right, that all of us probably are getting more
15 invitations to speak. I think the bar the transaction cost for
16 speaking are much, much lower than they've ever been so we can sit
17 in the chairs we're in now and basically give talks that we maybe
18 would have traveled for previously and actually across the globe.

19 So, you know, I think last week I gave a presentation to
20 several hundred, you know, high-level energy professionals in
21 Brazil. It was kind of fun. And also the coordination among the
22 states is actually taking, I think it's deepening in a way that I
23 really wouldn't have anticipated at the outset. You know, our
24 meetings are -- Nazio (phonetic) which you all voted on, thank you
25 very much, our membership going forward.

1 Earlier, the various states are working together and
2 kind of conglomerating in interesting ways and it's much more
3 fluid and I think real time than it has before which is great.
4 And including coordination with Department of Energy. We just the
5 other day rolled out a small initiative but I think it's important
6 directionally with the Department of Energy, EERE, Energy
7 Efficiency Renewable Energy, to -- with assistant -- deputy --
8 Assistant Secretary Simmons and Deputy Assistant Secretary
9 Fitzsimmons called Return to Work which is basically a series of
10 kind of facilitative efforts between DOE with no new money and a
11 bunch of states to look at work for (indiscernible) issues, work
12 at -- look at some of the data issues, look at institutional
13 facilities, and remote auditing tools and things like that that
14 really sort of in our current environment will need to be made
15 more useable going forward.

16 So very, I think, a good, you know, set of initiatives
17 and diverse array of states interested in those initiatives. So
18 that's I think interesting. Of course, no new money and we'll see
19 how it evolves going forward whatever happens in Washington in
20 November and beyond.

21 Let's see, so wanted to just congratulate Commissioner
22 Scott on the reauthorization, that's huge. And really, I think,
23 yeah, exactly. Obviously RDD, Laurie and her team, Virginia, they
24 work across the Commission, but possibly nowhere more than with
25 buildings aspects. I'm not sure, I guess I never done the map on

1 that. But I think the building, they bring so much value to RDD
2 investments that we make, bring so much value to the kind of on
3 the ground market oriented stuff that gets done in the efficiency
4 division, developing regulations on (indiscernible) building.
5 That just strategically, it's incredibly important to have that
6 forward perspective investment happen to be able to be able to
7 inform those efforts. So really excited to keep working together
8 with that whole team.

9 And I just wanted to just thank Vice Chair Scott the
10 invitation to moderate session and provide the closing remarks for
11 --

12 VICE CHAIR SCOTT: Sure (indiscernible).

13 COMMISSIONER MCALLISTER: -- the building decarb --
14 decarbonization forum. That was a lot of fun. And I think by all
15 accounts was a huge success. I mean, really, (indiscernible)
16 worked great. And just got so much good feedback from that effort
17 which helps -- helps us all achieve our goals. So thank you for
18 spearheading that.

19 And Erik Stokes, I have to call him out as well, he did
20 a great job --

21 VICE CHAIR SCOTT: Yeah.

22 COMMISSIONER MCALLISTER: -- on all the parts that I
23 introduced that I worked on.

24 And then also wanted, I'm sure Chair Hochschild you'll
25 bring this up but I wanted to just highlight the Assembly Bill 841

1 which was kind of an interesting conversation (indiscernible)
2 desk, you know, don't know exactly what's going to happen there
3 but I do think that the conversation and the legislature was
4 emblematic of success that we've had at the Energy Commission
5 establishing ourselves as a go-to program administrator for
6 important investments that the state might make. And that's --
7 that's huge. I mean, with the Prop 39, which that would be kind
8 of a continuation of NSHP, the ECAA program, just the competence
9 that we bring the local assistance and financing office and other
10 offices. But particularly the locus is there, the competence that
11 our staff now brings to setting up a program, getting it stood up,
12 getting the channel funds flowing, get the rules clear and working
13 with stakeholders to facilitate participation. It's just huge.

14 You know, our transportation investments and many areas
15 where we -- where we have a core competency there that is now
16 acknowledged. And that's really gratifying to see that happen.
17 There's not an issue about like whether we can do it, it's like
18 okay, well, the conversations can be where they need to be which
19 is how do we find the resources and dedicate that to the right
20 things. So that's really gratifying.

21 And then finally, I just wanted to -- wanted to thank my
22 team office. They have been doing just amazing work keeping a lot
23 of plates spinning. I won't list all of the initiatives but
24 there's just a lot of big ticket items that we're working on,
25 Efficiency Division and the Energy Assessments Division, we heard

1 about a few of them today. But Bryan Early, my chief of staff.
2 And Bill Pennington who I recently brought on to focus on the
3 building code. And Fritz Foo who is kind of the linebacker doing
4 a lot of other stuff. They're just great. And Laura Casteneda
5 also my executive assistant, they've just been tremendous during
6 these times.

7 And then I also wanted to thank Tom Chesy in the media
8 office who has been working on a video that at some point that you
9 guys will see about my own home construction project. And that's
10 been a really good project, the level of production. The
11 (indiscernible) is way better than either I or my son would have
12 accomplished.

13 So -- and also just that it's all the -- a story that's
14 relevant to the Energy Commission and as well to California in
15 terms of on the ground experience to making investments in
16 people's homes and businesses which often is the largest
17 investment any of us will ever make. So. You know, if we're
18 lucky enough to be able to make.

19 So anyway, that's story is coming soon. And apologies
20 for the teaser, but there it is.

21 Thanks a lot, everyone, I appreciate it. And I'll pass
22 it back.

23 CHAIR HOCHSCHILD: Thank you. Let's go to Commissioner
24 Douglas.

25 COMMISSIONER DOUGLAS: I just have one brief thing to

1 report which is that a team both involved in tribal work from the
2 Energy Commission and also the Strategic (indiscernible) Council
3 gave a really nice report to the Disadvantaged Community Advisory
4 Group a week or so ago. And the report was well received, there
5 was a nice discussion that came out of it.

6 I think -- I mean, that's my only report for today.
7 Thank you.

8 CHAIR HOCHSCHILD: Great. Thank you, Commissioner.

9 So let me -- let me begin by just echoing Vice Chair
10 Scott's comments on the extension of the EPIC program and give my
11 thanks to our colleagues at the PUC. I feel really lucky to have
12 the relationship with the Commissioners there that we do. I'm on
13 the phone all the time with President Batjer and with the other --
14 our other colleagues there. And I know that's true across the
15 board. It's been a terrific working relationship.

16 And the important thing from my perspective is the
17 extension for ten years really sends the signal that California's
18 open for business, that we're committed, and that is going to
19 unlock and already has unlocked a lot of new investment from the
20 private sector because it's the uncertainty that actually becomes
21 problematic. And so having that message get sent, that signal get
22 sent is just phenomenal.

23 And I do also want to acknowledge, you know,
24 Commissioner Monahan's point we're going to get basically a 50
25 percent increase in our clean transportation budget and do a lot

1 this coming year to support more electric vehicle charging meet
2 those critical needs. So it's been a terrific step forward.

3 I spent yesterday morning doing an intro call with the
4 incoming CAISO CEO, Elliot Mainzer, who will be starting at the
5 end of this month. He brings a ton of experience and expertise
6 from BPA into this role and we're really excited to welcome him as
7 the incoming CEO and also to acknowledge Steve Berberich's hard
8 work over the last many years in support of our electric grid and
9 wish him well in his future as he's going to be moving along with
10 (indiscernible) along with his wife. And thank him for all his
11 service.

12 And I worked quite a bit with him this last weekend, it
13 was a very intense weekend with respect to grid reliability. It
14 was working all weekend on that along with a number of Energy
15 Commission staff. I want to in particular single out Siva Gunda
16 who turned in a gold medal performance helping rally all sorts of
17 additional resources to help support grid reliability. Terrific
18 effort from Shawn and (indiscernible) and so many others, ERDD and
19 the Chief Counsel's Office, it was an all hands on deck moment.

20 These extreme heat storms that we're having now are
21 unprecedented in scale. They're stressing not just the grid in
22 California but across the West. And, you know, I do want to
23 highlight the point that this is -- these are challenges that
24 require everybody to take action. Our estimate at this point as
25 we got about 3 gigawatts of conservation which is an incredible

1 feat as well as all sorts of load shifting, including the Navy
2 which took 19 ships off of shore power to help support the grid
3 and so many other actions from our microgrids and energy storage
4 projects around the state and that helped support the grid.

5 So going forward we have a lot of work to do. To add
6 additional resilience we're going to be focused like a laser on
7 them. But I do want to just acknowledge the good work that's
8 already happened as we deal with these incredibly challenging heat
9 storms. So that is the world we're in right now even as we work
10 to further reduce emissions.

11 So with that, why don't we move on to the Executive
12 Director's Report, Item 9.

13 MR. BOHAN: Good afternoon, Commissioners. And thank
14 you, Chair.

15 I don't want to be repetitive, but I do want to
16 underscore the thanks that several of you shared with staff. If
17 you would have -- you know, I wouldn't have predicted this level
18 of productivity given all the challenges we've been talking about.
19 But I'm really pleased to say I think we're being very productive
20 and we're also learning. We're learning how to do this stuff with
21 Zoom and other tools better. So I think the upside potential is
22 great.

23 And I just want to flag two individuals. This process
24 has evolved in having these meetings on Zoom work out and it's
25 been a terrific collaboration led by Noemi, our public advisor,

1 but also CCL, specifically Cody. And the two of them have really
2 made things as good as they are and as Vice Chair Scott pointed
3 out, they're getting better.

4 Thank you.

5 CHAIR HOCHSCHILD: I was going to say, one little piece
6 of good news is that my younger daughter Sonia has gotten really
7 into cooking during this. She just brought me some crème brulee
8 which is maybe one of the few good things to happen in 2020.
9 Thank you, Sonia, for that.

10 All right. Let's turn to Item 10, Public Advisor's
11 Report.

12 MS. GALLARDO: Hello there, this is Noemi Gallardo and I
13 can't wait until my kids are old enough to bring me crème brulee
14 during meetings, that would be fabulous.

15 So I'm going to leave my video off because I've been
16 having technical issues today. So apologize for that. And it is
17 unfortunate because I'm wearing my fanciest business suit.

18 I have a quick office update. So we recently hired a
19 second clean energy equity intern. Her name is Karina Camacho and
20 we're really grateful to have her join the team.

21 I'm also excited to announce that on December 10th, the
22 Energy Commission will celebrate its first ever Clean Energy Hall
23 of Fame award that you're seeing on the screen. We will conduct
24 it virtually. And just like with the business meeting, we are
25 planning to make it as engaging and as interactive as possible for

1 the public.

2 The Clean Energy Hall of Fame is an event to recognize
3 our public stakeholders who are helping California achieve a 100
4 percent clean energy feature for all through innovative work that's
5 leading to equitable outcomes. And we'll have six total awards.
6 Four of them are going to be clean energy champions that recognize
7 individuals or organizations. We're going to have one youth game
8 changer award, recognizing a young individual who is a trailblazer
9 and inspiring change among youth. And one lifetime achievement
10 award recognizing someone who has dedicated a significant portion
11 of their career, if not their entire career, to clean energy.

12 I encourage the public to visit the Energy Commission's
13 home webpage to learn more about the awards and also to access the
14 nomination form. Big thanks to the media and communications team
15 for helping us make the nomination form happen and for the
16 beautiful logo that they've created.

17 And for the nominations, we need those submitted by
18 September 30th, that is the deadline. And feel free to reach out
19 to the Public Advisor's Office if you have any questions at
20 publicadvisor@energy.ca.gov.

21 That concludes my report. Thank you Chair, Vice Chair,
22 and Commissioners.

23 CHAIR HOCHSCHILD: Just to add to that. This concept
24 has been actually in the works for several years. It really took
25 Noemi coming on board to bring it fruition. And part of the

1 reason we're doing this is just because so many of the solutions
2 that we require are not just policy, they're technology and
3 they're advocacy, and they're new nonprofit, and new private
4 sector initiatives that can tip the balance towards a healthier,
5 cleaner, more sustainable future, and they deserve to be
6 recognized.

7 So really want to invite everyone to look at this and to
8 submit nominations. If you have a clean energy hall of fame hero
9 that deserves to be recognized, please get those applications in.
10 And for any further questions, please follow directly with our
11 terrific public advisor.

12 Let's move on now to Item 11, public comments. Do we
13 have any general public comments?

14 MS. GALLARDO: Thank you, Chair. This is Noemi
15 Gallardo, the public advisor. We do not have any written comments
16 and we do not have any verbal comment today.

17 CHAIR HOCHSCHILD: Okay. Thank you.

18 Let's move on to Item 12, Chief Counsel's Report.

19 MS. HOUCK: Thank you. We -- I'm going to recommend that
20 we -- my report is going to be for Closed Session today. And I'm
21 going to ask that we take our 15-minute break and then reconvene
22 for Closed Session. And each of you should have that inclination
23 and a separate invite for the call-in. And we will be discussing
24 items set out in Item 12A regarding updates on litigation matters
25 and recommendation regarding Item L and also discussing Item 13

1 for the deliberative process --

2 CHAIR HOCHSCHILD: Okay.

3 MS. HOUCK: -- on the item at 1:30.

4 CHAIR HOCHSCHILD: So is that still sufficient time if
5 we break now, reconvene for Closed Session at 1:00 and then for
6 the general meeting to close out at 1:30? That will still work?

7 MS. HOUCK: I'm not sure how long the Closed Session
8 will take. But the agenda does say that we will not hear Item 13
9 earlier than 1:30.

10 CHAIR HOCHSCHILD: Yeah.

11 MS. HOUCK: So we should be back close to 1:30. It
12 might -- just depending on the discussion. And we can also have
13 another Closed Session, if needed, after hearing the presentations
14 for Item 13.

15 CHAIR HOCHSCHILD: Okay. Thanks everyone. So we'll
16 adjourn for the moment and the Commissioners will reconvene for
17 1:00 for a Closed Session and we will reconvene the general
18 meeting no sooner than 1:30.

19 Thanks, everybody.

20 (Off the record for Closed Session at 12:46 p.m.)

21 (On the record 2:17 p.m.)

22 CHAIR HOCHSCHILD: Welcome back, everybody.

23 We are back from closed session and ready to move on to
24 Item 13, Small Power Plant Exemption for Sequoia Backup Generating
25 Facility.

1 Let me turn it over to Susan Cochran.

2 MS. COCHRAN: Thank you, Chair Hochschild. And good
3 afternoon.

4 As Chair Hochschild said, I'm Susan Cochran, I'm with
5 the Chief Counsel's Office. And I'm the hearing officer assigned
6 to assist the committee appointed to conduct proceedings on the
7 application for a small power plant exemption for Sequoia Backup
8 Generating Facility.

9 The CEC appointed a committee consisting of Commissioner
10 Douglas as presiding member and Commissioner Monahan as associate
11 member to conduct proceedings on the application.

12 On August 14, 2019, the application for an SPPE, small
13 power plant exemption, was filed by C-1 Santa Clara, LLC. I will
14 refer to that entity as Applicant for the remainder of my
15 presentation.

16 The Applicant proposes to build the Sequoia Data Center,
17 a four-story, 703, 450,000-square foot data center building that
18 will house computer servers in a secure and environmentally
19 controlled structure with approximately 70,000 square feet
20 dedicated to administrative and office uses. The data center will
21 be located at 2600 De La Cruz Boulevard in Santa Clara,
22 California. To provide an uninterrupted power supply to the
23 Sequoia Data Center, the Applicant proposes to install a total of
24 54, 2.2 megawatt diesel-fired -- diesel-fired standby generators
25 to serve the information technology load and ancillary power needs

1 for the data center. I will generally refer to these 54 standby
2 generators as the backup generators.

3 Prior to filing the application, existing above-ground
4 buildings at the project site were demolished. Construction of
5 the backup generators and the data center will require removal of
6 piping and other infrastructure associated with a former
7 cogeneration facility that was located at the project site.

8 In addition to construction of the backup generators and
9 the data center, the Applicant will build a substation for Silicon
10 Valley Power, the local utility. The California Energy Commission
11 has exclusive jurisdiction to approve or deny applications for the
12 construction and operation of thermal power plants that will
13 generate 50 megawatts or more of electricity.

14 Section 25541 of the Public Resources Code creates an
15 exemption from that exclusive jurisdiction for power plants
16 generating 100 megawatts or less if the CEC can make three
17 separate findings. Number 1, that the proposed facility will
18 generate no more than 100 megawatts. Number 2, that the proposed
19 facility will not have a significant adverse effect on the
20 environment. And Number 3, that the proposed facility will not
21 have a significant adverse effect on energy resources.

22 In addition, the California Energy Commission acts as
23 the lead agency under CEQA on the SPPE. The CEC staff prepared an
24 Initial Study Proposed Mitigated Negative Declaration, ISPMND, to
25 provide its analysis about the project's ability to meet the

1 requirements of the Warren-Alquist Act and CEQA. The committee
2 issued its proposed decision on August 24, twenty -- 21, 2020
3 which recommends granting the request at exemption. The committee
4 proposed decision considered the whole of the action which for the
5 project is the data center, the backup generators, the substation,
6 and other project features such as landscaping.

7 If the Commission grants the small power plant
8 exemption, the decision does not approve the project, that is the
9 data center, the backup generators, and/or the substation.
10 Instead, once granted, a small power plant exemption requires the
11 project proponent to obtain further permits and licenses from
12 other agencies. In this case, the city of Santa Clara and the Bay
13 Area Air Quality Management District. Those agencies will conduct
14 any other necessary environmental analysis as responsible agencies
15 under CEQA.

16 The first finding under Section 25541 requires that the
17 generating capacity of the backup generators not exceed 100
18 megawatts. The proposed decision found that the generating
19 capacity of a facility that cannot distribute power offsite should
20 be calculated based on the maximum load of the project as well as
21 by permanent design constrictions that limit the amount of power
22 that can be delivered from the generators. In this case, the
23 project's maximum load includes demand of the servers housed in
24 the data center and the cooling and lighting load for the
25 buildings. The project's maximum load was calculated to be

1 approximately 96.5 megawatts which is fixed by the use of
2 electrical equipment and is an upper capacity limit.

3 The Committee has proposed Condition of Exemption PD-1
4 to ensure that in the event the configuration of the data center
5 were to change and that change result in an increase in electrical
6 demand, the Applicant must follow the CEC's regulations for a
7 change in a project design feature or operation or performance and
8 amendment to CEC decisions.

9 The Committee has also proposed Condition of Exemption
10 PD-2 that precludes delivery of any the electricity to be produced
11 by the Sequoia Backup Generating Facility to be used for any other
12 facility, property, or use, including but not limited to delivery
13 to the electric distribution system, also known as the grid,
14 without the express written approval of the CEC.

15 The second factor under Section 25541 is whether the
16 backup generators will have a significant adverse effect on the
17 environment. Section 25519 of the Public Resources Code
18 establishes that the CEC is the lead agency under CEQA. However,
19 small power plant exemptions are not governed by the CEC certified
20 regulatory that we -- program that we use for applications for
21 certification. Therefore, our analysis to the effect on the
22 environment considers factors under both CEQA and the Warren-
23 Alquist Act.

24 The Applicant had included a number of project design
25 features to mitigate or avoid potential environmental effects from

1 the demolition, construction, and operation of the data center
2 and the backup generators. Staff prepared an environmental review
3 document, the ISPMND, that proposed additional mitigation measures
4 for biological resources and paleontological resources. The
5 proposed decision includes the additional mitigation measures.

6 CEQA requires that the CEC adopt a mitigation monitoring
7 or reporting program, MMRP. One is attached to the proposed
8 decision as Exhibit D. CEQA also provides that the CEC may
9 delegate reporting or monitoring responsibility under the MMRP to
10 another public agency that accepts the delegation. The city of
11 Santa Clara has agreed to monitor Applicant's performance of the
12 mitigation measures the Committee has recommended.

13 The Committee considered the ISPMND during the
14 Committee's adjudicatory process and the proposed decision
15 includes it as Appendix A. On the basis of Appendix A and the
16 entire record, and with the implementation and imposition of the
17 mitigation measures, the proposed decision includes findings of
18 fact and conclusions of law regarding the adequacy of our
19 environmental review from both CEQA and the Warren-Alquist Act.
20 The proposed decision specifically finds that the project will not
21 have any adverse effect on the environment.

22 The final finding under Section 25541 requires that the
23 backup generators not present an adverse impact on energy
24 resources. This finding is also made in the CEC's role as the
25 CEQA lead agency. The proposed decision concludes that the

1 proposed project will not have any adverse impacts on energy
2 resources. This finding is also made in the CEC's role as the
3 lead agency.

4 We have had meaningful and substantive participation
5 from the parties, including the Applicant, staff, and Intervenor
6 Robert Sarvey. During the public review and comment period on the
7 ISPMND, the Bay Area Air Quality Management District, the
8 Department of Toxic Substances Control, the city of San Jose
9 Airport Department, and Mr. Sarvey submitted comments on the
10 ISPMND. The Committee held two committee conferences, including
11 one in Santa Clara. Representatives from Bay Area Air Quality
12 Management District and the city of Santa Clara and its electrical
13 utility Silicon Valley Power testified at the evidentiary hearing.
14 The comments received on staff's ISPMND have been addressed in the
15 proposed decision.

16 The Committee filed a proposed decision on August 21,
17 2020. The Committee also submitted a notice of availability to
18 the docket on August 2020 -- 21, 2020, that was docketed on August
19 24, 2020. This notice of availability was sent electronically to
20 the proof of service list and the LISTSERV and was sent via U.S.
21 mail to a list of property owners, occupants of nearby properties,
22 and responsible and trustee agencies. The notice of availability
23 invited comments on the proposed decision and asked that those
24 comments be received by August 31, 2020 at 5:00 p.m.

25 Before the August 31, 2020 deadline, the CEC received

1 comments from Mr. Sarvey who is also an intervenor in this
2 matter. Mr. Sarvey did not propose any edits or changes to the
3 proposed decision. The Committee has therefore not proposed any
4 errata to the proposed decision. Mr. Sarvey made some comments
5 that touch on subjects raised during the evidentiary hearing and
6 that are accordingly addressed in the proposed decision. While I
7 recognize that Mr. Sarvey may disagree with the conclusions
8 reached, the Committee did give thoughtful consideration to all of
9 his comments and arguments raised in the evidentiary hearing and
10 elsewhere when it was preparing the proposed decision.

11 On the other hand, some of the comments that Mr. Sarvey
12 submitted on the proposed decision are concerns being raised for
13 the first time. I believe that Mr. Sarvey, if he is present, can
14 and should speak for himself on those topics. After the
15 completion of those comments, staff, the Applicant, and/or I can
16 be ready to address questions you may have about the comments.

17 A proposed order was prepared and filed in the docket.
18 If the Commission is inclined to adopt that proposed order, please
19 delete the text on page 1 that reads: [And errata, dated
20 September XX, 2020], and the related footnote at the bottom of
21 page 1.

22 I'm available to respond to any questions that may arise
23 and am happy to provide further information if necessary. That
24 concludes my report.

25 CHAIR HOCHSCHILD: Thank you, Susan.

1 Is the Applicant on the line? Would the Applicant like
2 to comment?

3 MS. COCHRAN: The Applicant was represented by Scot
4 Galati. I don't know if Mr. Galati is on the line.

5 MR. GOLDTHRITE: Scott Galati is on the line. We're
6 opening it now.

7 MS. COCHRAN: Thank you.

8 CHAIR HOCHSCHILD: Mr. Galati, can you hear us?

9 MR. GOLDTHRITE: So it seems like we're having a
10 technical issue because we can hear him on the Verizon line, but
11 he's not coming through.

12 CHAIR HOCHSCHILD: Is there another way to connect him?

13 MS. GALLARDO: This is Noemi Gallardo, the public
14 advisor. I can send him a -- he can -- well, actually he can, if
15 he can join by Zoom, we can promote him to a panelist and have him
16 come through that way.

17 CHAIR HOCHSCHILD: Is that Scott there? Scott? No?

18 Okay. Do you have his e-mail address, you can send him
19 the Zoom link?

20 MS. GALLARDO: Yes, we'll connect with him.

21 MR. GALATI: I am on.

22 CHAIR HOCHSCHILD: Oh, there you go.

23 MS. GALLARDO: So there he is.

24 CHAIR HOCHSCHILD: We can hear you. Go ahead, Scott.

25 MR. GALATI: Okay. Are you hearing me through the

1 phone?

2 CHAIR HOCHSCHILD: Yes, we can hear you fine.

3 MR. GALATI: Thank you very much. Thank you.

4 Scott Galati, representing C-1 Santa Clara, LLC, which
5 is owned by the same company that owns CyrusOne. Also on the
6 phone but not here to speak, just wanted to let you know is Jeff
7 Devine from CyrusOne as well as Marcela DeLong who you had heard
8 in evidentiary hearing with the design team. Steve Branoff who is
9 with the Air Quality firm that did the consulting on that. And
10 Brianna Bohonok who is our environmental consultant.

11 We have reviewed the proposed decision, we think that
12 all the issues were fairly discussed for quite some time, they
13 were briefed, and we support the proposed decision in its entirety
14 and ask that you approve it.

15 Thank you.

16 CHAIR HOCHSCHILD: Thank you. Is the Applicant on the
17 line? Sorry. Is the staff on the line and would the staff like
18 to provide any response to that?

19 MR. GOLDTHRITE: So we opened Lisa DeCarlo, Lon Payne,
20 and Matthew Layton's line.

21 CHAIR HOCHSCHILD: Staff, can you hear us? Lisa or
22 Matthew?

23 MR. LAYTON: This is Matt Layton, I can hear you. But
24 Lisa and Lon were going to talk.

25 CHAIR HOCHSCHILD: Okay. Lisa, can you --

1 MS. DECARLO: This is Lisa DeCarlo, I can hear.

2 CHAIR HOCHSCHILD: Okay. Yeah, go ahead, Lisa.

3 MS. DECARLO: Okay. Great. Lon was going to give our
4 opening response but I'll try and make it here.

5 Yeah, staff has read and agrees with the proposed
6 decision in Hearing Officer Cochran's summary of that decision.
7 And most of -- and agrees most of Mr. Sarvey's comments related to
8 issues already presented before the Committee and addressed in the
9 decision. And we're available to address any questions or
10 comments that the dais may have for us.

11 CHAIR HOCHSCHILD: Thank you.

12 Unless there's questions from the commissioners or
13 staff, should we see if there are any other intervenors on the
14 line wishing to comment at this time?

15 MR. GOLDTHRITE: We have Robert Sarvey on the line.

16 CHAIR HOCHSCHILD: Go ahead, Mr. Sarvey.

17 MR. SARVEY: Thank you. With approval of this fifth
18 data center, the CEC will have allowed the use of diesel
19 generators in all five of the Santa Clara Data Center decisions
20 despite the Bay Area Air Quality Management District pleading with
21 you to use a different technology. The five data centers approved
22 by the Commission will operate 232 diesel backup generators
23 totaling 611.5 megawatts, and admitted to Environmental Justice
24 Committee, all these projects are within a few thousand feet of
25 each other.

1 The Air Resources Board has also now advised you to not
2 allow the backup use of generators at these data centers. The two
3 expert responsible air quality agencies are telling you to now not
4 use -- or they're telling you now to use a different technology.

5 With approval of the proposed decision, the Commission
6 will approve five data centers totaling 453.6 megawatts of
7 potential peak demand which is 86 percent SPPE current peak
8 demand. Currently, as you know, the state is struggling to meet
9 its electrical needs. Has even to resorted to rolling backup and
10 running data center diesel backup generators to meet electricity
11 demands.

12 Under current conditions, as we saw recently, the 453
13 megawatts of rode or even the 99 megawatts required to power the
14 Sequoia Data Center represents a significant impact to energy
15 resources in current conditions.

16 The five data centers have the potential to emit
17 693,000, 519 metric tons of GHG emissions per year which is 2
18 percent of the entire energy sectors GHG emission target for 2030.
19 The proposed decision never even mentions the cumulative impact of
20 your approval of five mega data centers. In fact, it is
21 consistently commented at all of these proceedings that you
22 require the Applicants to use Silicon Valley Power green energy
23 program following back in (indiscernible) to prevent a significant
24 impact on the state's GHG reduction plan.

25 The PD -- the other PDs for data centers again failed to

1 require an assessment of emergency operations despite it being
2 the purpose of the project. The PD rationalized it does not
3 evaluate emergency operations because in the ISMND (sic), staff
4 pointed out that emergency operations are highly unlikely
5 testifying that the risk of an outage at any data center within
6 SPPE service territory has historically been 1.6 percent per year.
7 That conclusion is laughable now that you guys use Santa Clara
8 Data Center emergency diesel generators as the demand responsible
9 to recently prevent rolling blackouts.

10 The decision dismisses the emergency operation with
11 diesel generators due to PSDS event that should state as the
12 utilities and regulators try to balance and cost and benefits of
13 PSDS by fine tuning and targeting implementation. The most likely
14 outcome is that future PSDS will have even less potential effects
15 on SPPE service territory. Their speculation.

16 Fires are raging across California right now. Two of
17 the most significant wildfires in California history running
18 across the state right now and red -- red flag warnings are in
19 effect. An unprecedented September PSDS shutoff is now underway
20 as we speak. PSD events are not going to diminish and they're
21 fixed on Silicon Valley Power are likely to increase.

22 Do the right thing. Do not allow diesel use to back up
23 these data centers and require the Applicant to enroll Silicon
24 Valley Clean Power Program to prevent a significant impact on GHG
25 resources. Thank you.

1 CHAIR HOCHSCHILD: Thank you. Are there any other
2 intervenors on the line wishing to comment?

3 MR. GOLDTHRITE: I don't believe we have any intervenors
4 on the line. We have three public comments.

5 CHAIR HOCHSCHILD: Yep. Before we get to that, Susan,
6 do you have any response to any of the previous comments?

7 MS. COCHRAN: Yes, Chair Hochschild, thank you.

8 I just want to point out that as it relates to
9 alternatives to the project, CEQA states that a lead agency be
10 that consider alternative technologies or other alternatives to a
11 project once it has determined that there are no significant
12 effects. And that discussion is already within the committee
13 proposed decision and I believe addresses many of Mr. Sarvey's
14 concerns.

15 I think that we should wait for any further discussion
16 pending the receipt of the public comment.

17 CHAIR HOCHSCHILD: Thank you.

18 At this time, let's turn now to public comment.

19 Madam Public Advisor, do we have any public comments?

20 MS. GALLARDO: Thank you, Chair. This is Noemi
21 Gallardo, public advisor.

22 We do not have any written comment. We do have people
23 on the phone line. First of all, we will start off with
24 representatives from the California Air Resources Board, also
25 known as CARB or the ARB. First to speak will be Thomas Andrews.

1 And then second will be Craig Segall. And as a heads up, we also
2 have someone from the Bay Area Air Quality Management District,
3 Henry Milken -- Henry Hilken, excuse me, he can go third.

4 And a reminder to all speakers to please spell out your
5 names and state your affiliation before speaking. Thank you so
6 much.

7 Thomas Andrews should come first.

8 MR. ANDREWS: I think there's been a misunderstanding.
9 This is Thomas Andrews, I'm not giving a public comment, I guess.

10 MS. GALLARDO: Okay. No problem, Thomas. Thank you for
11 clarifying that.

12 Craig, are you available? Please make sure to unmute.

13 MR. SEGALL: I am. Can you hear me?

14 CHAIR HOCHSCHILD: Yes.

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

16 MR. SEGALL: Great. Well, good afternoon,
17 Commissioners.

18 My name is Craig Segall; that's C-R-A-I-G,
19 S-E-G-A-L-L, and I'm assistant chief counsel at the California Air
20 Resources Board. Thanks for having me today.

21 CARB and staff have been working with CEC staff on how
22 to improve the CEQA and Clean Air Analysis for present and future
23 data center projects. Those projects become much more common as
24 you've heard today. Unfortunately, we're not quite finished with
25 that yet which brings me here today.

1 Recent events underscore the need for analyses to
2 ensure that backup generators are as clean as possible. The
3 backup power system are being called upon more frequently due to
4 public safety power shutoffs and for load managements to avoid
5 blackouts. The CEC is reviewing multiple requests to grant small
6 power plant exemptions data centers largely in the Bay Area.

7 Collectively, hundreds of megawatt generations under
8 review with associated cumulative air pollution effects. Much of
9 the generation would use diesel engines, many projects have chosen
10 to use relatively old so-called tier 2 generators that have less
11 polluting tier 4 generators, batteries, or fuel cells, all of
12 which are alternatives we believe are worth considering here.

13 CARB has technical concerns related to the analysis of
14 these data centers, including Sequoia as to potential avoidable
15 adverse environmental effects they may cause. We believe if
16 CARB's technical concerns were addressed, the CEC analysis would
17 require stronger public health protections such as improved
18 pollution control technologies.

19 Before data centers are approved by this Commission,
20 including Sequoia, CARB urges the CEC staff work with CARB,
21 interested air districts, and other stakeholders to fully explore
22 this issue. We believe we can do so expeditiously as a team and
23 CARB can also provide analyses in the records for this proceeding
24 this fall. CARB's staff believes better options are available
25 that provide cleaner or zero emission backup power improve for its

1 stability and superior public health protection.

2 Thank you.

3 CHAIR HOCHSCHILD: Thank you.

4 MS. GALLARDO: This is Noemi Gallardo, public advisor.

5 Is Henry Hilken on the line?

6 MR. HILKEN: Yes, I'm here. Can you hear me?

7 CHAIR HOCHSCHILD: Yes.

8 MS. GALLARDO: Yes, Henry, we can.

9 MR. HILKEN: Great. My name's Henry Hilken;
10 H-E-N-R-Y, H-I-L-K-E-N. And I'm the planning director at the Bay
11 Area Air Quality Management District.

12 Good afternoon, Commissioners. Thanks.

13 So we're joining you today to express our concerns about
14 the continued dramatic growth in diesel combustion for backup
15 power at data centers. We're -- we've been tracking this pretty
16 closely. There are many projects here in the Bay Area, we're
17 aware of at least 15 projects that total over 1500 megawatts. Not
18 all of these are subject to CEC authority, of course. But
19 collectively, that's -- that's a lot of projects. 1½ gigawatts of
20 power diesel, fossil diesel powered generation proposed here in
21 the Bay Area. So cumulatively, this is a very significant
22 increase in diesel combustion in our region.

23 And so we really have -- we have air quality and health
24 concerns and we have climate concerns. This Sequoia project that
25 you're considering today and many of the other recent projects are

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1 in impacted communities down at Santa Clara County under our
2 community health protection program. And our goals there are in
3 these impacted communities to drive down emissions as quickly as
4 we can. And so any increase in toxic diesel emissions in these
5 communities is very concerning.

6 And certainly with respect to climate, I think we just
7 have to look out the window today, we've seen ample evidence of
8 climate forced wildfires that are plaguing us. You know, for the
9 fourth year running now, we've seen historic air pollution from
10 climate prompted wildfires in Northern California. So clearly, we
11 have a climate crisis that we're grappling with today.

12 So in light of these trends, we really need to reverse
13 our reliance on fossil diesel. And I know this is something that
14 the Commission is aware of. Even today you've had some very
15 interesting agenda topics on your SB-100 report and that EV
16 dashboard and those reach codes and jurisdictions that you
17 considered this morning. But we really urge you to redouble these
18 efforts. Have these severe quality and climate challenges, this
19 is not the time to building such a massive increase in diesel fuel
20 power generation when there are promising alternatives available.
21 Renewables and energy storage fuel cells, even tier 4 as was
22 mentioned previously.

23 So we really urge the CEC to redouble its efforts,
24 continue to lead this transition to cleaner sustainable energy and
25 certainly the Air District would very much like to work with you

1 on this and work with CARB as the previous speaker indicated. I
2 think that would be a good partnership and we'd really like to
3 work with you on reversing this transit diesel combustion.

4 Thanks.

5 CHAIR HOCHSCHILD: Thank you. Any further public
6 comment, Madam Public Advisor?

7 MS. GALLARDO: No further comment, Chair.

8 CHAIR HOCHSCHILD: Okay. Unless there's any objections
9 from my colleagues, we'll now adjourn for Closed Session again.
10 And we'll come back when we're done with that.

11 (Off the record for Closed Session at 2:44 p.m.)

12 (On the record for Open Session at 3:23 p.m.)

13 CHAIR HOCHSCHILD: At this point I see Commissioner
14 McAllister, Commissioner Douglas, Monahan, and Vice Chair Scott.
15 So we'll go ahead and restart the meeting.

16 Let me kick it over to Commissioner Douglas.

17 COMMISSIONER DOUGLAS: Let me unmute.

18 Thank you so much, Chair Hochschild. I have a question
19 for Mr. Segall, believe you're still on.

20 You mentioned the possibility of bringing some new
21 analysis or additional information that you think the Commission
22 should consider sometime this fall.

23 Could you elaborate on that? What do you think you
24 could provide this fall and generally by when?

25 MR. SEGALL: Thanks for asking, Commissioner Douglas.

1 So we have taken a fairly close look at the docket post
2 for this proceeding. And again, you're coming to this late,
3 things have ramped up rapidly, they're all managing all sorts of
4 (indiscernible) I'm sure.

5 But we've taken a close look at technology availability
6 both as to diesel generation and the starter actions inclusion for
7 (indiscernible) available. But also looked at some question in
8 this docket including how emergency operations are modeled or not
9 from the cumulative air and (indiscernible) analyses from the
10 modeling choices.

11 We have fairly extensive staff experience that we can
12 contribute in this area looking at what fact may mean, what air
13 quality (indiscernible) are relevant and what alternatives are
14 within your discretion to impose. I am comfortable saying that
15 CARB could file fairly detailed analyses to that effect within a
16 month or two if needed on this question.

17 We obviously also suggested some broader collaboration
18 amongst the air and energy agencies which we do think would be
19 appropriate. That particular proceeding, even if those
20 conversations are ongoing, we certainly could highlight some areas
21 that in our experience as an air (indiscernible) see more the
22 (indiscernible) Commission consideration.

23 COMMISSIONER DOUGLAS: Okay. Thank you, that's helpful.

24 Similar question for Bay Area. Is there a specific
25 analytical approach or specific set of information that you think

1 based on the recent energy emergency, the Commission could
2 consider, you know, specifically that you think you could bring to
3 the proceeding?

4 MR. GOLDTHRITE: Henry Hilken is no longer on the line.

5 COMMISSIONER DOUGLAS: Got it. Okay.

6 So I'm just kind of glancing at my colleagues to see if
7 anyone else wants to speak. Okay. I see head shaking.

8 So Mr. Segall and parties, after deliberation, you know,
9 we do recognize that the current energy emergency and the previous
10 energy emergency are events that we didn't have in our record
11 because they happened subsequent to the decision being published.

12 And based on the recent energy emergency, I'm prepared
13 to move that the Commission remand the proceeding back to the
14 Committee to consider additional relevant information on air
15 quality and public health impact with the scope and filing of
16 these additional proceedings to be as set forth in future
17 Committee orders. So that's my motion for how to proceed on that.

18 CHAIR HOCHSCHILD: Thank you, Commissioner Douglas.

19 Is there a second, Commissioner Monahan?

20 COMMISSIONER MONAHAN: Yes, I second that recommendation
21 from Mr. Douglas -- or motion.

22 CHAIR HOCHSCHILD: Okay. All right. With that, let's
23 take a vote.

24 All in favor say aye. Commissioner Douglas.

25 COMMISSIONER DOUGLAS: Aye.

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CHAIR HOCHSCHILD: Commissioner Monahan.

COMMISSIONER MONAHAN: Aye.

CHAIR HOCHSCHILD: Commissioner McAlister.

COMMISSIONER MCALLISTER: Aye.

CHAIR HOCHSCHILD: Vice Chair Scott.

VICE CHAIR SCOTT: Aye.

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

With that, we are adjourned. Thank you, everybody.

(The Business Meeting adjourned at 3:28 p.m.)

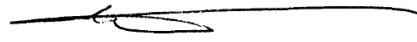
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IN WITNESS WHEREOF, I have hereunto set my hand this 18th day of September, 2020.



PETER PETTY
CER**D-493
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IN WITNESS WHEREOF, I have hereunto set my hand this 18th day of September, 2020.



Jill Jacoby
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