DOCKETED							
Docket Number:	21-BUSMTG-01						
Project Title:	Business Meeting Agendas, Transcripts, Minutes, and Public Comments						
TN #:	240065						
Document Title:	Transcript 9-30-21 for Business Meeting						
Description:	N/A						
Filer:	Liza Lopez						
Organization:	California Energy Commission						
Submitter Role:	Commission Staff						
Submission Date:	10/14/2021 10:17:45 AM						
Docketed Date:	10/14/2021						

BUSINESS MEETING

BEFORE THE

CALIFORNIA ENERGY COMMISSION

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

REMOTE ACCESS ONLY

As of June 9, 2021, public comment will be accepted solely through the Zoom platform.

The California Energy Commission's (CEC) September 30, 2021 Business Meeting will be held remotely, consistent with Executive Order N-08-21 to continue to help California respond to, recover from, and mitigate the impacts of the COVID-19 pandemic. The public may participate consistent with the direction in the Executive Order.

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

THURSDAY, SEPTEMBER 30, 2021

10:00 A.M.

Reported by: Troy Ray

APPEARANCES

Commissioners (Via Remote)

David Hochschild, Chair Siva Gunda, Vice Chair Karen Douglas Andrew McAllister Patricia Monahan

Staff Present: (Via Remote)

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

	Agenda	Item
Danuta Drozdowicz	2	
Danny Tam	2	
Elliot Mainzer, California ISO	3	
Liz Gill	4	

<u>Public Comment</u> (Via Remote)	Agenda	Item
Igor Tregub, Self	2	
Kiki Velez, Natural Resources Defense Counci.	1 2	
Braxton Bridgers, Association for Energy	2	
Affordability, AEA		
Lauren Cullum, Sierra Club California	2	
Kevin Ma, Silicon Valley Youth Climate Action	n 2	

I N D E X

		Page
Proc	eedings	5
Item	ns	
1.	Consent Calendar	8
	a. United States Department of Defense (DOD) Office of Local Defense Community Cooperation (OLDCC).	
2.	Adoption of the 2022 California Green Building Standards Code Voluntary Residential Energy Efficiency Measures and Other Energy References	9
3.	California Independent System Operator (ISO)	35
4.	Adoption of Mid-Term Reliability Analysis Report	45
5.	Lead Commissioner or Presiding Member Reports	61
6.	Executive Director's Report	33
7.	Public Advisor's Report	84
8.	Public Comment	17
9.	Chief Counsel's Report	
	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:	

		1	Page
9.	Chie	f Counsel's Report (Cont.)	
	i.	In the Matter of U.S. Department of Energy (High Level Waste Repository) (Atomic Safety Licensing Board, CAB-04, 63-001-HLW); State of California v. United States Department of Energy (9th Cir. Docket No. 09-71014)	
	ii.	State Energy Resources Conservation and Development Commission v. HyGen Industries, Inc. (Sacramento County Superior Court, Case No. 34-2019-00252543-CU-BC-GDS)	
	iii.	Interlink Products International, Inc. v. Xavier Becerra, Drew Bohan, Melissa Rae King (United States District Court for the Eastern District of California, Case No. 2:20-cv-02283)	
	b.	Pursuant to Government Code, section 11126, subdivisions (a) and (e), the CEC may also discuss any judicial or administrative proceeding that was formally initiated after this agenda was published or determine whether facts and circumstances exist that warrant the initiation of litigation, or constitute a significant exposure to litigation against the CEC, which might include personnel matters.	;
Adjo	ırnmer	nt	86
Repo	rter's	s Certificate	87

88

Transcriber's Certificate

2 SEPTEMBER 30, 2021

- 10:00 a.m.
- 3 MS. MURIMI: The California Energy Commission's
- 4 Business Meeting will begin shortly. Thank you for your
- 5 patience.
- 6 (Start of Introductory Video.)
- 7 Today's Business Meeting is being held remotely.
- 8 Please note the public comment will now be conducted via
- 9 Zoom. When the public comment period is announced press
- 10 the raise-hand feature to indicate you would like to make a
- 11 comment.
- 12 If you are participating by phone to indicate
- 13 you'd like to make a comment please raise your hand by
- 14 pressing *9 and then press *6 to unmute. Again, that is *9
- 15 to raise your hand and *6 to unmute.
- 16 For public comment please note that comments are
- 17 limited to three minutes or less per person and one
- 18 representative per organization. Depending on the number
- 19 of commenters we may adjust the time for public comment to
- 20 be fair to everyone who'd like to speak.
- 21 After you raise your hand the Public Advisor will
- 22 announce you using the listed Zoom name or with the last
- 23 three digits of the phone number used to call in to the
- 24 meeting. The Public Advisor will then open your line.
- 25 Before making your comment state and spell your name and

- 1 indicate your affiliation, if any.
- 2 Finally, to help ensure you're heard clearly
- 3 speak closely and clearly into the device, do not use the
- 4 speakerphone feature.
- 5 Welcome to the California Energy Commission
- 6 Business Meeting. The meeting will now begin.
- 7 (End of Introductory Video.)
- 8 VICE CHAIR GUNDA: Good morning, everyone. Thank
- 9 you for joining the Energy Commission's September 30th
- $10\,$ Business Meeting. I'm Vice Chair Siva Gunda. Chair
- 11 Hochschild will not be able to join us today and I'll be
- 12 presiding over the business meeting.
- 13 Commissioner Douglas, would you please lead us in
- 14 the Pledge of Allegiance?
- 15 (Whereupon the Pledge of Allegiance was recited.)
- VICE CHAIR GUNDA: Thank you, Commissioner
- 17 Douglas.
- 18 Before turning to our business items today I want
- 19 to acknowledge that we're still in the middle of a COVID
- 20 surge due to Delta and other variants, and want to keep
- 21 California healthy and all of us need to do our part.
- 22 Please take precautions, please consider getting vaccinated
- 23 and wear masks.
- Now for doing instructions, today's business
- 25 meeting is being held remotely consistent with Assembly

- 1 Bill 361 to improve and enhance public access to state
- 2 meetings during the COVID-19 pandemic and future
- 3 emergencies by following broader access to teleconferencing
- 4 options. The public can participate in the business
- 5 meeting consistent with the instructions for remote
- 6 participation found in the notice for this meeting and as
- 7 set forth on the agenda posted to the Commission's website.
- 8 Please note that Zoom's closed captioning feature
- 9 has been enabled to make our business meetings more
- 10 accessible. Anyone using an electronic device can enable
- 11 this feature by clicking on the "live transcript" icon and
- 12 then selecting either "show subtitle" or "view full
- 13 transcript." You can stop closed captioning by exiting out
- 14 at the live transcript or selecting "hide subtitles." The
- 15 closed captioning service is helpful, but not precise. The
- 16 Commission will continue to post a transcript of this
- 17 business meeting rendered by a court reporter in the docket
- 18 system and posted on the business meeting webpage.
- 19 Please note that if Zoom were to shut down we
- 20 would switch to the Verizon phone line at 888-823-5065, the
- 21 pass code is "Business Meeting." Public comments would
- 22 then be accepted through Verizon.
- 23 Pursuant to California Code of Regulations Title
- 24 20, section 1104(e) any person may make oral comments on
- 25 any agenda item. To ensure the orderly conduct of

- 1 business, public comments will be limited to three minutes
- 2 or less per person for each agenda item voted on today.
- 3 Any person wishing to comment on informational
- 4 items or reports, which are non-voting items shall reserve
- 5 their comment for the general public comment portion of the
- 6 meeting agenda and shall have a total of three minutes or
- 7 less to state all remaining comments.
- 8 We are now solely using Zoom for public comment.
- 9 Once the public comment period begins if you would like to
- 10 speak please raise your hand by clicking the hand icon at
- 11 the bottom of your screen. If you're joining by phone
- 12 press *9 to raise your hand and *6 to unmute. After the
- 13 Public Advisor calls on you to speak remember to spell your
- 14 name and state your affiliation, if any.
- 15 So now we'll turn to Item 1, the Consent
- 16 Calendar. Items will be taken up and voted on as a group.
- 17 Madam Public Advisor, is there any public comment
- 18 for Item 1a?
- 19 MS. GALLARDO: This is Noemi, the Public Advisor.
- 20 A reminder to the attendees, if you would like to make a
- 21 comment please use the raise-hand feature. If you are on
- 22 by phone press *9 to raise your hand, *6 to unmute.
- Vice Chair Gunda, I do not see any hands raised.
- 24 We may proceed.
- VICE CHAIR GUNDA: Thank you, Madam Public

- 1 Advisor.
- Is there any Commissioner discussion? Seeing
- 3 none would you like to make a motion, Commissioner Monahan?
- 4 COMMISSIONER MONAHAN: I move to approve this
- 5 item.
- 6 VICE CHAIR GUNDA: Commissioner McAllister, would
- 7 you second?
- 8 COMMISSIONER MCALLISTER: Second Item 1.
- 9 VICE CHAIR GUNDA: Okay, we will now take the
- 10 vote. Commissioner Monahan?
- 11 COMMISSIONER MONAHAN: Aye.
- 12 VICE CHAIR GUNDA: Commissioner McAllister?
- 13 COMMISSIONER MCALLISTER: Aye.
- 14 VICE CHAIR GUNDA: Commissioner Douglas?
- 15 COMMISSIONER DOUGLAS: Aye.
- 16 VICE CHAIR GUNDA: Thank you. My vote is in
- 17 favor as well. The vote count is 4-0 and the motion
- 18 passes.
- 19 We'll now move to Item 2, Adoption of the 2022
- 20 California Green Building Standards Code Voluntary
- 21 Residential Energy Efficiency Measures and Other Energy
- 22 References. With that I'll pass on to and welcome Danuta
- 23 and Danny Tam to present.
- MS. DROZDOWICZ: Thank you, Commissioner. Good
- 25 morning, Commissioners. My name is Danuta Drozdowicz and I

- 1 work in the Building Standards Office of the Energy
- 2 Commission's Efficiency Division. I'm here with my
- 3 colleague Danny Tam to present an overview of the changes
- 4 that are proposed for the energy section of CALGreen, Part
- 5 11, as well as non-substantive pointers in Parts 2, 2.5, 3,
- 6 4, and 5 for Title 24 of the California Building Code in
- 7 the upcoming 2022 code cycle. Next slide please.
- 8 CALGreen was developed in 2007, one of several
- 9 agencies -- designed several strategies -- designed to meet
- 10 the goals of Assembly Bill 32 with global warming solutions
- 11 back to 2006 that required California reduce greenhouse gas
- 12 emissions to 1990 levels by 2020, a reduction of
- 13 approximately 15 percent below the business-as-usual
- 14 scenario. This was the first code in the U.S. to take such
- 15 a comprehensive, long-term approach to addressing climate
- 16 change as it applied to buildings. While the required
- 17 targets have been met, CALGreen continues in order to
- 18 ensure further future reductions.
- 19 CALGreen is the first-in-the-nation mandatory
- 20 green building code. It contains a full spectrum of green
- 21 building standards that either exceed or are in addition to
- 22 code, including requirements for planning and design, site
- 23 design, water conservation, sustainable building materials,
- 24 environmental and indoor air quality, commissioning and, of
- 25 course, energy efficiency.

1	In addition to the mandatory requirements
2	CALGreen includes voluntary appendices that local
3	jurisdictions may choose to adopt.
4	Several state agencies are responsible for
5	specific portions of CALGreen. Housing and Community
6	Development is responsible for residential buildings, the
7	Division of the State Architect for schools, the Office of
8	Statewide Health Planning and Development for hospitals and
9	institutions, the California Energy Commission for energy.
10	And the California Building Standards Commission is
11	responsible for non-residential buildings/any areas not
12	addressed by the other agencies and for the overall
13	coordination and adoption of CALGreen revisions and updates
14	during each three-year code cycle. Next slide please.
15	Mandatory for all jurisdictions are CALGreen
16	Chapter 4.2, "Residential Mandatory Measures," and Chapter
17	5.2, "Nonresidential Mandatory Measures," that require
18	buildings to meet Part 6 of the California Energy Code.
19	Jurisdictions may also adopt all or part of the
20	CALGreen voluntary measures contained in Appendices (A4)
21	Residential Measures and (A5) Nonresidential. The

the current energy code, and are required for projects that $$\operatorname{11}$$

current energy code and they're organized as prerequisite

options, a menu of efficiency measures that exceed those in

voluntary appendices contain measures that exceed the

22

23

24

25

- 1 want to achieve the targeted energy design rating. And the
- 2 energy design rating targets require an energy model
- 3 demonstrating that the design meets an efficiency target
- 4 exceeding current energy code for the jurisdiction's
- 5 climate zone.
- 6 If voluntary measures are adopted both
- 7 prerequisites options and EDR targets must be met. Next
- 8 slide, please.
- 9 Local jurisdictions are not obligated to use this
- 10 model language, but jurisdictions developing local
- 11 ordinances, also known as reach codes, to meet their
- 12 climate action plan reduction goals often adopt CALGreen or
- 13 use some of CALGreen's voluntary provisions as a template
- 14 for their ordinance.
- 15 Further, for the wider design and construction
- 16 industry voluntary provisions in CALGreen traditionally lay
- 17 the groundwork for the energy provisions to be expected in
- 18 the next energy code cycle.
- 19 And most important CALGreen has and will continue
- 20 to demonstrate an exemplary record, both in saving energy
- 21 and reducing greenhouse gas emissions. If the voluntary
- 22 measures proposed today are implemented by local
- 23 jurisdictions, they will contribute to this trend. Next
- 24 slide please.
- 25 The updates that we propose for this code cycle

- 1 are exclusive to the Residential Voluntary Appendix (A4)
- 2 and applicable only to single-family homes.
- 3 They expand the menu of prerequisite options from
- 4 the current four to eight. And require that two options be
- 5 met as opposed to one option in the 2019 code. They
- 6 simplify the EDR targets by providing a single tier rather
- 7 than the two years that are currently in the 2019 code.
- 8 In addition to these changes we propose
- 9 clarifying code language to Title 24, Parts 2, 2.5, 3, 4,
- 10 and 5 with the building code and to Appendix (A5)
- 11 Nonresidential of CALGreen. Next slide.
- 12 To develop these updates CEC staff worked with
- 13 our stakeholders, including extensively with the CASE team,
- 14 the statewide codes and standards program. The CASE team
- 15 provided a comprehensive report titled, "Voluntary Energy
- 16 Efficiency Requirements," to Title 24, Part 11 CALGreen,
- 17 which can be found docketed on the CEC website, Docket No.
- 18 21-BTSD-03.
- 19 Based on all this input staff propose that we
- 20 adopt additional residential prerequisite options and
- 21 revise EDR targets.
- Lead Commissioner public hearings were held on
- 23 both July 27 and August 6th of this year to provide
- 24 stakeholders and the general public an opportunity to
- 25 review and comment on staff proposals. 45-day and 15-day

- 1 public comment periods provided additional opportunities
- 2 with public and stakeholder input.
- 3 And now to the specific proposed updates. Next
- 4 slide.
- 5 The existing options in Part 11, prerequisite
- 6 options in Part 11 are roof deck insulation or ducts in
- 7 conditioned space, high-performance walls, compact hot
- 8 water distribution system, and drain water heat recovery.
- 9 Proposed new options are high performance
- 10 vertical fenestration, heat pump water heater demand
- 11 management, battery storage system controls, and heat pump
- 12 space and water heating.
- I am now pleased to introduce Danny Tam, who will
- 14 present the changes proposed to the Energy Design Ratings
- 15 and the Nonsubstantive Pointers. Next slide.
- MR. TAM: Thank you, Danuta. Good morning, Vice
- 17 Chair and Commissioners, Danny Tam CEC staff. I will be
- 18 presenting the changes to Energy Design Rating, or EDR, for
- 19 single-family buildings. The EDR targets in Part 11 are
- 20 voluntary reach performance targets that go beyond the
- 21 minimum requirements in Part 6.
- There are some major updates to Part 6 in 2022,
- 23 of which the most significant change is that the
- 24 installation of either heat pump space heating or heat pump
- 25 water heating is now the prescriptive requirement. that's

- 1 why it was necessary to update the EDR targets to reflect
- 2 these changes.
- 3 We're also proposing to have a single EDR tier
- 4 instead of two for simplification and to make it easier for
- 5 jurisdiction to adopt Tier 2.
- 6 Another change is that the proposed margins are
- 7 based on hourly source energy. Hourly source energy is the
- 8 new metric we're introducing in 2022 for Part 6. Since our
- 9 goal for this cycle is to promote high efficiency heat pump
- 10 technologies we believe our resource energy is a better
- 11 metric for Part 11. Next slide.
- If a jurisdiction adopts the EDR target there are
- 13 a few ways to meet these targets. The most straightforward
- 14 approach is to install both heat pump space heater and heat
- 15 pump water heater. This contrasts with the 2022 Part 6
- 16 prescriptive requirement where only at one heat pump is
- 17 required.
- Now you can also install a battery storage system
- 19 or triple pane windows in colder climate zones such as
- 20 Climate Zone 1 and 16.
- 21 And just to be clear these examples are not the
- 22 only way to meet these targets. Since the EDR targets are
- 23 performance targets you can meet them with other measures,
- 24 such as earlier insulation. We did not receive any
- 25 comments on the proposed EDR targets and staff recommends

- 1 moving forward with these proposed targets. Next slide.
- 2 In terms of impact, the Part 11 EDR targets that
- 3 we proposed today would reduce an estimate average of 0.2
- 4 metric ton per year per single-family building above and
- 5 beyond the Part 6 standards. If implemented statewide this
- 6 would be equivalent to removing additional 2600 cars off
- 7 the road for the first year.
- 8 When you look at the total CO2 impact of the 2022
- 9 Part 6 and Part 11 standards together for single-family
- 10 buildings it would be equivalent to removing 8,000 cars for
- 11 the first year and 24,000 cars on the third year. Next
- 12 slide.
- 13 Finally we added some non-substantive pointers in
- 14 Part 2 to 5. This is done as an informative note to
- 15 systems and new equipment that are also subject to Part 6.
- 16 Next slide.
- 17 Staff recommends the adoption of Title 24, Part
- 18 11 Residential Appendix (A4) and (A5) of the 2022
- 19 California Green Building Standards Code and a
- 20 nonsubstantive modification to Title 24, Parts 2, 2.5, 3,
- 21 4, and 5. Staff determined that this action is exempt from
- 22 CEQA. Next slide.
- 23 We would like to acknowledge and thank the
- 24 following staff members who contributed so much to this
- 25 process. This concludes our presentation and staff are

- 1 available to answer any questions you may have.
- VICE CHAIR GUNDA: Thank you, Danuta and Danny,
- 3 for the presentations. I would like to ask Madam Public
- 4 Advisor to see if there is any public comment.
- 5 MS. GALLARDO: This is Noemi, the Public Advisor.
- 6 A reminder to attendees that if you would like to make
- 7 public comment please use the raise hand feature on the
- 8 screen. If you are on by phone press *9 to raise your hand
- 9 and *6 to unmute.
- I do see several hands raised, so we will begin
- 11 with Igor Tregub. This is a reminder for you and for
- 12 others who are raising their hand to please state your
- 13 name, spell your name, indicate your affiliation if any,
- 14 and then you may begin. Igor, I am opening your line. I
- 15 apologize ahead of time if I mispronounced your name, you
- 16 may begin.
- MR. TREGUB: Yeah, well you got it, great. Hi
- 18 I'm Igor Tregub. Thank you so much for members of this
- 19 body and to the CEC for your work. I am speaking today in
- 20 my capacity as Chair of the California Democratic Party
- 21 Environmental Caucus, but speaking as an individual. I
- 22 support the major improvements to the heat pump baseline,
- 23 energy efficiency in non-residential and higher indoor air
- 24 ventilation standards that we saw in 2022, Title 24, Part
- 25 6.

- 1 When it comes to CALGreen I support the approach
- 2 proposed by staff, because it will help to lower our
- 3 state's GHG emissions and protect the health of communities
- 4 by stopping the building-out of the dangerous and dirty gas
- 5 system.
- 6 Part 11 has an important role to play to help
- 7 local governments adopt local reach codes. I live in
- 8 Berkeley, we were very proud to be the first city to do a
- 9 complete gas ban. And we're so pleased that 49 other
- 10 jurisdictions across the state, local governments, have
- 11 joined us mostly through reach codes in the 2019 code
- 12 cycle. And we appreciate that they have gone beyond the
- 13 Commission's current proposal. We expect that they will
- 14 again when those reach codes are updated next year.
- 15 That being said, Part 11 is still important to
- 16 provide other local governments a simple, consistent,
- 17 readily implementable and standard way to join the fray and
- 18 adopt their first reach code. It's also a way to start the
- 19 conversation for the 2025 code update. And this
- 20 performance-based approach to decarb has merits.
- 21 So in summary I support the CEC's proposal. It
- 22 may be limited in scope, but I think it goes in the right
- 23 direction and can help local governments accelerate their
- 24 own transition of fossil fuels. Thank you for your time.
- MS. GALLARDO: Thank you.

1	1	Morr		72 - 1	770] 0 7	And Kiki	770] 0 7	_	~~~ ' ~ d ~ ~
		Next.	1.8	ואוא	V Θ I Θ Z I	Ana Kiki	velez.	а	reminder

- 2 to please spell your name, indicate your affiliation if
- 3 any. Your line is open and you may begin.
- 4 MS. VELEZ: Great. Hi, my name is Kiki Velez.
- 5 And that's K-i-k-i V-e-l-e-z. And I'm speaking today on
- 6 behalf of the Natural Resources Defense Council. First
- 7 off, I want to thank the Vice Chair, the Commissioners and
- 8 Energy Commission staff for the opportunity to comment
- 9 today and particularly thank you to Danuta Drozdowicz and
- 10 Danny Tam for their great presentation.
- 11 Transitioning buildings off fossil fuels by
- 12 ensuring that all new buildings are built to be efficient
- 13 and all-electric is critical to achieving our climate
- 14 goals, as well as to ensure that all Californians have
- 15 access to affordable, lifesaving and clean heating and
- 16 cooling in the face of increasingly extreme weather. Both
- 17 energy efficiency and building electrification are
- 18 essential to achieving a clean and affordable energy
- 19 future.
- With that being said, we want to acknowledge
- 21 first and foremost that Commission staff focused much of
- 22 their time and energy this code cycle on Part 6 and we
- 23 strongly support the changes there, from heat pump
- 24 baselines to energy efficiency and nonresidential
- 25 construction to the new multifamily chapter.

1	While	we	wish	that	Part	11	could	have	been	more

- 2 comprehensive we think focusing on Part 6 this cycle was
- 3 the right call, pushing the state closer to the all-
- 4 electric building code that we need. Nevertheless, we
- 5 support Part 11 including the amendments proposed today.
- 6 We think it raises the bar in alignment with the state's
- 7 decarbonization goals and lays a good foundation for both
- 8 local reach codes and the 2025 building code.
- 9 This code cycle, many of the now 50 local
- 10 governments that adopted reach codes went beyond the
- 11 Commission's current proposal. And we expect that they
- 12 will again when they update the reach codes in 2022. But
- 13 Part 11 is still important because it provides local
- 14 governments who are new to this process with a simple and
- 15 standard starting point for their first reach code. Part
- 16 11 can also set the stage for the 2025 code update. And
- 17 its performance-based approach to decarbonization has
- 18 merits.
- In summary, we support the CEC's proposal. While
- 20 limited in scope we support its emphasis on efficient
- 21 electrification, which is absolutely critical to meeting
- 22 California's climate goals. And we hope it can assist
- 23 local governments in accelerating their own transition off
- 24 fossil fuels. Thank you for your time today and the
- 25 opportunity to comment.

1	MS.	GALLARDO:	Thank	you.
1	1.10		TIIGIIIC	you

- Next up we have a phone number ending in 729.
- 3 Again, a reminder to please state your name, spell your
- 4 name, indicate your affiliation if any. Your line is open
- 5 and you may begin. Don't forget to unmute on your end.
- 6 MR. BRIDGERS: Hi. Good morning, my name is
- 7 Braxton Bridgers, spelled B-r-a-x-t-o-n B-r-i-d-g-e-r-s.
- 8 And I'm calling on behalf of the Association for Energy
- 9 Affordability, also known as AEA.
- 10 The Energy Commission's recent decision to adopt
- 11 amendments to Part 1 and 6 of the Title 24 Energy Code
- 12 marked a significant step toward achieving California's
- 13 climate goals.
- 14 The decision to adopt proposed amendments to
- 15 Appendix (A4) Residential Voluntary Measures of Title 24,
- 16 Part 11, was further support efforts to decarbonize
- 17 estates' building stock, which constitutes a quarter of
- 18 California's greenhouse gas emissions. By expanding this
- 19 selection of prerequisite options under (A4) to include
- 20 heat pump space and water heating, heat pump water heater
- 21 demand management, and battery storage systems the
- 22 Commission will provide jurisdiction with a model for a
- 23 reach code standard prioritizing electrification.
- 24 And now more than ever it is urgent that building
- 25 decarbonization strategies are implemented at both the

- 1 state and local levels to mitigate the climate and health-
- 2 related impacts caused by fossil fuels in buildings. As
- 3 extreme heat events are projected to continue and increase
- 4 throughout the golden state ensuring that all California
- 5 have access to energy efficient and healthy homes is
- 6 essential.
- 7 The CEC's recently published building
- 8 decarbonization assessment illustrates that by implementing
- 9 strategies such as expanding the use of the efficient
- 10 electric-heat pumps and investing in weatherization and
- 11 electrification of existing buildings California can reduce
- 12 greenhouse gas emissions by more than 40 percent by 2030.
- 13 AEA has committed to continuing our work in
- 14 supporting building decarbonization efforts across the
- 15 state and we look forward to supporting California in
- 16 achieving its energy and climate goals. Thank you very
- 17 much for the opportunity to comment.
- MS. GALLARDO: Thank you.
- 19 Next is Lauren Cullum. Lauren a reminder to
- 20 state your name, spell your name, indicate your affiliation
- 21 if any. Your line is open and you may begin.
- MS. CULLUM: Hi. Good morning, thank you for the
- 23 opportunity to comment. Lauren Cullum, L-a-u-r-e-n C-u-l-
- 24 l-u-m calling on behalf of Sierra Club California
- 25 representing 13 local chapters in California and half a

- 1 million members and supporters throughout the state.
- We support the CEC's proposal and recommendation
- 3 to adopt the amendments to the CALGreen code. The
- 4 transition to clean energy resources and all-electric
- 5 buildings cannot come soon enough. We still have so much
- 6 work to do in order to reduce our reliance on fossil fuels
- 7 and transition to a 100 percent clean economy without
- 8 delay. And electrification of California's homes and
- 9 buildings is a critical step in cutting climate pollution.
- 10 We support the approach proposed by staff because
- 11 we think it is a step in the right direction towards
- 12 lowering our state's greenhouse gas emissions and reaching
- 13 our climate goals as well as also protecting the health of
- 14 communities by stopping the building-out of the dangerous
- 15 and dirty gas system.
- 16 We also believe that this proposal will help
- 17 local governments accelerate their own transition off of
- 18 fossil fuels. Many of the 50 local governments that have
- 19 so far adopted reach codes in the 2019 code cycle have gone
- 20 beyond the Commission's current proposal. And we expect
- 21 they will again when they update their reach codes in 2022.
- The CALGreen approach creates new pathways for
- 23 electrification, particularly for cities that are not yet
- 24 in a position to pass an all-electric reach code for new
- 25 buildings. We think this code will ultimately help more

- 1 cities adopt electrification reach codes and more buildings
- 2 to go all-electric faster; therefore Sierra Club California
- 3 supports these updates to the CALGreen code. Thank you so
- 4 much.
- 5 MS. GALLARDO: Thank you.
- 6 Next is Kevin. Kevin, a reminder to please state
- 7 your name, spell it and indicate your affiliation, if any.
- 8 Your line is open and you may begin.
- 9 MR. MA: Morning Commissioners, my name is Kevin
- 10 Ma with Silicon Valley Youth Climate Action, that's K-e-v-
- 11 i-n M-a. We are a local nonprofit led by youth leaders in
- 12 the Santa Clara County area fighting for a better climate
- 13 change and changes by the government. We strongly support
- 14 the major improvement to the heat pump baseline in this
- 15 Parts 11 title change.
- 16 While it's not mandatory as in Part 6, it is an
- 17 important step to allow local governments to be able to be
- 18 more ambitious by adopting a local reach code. But not
- 19 necessarily going through the staff work to do the research
- 20 on their own as it provides a simple, standard way for
- 21 other cities across the state to do the same thing that
- 22 other cities have already done, with 50 local governments
- 23 ready. And we believe that by allowing local governments
- 24 to do so that it can teach the state for the next quarter
- 25 revision that it is possible to go further and ensure that

- 1 natural gas slowly gets -- or actually not slowly -- as
- 2 rapidly as possible can remove from buildings in order to
- 3 reach our climate change standards by AB 32.
- In summary we support the CEC's proposal. While
- 5 not in scope it's the right direction. But we do hope to
- 6 be making such changes faster in the future. Thank you.
- 7 MS. GALLARDO: All right, thank you.
- 8 All right one more reminder, if anyone would like
- 9 to make a comment please use the raise hand feature. If
- 10 you're on by phone press *9 then *6 to unmute.
- MS. GALLARDO: Vice Chair Gunda, I do not see any
- 12 other hands raised, we may proceed.
- 13 VICE CHAIR GUNDA: Thank you, Madam Public
- 14 Advisor.
- I want to move to Commissioner discussion. Well
- 16 Commissioner McAllister, would you want to begin?
- 17 COMMISSIONER MCALLISTER: Absolutely, thank you
- 18 very much Vice Chair Gunda. And I really want to express
- 19 my sincere appreciation to the commenters. This in a way,
- 20 the Part 11 this year but I think generally, it's a little
- 21 bit of a corollary to Part 6. A few of the threads from
- 22 Part 6 kind of continue on and we try to figure out where
- 23 we can kind of add value with either mandatory and/or
- 24 voluntary components of CALGreen and recommend those to HCD
- 25 and the Building Standards Commission.

1 Well	, first	of	all	Ι	wanted	to	thank	Danuta,	just
--------	---------	----	-----	---	--------	----	-------	---------	------

- 2 thank you for all of your interactions and support and
- 3 facilitation of the conversations with local governments
- 4 across the state. I think many of my comments were
- 5 actually said by the commenters and I think that dynamic is
- 6 something that's well understood and just a real advantage
- 7 that we have and a structure that we have for the building
- 8 code in the state, but it does inspire kind of a virtuous
- 9 cycle of market development.
- But we sort of put out the markers a few years,
- 11 encourage local governments to go after that. Or at least
- 12 enable them, give them tools that they can use to build
- 13 their own reach codes either just by adopting straight out
- 14 or modifying in some way the CALGreen piece. But that's
- 15 not for all local governments, and each one has its own
- 16 path. And I think it's emblematic of the fact that we have
- 17 a big state that is incredibly diverse and so we sort of
- 18 provide the structure for that tapestry or that quilt. And
- 19 then the local governments kind of come in and fill in and
- 20 add their texture and their color as they see fit that
- 21 reflects their own context. And I think that's a really
- 22 powerful way actually to develop kind of a statewide
- 23 consensus position, which is essentially what Part 6 ends
- 24 up being. With a big push in the direction of climate
- 25 mitigation and adaptation.

And so I think I'm super happy with thi	s, so
---	-------

- 2 acknowledging that Part 6 was a very big lift. And so we
- 3 did have to focus our efforts on what we thought was the
- 4 highest value that we could give through Part 11. And this
- 5 is very simple. It's a really elegant solution, actually,
- 6 if you look at the details of the proposal. I
- 7 And Danny, thank you too for all of your work and
- 8 the whole team's work behind this. A lot of the analysis
- 9 was kind of done in Part 6, but tailored in a very elegant
- 10 way for the Part 11. And basically the core of the Part 11
- 11 offering is a table by Climate Zone that just says how many
- 12 more EDR points you need to get in order to comply with
- 13 this piece. And so each local jurisdiction can sort of
- 14 just adopt that in a very straightforward way and the
- 15 billing department would be able to enforce it really in a
- 16 straightforward way, and so it does.
- 17 So one last piece of context I want to provide is
- 18 that just the main -- so Danny went through the CO2
- 19 reduction impacts of this update, and we saw those in Part
- 20 6 as well.
- In some ways you could kind of see the CO2, the
- 22 increment and reductions from 2019 to 2022 as a little bit
- 23 modest. But what we've done fundamentally is pivot toward
- 24 the technology of the future, the technologies of the
- 25 future with -- and those carbon benefits only accelerate as

- 1 the electricity grid cleans itself up. And so we really
- 2 are kind of piggybacking on what we know and what we're
- 3 guiding forward on the electricity grid side to adjust our
- 4 buildings to take advantage of those technologies that
- 5 really are where things will be going in the future.
- 6 So Part 11 does that even more by pivoting more
- 7 sort of deeply and sort of muscularly toward electric
- 8 heating technologies. And sort of the similar context
- 9 applies to Part 11, it has to be cost-effective and
- 10 feasible. But we have a little more leeway in terms of
- 11 what we can put in there and what the marketplace is asking
- 12 for. Voluntary allows us to be a little more liberal that
- 13 way.
- 14 So the local governments will have this to work
- 15 with as they see fit. I agree with the commenters that
- 16 it's highly likely. I think it's really unimaginable that
- 17 many local governments don't go beyond this offering, but
- 18 that gives us more tools in our toolbox next time to figure
- 19 out where to go with the 2025 update.
- 20 So I want to just thank staff for all this and
- 21 Mike and Christine, Mike Sokol and Christine Collopy,
- 22 leading the Division and just juggling a lot of things, a
- 23 massive community effort on the Part 6 and really just
- 24 keeping the train rolling down the track to Part 11. And
- 25 it's all, I think, as a whole it's quite elegant and

- 1 internally kind of consistent with where we're going as a
- 2 state. So I would just want to again thank the whole team.
- 3 And CCO, the Chief Counsel's Office as well, Linda and her
- 4 whole team. The list that Danny you showed, that goes a
- 5 long way to just letting everyone know how many people were
- 6 involved in this. It goes beyond that list and everyone I
- 7 think has really rolled up their sleeves for a long time
- 8 now.
- 9 And this actually, Part 11, is taking shape and
- 10 getting through the rulemaking process shepherded by
- 11 Corrine who's done a great job on these rulemakings
- 12 alongside the implementation of the Part 6 that is also
- 13 proceeding in earnest. So there's so many aspects of the
- 14 building code and we just are really blessed to have the
- 15 staff that we have working on these issues.
- 16 So with that I think I will pass the mic to
- 17 anyone else who wants to make a comment. So thanks
- 18 everyone for all your support on this, and again thanks to
- 19 staff.
- 20 VICE CHAIR GUNDA: Yeah, thank you, Commissioner
- 21 McAllister.
- Commissioner Monahan?
- 23 COMMISSIONER MONAHAN: Thank you. Well, I
- 24 appreciate the briefing that Danuta and Danny gave to me
- 25 earlier this week. And it's really clear that local

- 1 governments are at the vanguard, both of climate impacts
- 2 and to climate action.
- In my city, I live in Berkeley and it was the
- 4 first to pass a reach code and then it was just a domino
- 5 effect, right? Fifty cities across the state have adopted
- 6 reach codes. And it's really been inspirational to be a
- 7 Commissioner and to have the many of these codes come
- 8 before us for a decision, just to demonstrate that they are
- 9 stronger than what the state is requiring.
- 10 And the fact that CALGreen building standards
- 11 provide an opportunity for the Energy Commission to support
- 12 these local efforts and inform future building code updates
- 13 that we are responsible for, it's just a winning
- 14 combination. So I am looking forward to voting aye on
- 15 these standards, or codes, and I really appreciate the work
- 16 of the full team in pulling these together.
- 17 VICE CHAIR GUNDA: Thank you, Commissioner
- 18 Monahan.
- 19 I just want to check, Commissioner Douglas? (No
- 20 audible response.) I don't think Commissioner Douglas has
- 21 a comment, so I -- oh looks like you have. All right, go
- 22 ahead please.
- 23 COMMISSIONER DOUGLAS: No, I'm here. I just
- 24 wanted to say I'm in strong support of these. I had a
- 25 chance to have some role in the very first set of CALGreen

- 1 standards and they've just gotten better since. And so I'm
- 2 looking forward to supporting this item.
- 3 VICE CHAIR GUNDA: Thank you, Commissioner
- 4 Douglas. Yeah, just I want to add a few things. I don't
- 5 like to go after Commissioner McAllister, because I can't
- 6 really add much. But one thing of note, I think is just
- 7 remembering and recognizing Commissioner McAllister's
- 8 continued leadership in the building sector and the
- 9 decarbonization efforts of the buildings as a whole.
- I think we've seen some incredible work this
- 11 year: specifically the AB 3232 effort, the IEPR
- 12 decarbonization effort, the building codes and standards
- 13 that we adopted earlier, and the green building standards
- 14 that we're thinking through today, are just an incredible
- 15 body of work. And I really want to applaud the Efficiency
- 16 Division for all their work, Danuta and Danny, thank you
- 17 for your presentation. And as Commissioner McAllister
- 18 already noted, leadership of the Division Mike Sokol and
- 19 Christine Collopy and many, many staff who are not always
- 20 visible in these public forums. And also Commissioner
- 21 McAllister to your office, Bryan and Fritz, for their
- 22 efforts in kind of corralling these things forward. So
- 23 just an all-around thanks for everybody's work on this and
- 24 congratulations.
- With that, Commissioner McAllister, would you

- 1 like to make a motion?
- 2 COMMISSIONER MCALLISTER: I also wanted to
- 3 recognize Bill Pennington. So thanks for going through
- 4 those additional ones, but Bryan and Fritz and Bill have
- 5 really worked together with Mike, Christine and the whole
- 6 team to help and Will Vicent, and just the leadership at
- 7 each level throughout the Commission.
- 8 And I think that the process has just been
- 9 really, really terrific and people taking ownership and
- 10 it's just been very gratifying. And thank you also for
- 11 tying it to AB 3232. I think Adam from the Silicon Valley
- 12 Youth brought that up, or one of the speakers did, that we
- 13 know what direction we need a path to walk down to get to
- 14 the buildings component of our climate goals, of our carbon
- 15 reduction goals.
- And so to a large extent it's finding the sort of
- 17 fleshing out the details and kind of finding the resources
- 18 and programmatic structure to support that journey. So
- 19 really it does feel like this as you said Commissioner, or
- 20 Vice Chair Gunda, the body of work is becoming much more
- 21 defined. And so I find that very gratifying that to be
- 22 able to sort of know what this has to look like for
- 23 success. So this is a big part of that, and thanks again
- 24 Danuta and Danny for bringing it to us.
- 25 So I move Item 2.

- 1 VICE CHAIR GUNDA: Commissioner Monahan, would
- 2 you second?
- 3 COMMISSIONER MONAHAN: I second this item.
- 4 VICE CHAIR GUNDA: Great, we'll take the vote
- 5 now. Commission McAllister?
- 6 COMMISSIONER MCALLISTER: Aye.
- 7 VICE CHAIR GUNDA: Commissioner Monahan?
- 8 COMMISSIONER MONAHAN: Aye.
- 9 VICE CHAIR GUNDA: Commissioner Douglas?
- 10 COMMISSIONER DOUGLAS: Aye.
- 11 VICE CHAIR GUNDA: And my vote is age in favor as
- 12 well. The vote count is 4-0 and the motion passes for Item
- 13 2. Thank you Danny, Danuta, and the entire team for moving
- 14 this forward.
- 15 With that we will begin to move to Item 3. I
- 16 just want to check with our Public Advisor if we have a
- 17 presenter for Item 3. I know there is a time constraint
- 18 there. If not I would like to ask Drew if he could make
- 19 his announcements at this point.
- MS. GALLARDO: This is Noemi, the Public Advisor.
- 21 I do not see our special speaker has joined yet. I will
- 22 let you know when she does.
- 23 VICE CHAIR GUNDA: Great. Thank you so much.
- 24 With that, Drew, would you please go ahead?
- MR. BOHAN: Certainly. Thank you, Vice Chair and

- 1 Commissioners. I've just got a couple things to report. I
- 2 noted at a prior business meeting that the new building is
- 3 open. Our sister agencies are populating the additional
- 4 floors. This is a rolling process and not everybody is
- 5 fully moved in due to COVID. We are still, the last time I
- 6 was in I think I saw about 15 signatures, so we're
- 7 averaging a very small number of people who are actually
- 8 going in which I think is good given the conditions we're
- 9 still facing. But the building is open and people are
- 10 showing up.
- 11 Also the facilities are working. So there is a
- 12 beautiful conference room some of you have had an
- 13 opportunity to see, holds about 300 folks. And our team,
- 14 our IT team is working closely with the IT folks from
- 15 Agency and from DWR and so we're ready to put on meetings
- 16 like this when we're ready to go back in-person or other
- 17 meetings that we used to do in our main conference room at
- 18 our old building.
- 19 The second thing you voted to grant authority to
- 20 the Executive Director to approve package units. You
- 21 learned, I believe last meeting, that we did approve two
- 22 each at the Roseville power facility and at Sutter, up in
- 23 Sutter County. And those were 30 megawatts each, so a
- 24 total of 60 at each site; 60 twice of course is 120
- 25 megawatts. Those are ready to go. They needed to be

- 1 commissioned, some other activities needed to take place
- 2 between the ISO, and there needed to be waivers and so
- 3 forth, but they are now ready to go and ready to be called
- 4 upon if needed.
- 5 In addition you approved at the last business
- 6 meeting battery storage. And so we were charged as staff
- 7 with the responsibility to come up with the application
- 8 requirements as we did for the package units. Those are
- 9 done, those are out there, we are in consultations with two
- 10 participants in the market who may or may not go forward.
- 11 We don't know, but they're at least enthusiastic about
- 12 looking into this possibility so we're ready to go there.
- 13 And, finally, I would just note that the root
- 14 cause analysis is underway at the Russell City Energy
- 15 Center. And we're expecting to get that document, but next
- 16 month; we're still on the 30th. And so Vice Chair and
- 17 Commissioners, that's my report, thank you very much
- 18 VICE CHAIR GUNDA: Thank you, Drew. That's
- 19 perfect timing.
- I believe we have the speaker for our Item 3
- 21 here. So let's move to Item 3, California Independent
- 22 System Operator, I welcome California CAISO CEO Elliot
- 23 Mainzer to present up. Thank you.
- MR. MAINZER: Thank you very much, Commissioner
- 25 Gunda. It's a pleasure to be with you. I'm just going to

- 1 do a quick sound check, can you hear me okay?
- 2 VICE CHAIR GUNDA: Yep.
- 3 MR. MAINZER: Thank you. Well , I know it's
- 4 wonderful to be with you this morning. I know you all have
- 5 an extremely packed meeting this morning. And I was sort
- 6 of considering my conversation here this morning as just
- 7 kind of a down payment on a, what I hope will be a longer
- 8 conversation at some point.
- 9 But we have quite a bit of activity happening
- 10 again in the energy market front, particularly with respect
- 11 to our Energy Imbalance Market (indiscernible) for an
- 12 enhanced Day-Ahead Market. And I had the pleasure of
- 13 spending several days with Chair Hochschild a couple of
- 14 weeks ago. He joined me for a visit up to the Pacific
- 15 Northwest to an energy conference where we had a chance to
- 16 meet many of the regulators and other market participants
- 17 from across the west and just talk a little bit about how
- 18 the EIM and potentially an enhanced Day-Ahead Market fit
- 19 into the state's energy future.
- 20 And I just wanted to start by putting a couple of
- 21 initial data points into the mix and then very much look
- 22 forward to significantly greater engagement on this topic.
- 23 I know Commissioner McAllister is engaged with some of the
- 24 regional conversations around the northwest power pool and
- 25 its resource adequacy program. There's just a lot of

- 1 interest right now in the west in the further evolution of
- 2 the region's integrated energy markets. And we're going to
- 3 try to continue to play a constructive role.
- As you know, the Energy Imbalance Market, which
- 5 was started back in 2014 by PacifiCorp and the ISO has now
- 6 grown, to the point where it's likely to cover about 84
- 7 percent of the load in the Western United States by next
- 8 year. Just this week we had a really personally kind of
- 9 happy milestone, where the Bonneville Power Administration,
- 10 my alma mater in the northwest, officially decided to join
- 11 the EIM, bringing the federal transmission grid into the
- 12 mix. And that was on the heels of just a couple weeks
- 13 earlier, of the signing of the Western Area Power
- 14 Administration's desert southwest operation into the EIM as
- 15 well. So having these two critical power marketing
- 16 administrations now integrated into the market are two
- 17 pieces of really important geographical expansion and value
- 18 for the market and its footprint continues to grow.
- 19 We typically talk about the gross benefits of the
- 20 Energy Imbalance Market. The most recent estimate of the
- 21 benefits of that market since inception, are a cumulative
- 22 \$1.42 billion, with about \$375 million of that accruing to
- 23 California immersion. But at the end of the day I think
- 24 the value proposition is both the quantitative side, but
- 25 also just the reliability and physical dispatch

- 1 improvements that the EIM has made possible. Both for just
- 2 wide-area diversification, reducing obviously fossil fuel
- 3 emissions, greenhouse gas emissions, and certainly the
- 4 total amount of curtailments, particularly of the solar
- 5 fleet that are necessary. Having access to those other
- 6 markets on an interhour basis has been really valuable.
- 7 And some of you may have also seen just the role
- 8 that the EIM played just this last summer, as most recently
- 9 as July 9th, in helping to make finetuning adjustments of
- 10 energy transfers between the balancing authorities in the
- 11 west. And helping us all stay as reliable as possible,
- 12 because we know that if any one of us goes lights-out it
- 13 affects everybody else. So that interconnected nature of
- 14 the EIM is really built on relationships.
- Now I think you all know that some of our working
- 16 relationships have been stressed and tested a little bit
- 17 this year as well. Some of the issues with our energy
- 18 market that materialized last year around imports and
- 19 exports and wheel-throughs, not only were they polarizing
- 20 here within the state, but they had some significant
- 21 implications for out-of-state entities like Arizona Public
- 22 Service and PNM and NV Energy who rely on a lot of imports
- 23 out of the California market. We've had to make some tough
- 24 decisions to make sure that we take care of the native-load
- 25 customers within our balancing authority and don't provide

- 1 a super priority for wheel-throughs to cross our system.
- 2 And so these have been challenging issues, but through all
- 3 of the challenges we've continued to work very closely with
- 4 the EIM entities in this.
- 5 Over the course of the last three to four months
- 6 we've been brokering some dialogue between the three
- 7 investor owned utilities in California, at both the
- 8 technical policy and CEO level, and a subset of the EIM
- 9 entities. Who have put together a set of design principles
- 10 for an enhanced Day-Ahead Market that would build on the
- 11 footprint and the capabilities of the EIM and start
- 12 extending that market more broadly the next couple of
- 13 years.
- We felt at the end of August that we made enough
- 15 progress on those design principles, that it was time to
- 16 actually put them out into the public domain. And so on
- 17 October 13th we will be hosting what we're referring to as
- 18 our EDAM Forum. This is going to be a virtual symposium
- 19 for the morning of the 13th where we're going to introduce
- 20 and reinvigorate the conversation around EDAM and start
- 21 socializing that level of interest in some of the key
- 22 issues there, both on the design and governance issues.
- 23 And we're going to structure it where we'll have
- 24 a CEO panel to kick it off where we've got Patti Poppe and
- 25 Kevin Payne from PG&E and Edison sitting down with Stefan

- 1 Bird from PacifiCorp and Doug Cannon from NV Energy and Deb
- 2 Smith from Seattle City Light. And also we have the COO
- 3 Adam Richins of Idaho Power. Those are some of our key
- 4 partners.
- 5 We'll then have Mark Rothleder and a set of the
- 6 utilities talk about the design principles that they've
- 7 hammered out.
- 8 And then we have a stakeholder panel, which will
- 9 include a few representatives from California including
- 10 Commissioner Rechtschaffen from the PUC, the Chair of the
- 11 Nevada PUC and also a representative from Oregon, Letha
- 12 Tawney, who's been Chair of the Body of State Regulators.
- I think it's going to be a really fabulous panel,
- 14 really great opportunity to open up this conversation
- 15 again. And sort of keep California right in the heart of
- 16 the action with respect to regional market expansion.
- 17 I'll just mention one last thing and then take a
- 18 breath. One of the key issues as you all know, probably
- 19 better than I do, with respect to market expansion is the
- 20 issue around governance. Just this last -- over the summer
- 21 on August 20th the ISO Board of Governors and the EIM
- 22 governing body both approved unanimously a set of
- 23 enhancements to the governance framework for the existing
- 24 Energy Imbalance Market where there will be greater joint
- 25 authority and decision-making around those issues that are

- 1 specific to the Energy Imbalance Market. It doesn't really
- 2 change the ultimate decision-making authority of my Board
- 3 of Governors, but it provides a more inclusive governance
- 4 model. And we're hoping that that type of governance
- 5 framework can be deployed and built upon as we start
- 6 working on the enhanced Day-Ahead Market.
- 7 So we wanted to sort of get past the recall, and
- 8 sort of get into the fall and have summer at least
- 9 partially in the rearview mirror before we reintroduce this
- 10 concept. But I just wanted to let you know that this
- 11 conversation is now starting to open up again. I really
- 12 appreciated Chair Hochschild leaning in with me and really
- 13 helping to diving in to understand some of the nuances of
- 14 these topics. And I certainly was appreciative when we
- 15 transmitted the report to the Governor yesterday, the 60-
- 16 day report, that that issue around the EDM made it into
- 17 that. And I'm really looking forward and relish an
- 18 opportunity to sit down with you again for a much deeper
- 19 dive on this topic and try to work in common cause to
- 20 continue making progress on regional market expansion.
- 21 So that was the information I wanted to put out
- 22 there today. And thank you for letting me hop in on the
- 23 agenda for a few minutes and just share some initial
- 24 thoughts there.
- 25 VICE CHAIR GUNDA: And thank you so much. And

- 1 just for the attendees today at the meeting this is an
- 2 informational item so we will not have any public comment.
- 3 But I would want to, before Elliot needs to jump off, I
- 4 want to see if any of the Commissioners have any questions
- 5 for him or any comments.
- 6 COMMISSIONER MCALLISTER: Just a -- oh, go ahead,
- 7 Commissioner Monahan.
- 8 VICE CHAIR GUNDA: Yes, go ahead Commissioner.
- 9 MR. MAINZER: Okay, just briefly I just
- 10 want to thank you, Elliot, for all your leadership on this.
- 11 I mean just your background is sort of uniquely. almost
- 12 uncannily tailored to help facilitate this discussion just
- 13 given your west-wide perspective and just history in these
- 14 issues. And any way we can work together, I think this has
- 15 a lot. As you mentioned there have been some frictions in
- 16 some directions, but I think there's just a massive
- 17 opportunity to pivot really clearly towards a very
- 18 positive, constructive conversation.
- 19 And the perspective that I'm getting on this
- 20 through the Western Interstate Energy Board and WIRAB, it's
- 21 just there's a real thirst for rolling up the sleeves and
- 22 figuring this out. And I think what's driving that in part,
- 23 at least, is just an acknowledgement that these shifts,
- 24 these climate shifts and these events are absolutely all of
- 25 our problem. It's the entire West, the whole Western

- 1 Interconnect. And so just finding solutions that we can
- 2 pair up on and just keep track of across the seams and
- 3 borders of our various jurisdictions, I think, just has to
- 4 be the solution. And it seems like the light bulb has kind
- 5 of come on across the West on that. And it's really great
- 6 to have you guiding that conversation, big parts of that
- 7 conversation on California's behalf, so thank you for that.
- 8 MR. MAINZER: Thank you very much, Commissioner.
- 9 I really appreciate your voice on this too. I think all of
- 10 you, I think the Energy Commission is just doing a fabulous
- 11 job of raising the bar on so many topics and establishing
- 12 that kind of statewide perspective. I just really look
- 13 forward to partnering with you on this topic and connect to
- 14 your personal engagement.
- 15 COMMISSIONER MCALLISTER: Excellent.
- VICE CHAIR GUNDA: Thank you. I think we have a
- 17 -- Commissioner Monahan and Commissioner Douglas wanted to
- 18 have in comment. So Commissioner Monahan?
- 19 COMMISSIONER MONAHAN: Well, I too want to thank
- 20 Elliot for coming in. I would suggest that on a regular
- 21 basis we have you come back. I feel like on a quarterly
- 22 basis would be great. And considering the partnership that
- 23 we have with ISO and with the CPUC, I just think the more
- 24 we can hear from you directly and be able to have a
- 25 conversation with all the Commissioners present the better

- 1 for everyone. And is it October 14th that you said you
- 2 were having the --
- 3 MR. MAINZER: October 13th, yeah.
- 4 COMMISSIONER MONAHAN: The 13th. And is that
- 5 going to be available via -- I'm going to actually be in
- 6 Hawaii, hopefully not working. (Laughter) But I'm assuming
- 7 that's going to be recorded and we can watch it afterwards.
- 8 MR. MAINZER: I'm sure we will record it, yes.
- 9 And I hope you enjoy your time in Hawaii. That would be a
- 10 good priority. Yes, we'll make a recording, yeah.
- 11 COMMISSIONER MONAHAN: Great. Thank you.
- 12 VICE CHAIR GUNDA: Thank you. And Commissioner
- 13 Douglas?
- 14 COMMISSIONER DOUGLAS: I just wanted to thank
- 15 Elliot as well for joining us and for giving us that great
- 16 overview. I agree with Commissioner McAllister that you
- 17 just have a really great set of connections and
- 18 perspectives for us as we navigate this next chapter for
- 19 California energy. And so it's great to be working with
- 20 you.
- 21 MR. MAINZER: Thank you, Commissioner Douglas. I
- 22 appreciate all your leadership on so many fronts. Thank
- 23 you guys so much. I'll let you get back to your packed
- 24 agenda. And it's wonderful to see you, Commissioner Gunda,
- 25 as always. Thank you, sir, and we'll look forward to

- 1 talking soon okay.
- VICE CHAIR GUNDA: Great. Thank you so much,
- 3 Elliot. Thank you.
- 4 MR. MAINZER: All the best, thank you, sir.
- 5 VICE CHAIR GUNDA: Yeah, thanks.
- 6 With that we'll move on to the Item 4, Adoption
- 7 of Midterm Reliability Analysis. And I welcome Liz Gill to
- 8 present.
- 9 MS. GILL: Great. Good morning, Vice Chair and
- 10 Commissioners, my name is Liz Gill and I'm an Advisor to
- 11 Vice Chair Gunda. I'm here to present the Midterm
- 12 Reliability Analysis to be considered for adoption by the
- 13 Commission. This analysis evaluates the system reliability
- 14 needs on the CAISO system through 2026 in order to support
- 15 decision-making at the Public Utilities Commission on the
- 16 need for future procurement.
- 17 This analysis was presented at an August 30th
- 18 workshop. On September 23rd staff held a second session to
- 19 discuss additional modeling questions from stakeholders.
- 20 Staff receive stakeholder feedback and then integrated that
- 21 feedback to refine this analysis. Next slide, please.
- This analysis benefits Californians through
- 23 supporting decision making during a critical transition to
- 24 reliance on clean energy resources for electric
- 25 reliability. Electric reliability is essential to the

- 1 health and safety of Californians into the California
- 2 economy. Next slide, please.
- 3 So the genesis of this report is from the CPUC's
- 4 Midterm Reliability Procurement Decision issued in June of
- 5 this year, ordering 11.5 gigawatts of Net Qualifying
- 6 Capacity, or NQC, to meet electric reliability in the next
- 7 five years as there are significant planned retirements,
- 8 including the once-through cooling unit the Diablo Canyon
- 9 Nuclear Power Plant.
- This decision ordered procurement only from
- 11 zero-emitting resources and renewables, but left open the
- 12 question of whether additional fossil fuel resources should
- 13 be needed to support electric reliability in the next five
- 14 years. This analysis is intended to support decision
- 15 making later this year at the CPUC on the question of
- 16 whether additional procurement is needed, and if any of
- 17 that procurement should come from fossil fuel-based
- 18 resources.
- 19 To address this the team broke up the analysis
- 20 in to several tracks and staff used a Loss Of Load
- 21 Expectation analysis, which I'll explain in the next slide,
- 22 to inform the questions at hand.
- 23 So the first question is whether additional
- 24 capacity is needed to support system reliability beyond
- 25 what's already been procured by the CPUC. And the second

- 1 part to this question is whether additional thermal
- 2 resources provide an additional reliability benefit
- 3 compared to a portfolio of new zero-emitting resources.
- 4 Then given the expectation that much of the new
- 5 capacity will be battery storage the team explored the
- 6 performance and potential constraints that rely on battery
- 7 resources to pose.
- 8 And then, finally, should it be determined that
- 9 additional thermal capacity is needed to support mid-term
- 10 grid reliability. We reported on incremental efficiency
- 11 improvement potential in capacity that has already been
- 12 permitted by the CEC that has not yet been contracted or
- 13 built. Next slide, please.
- Before we jump into the analysis I'll compare the
- 15 stack analysis that was brought before you earlier this
- 16 month, with a very high-level overview of the LOLE
- 17 analysis. Next.
- 18 So the staff analysis evaluates effectively in
- 19 worst-case scenario, representing a west-wide extreme heat
- 20 event, with extreme demand and lack of economic imports and
- 21 assumed continued drought in order to inform contingency
- 22 resources and emergency procurement needs. While useful
- 23 this is, however, just a snapshot analysis of one scenario.
- 24 Next.
- The LOLE analysis is an industry standard

- 1 probabilistic analysis to inform procurement need. It uses
- 2 thousands of model simulations with random draws from a
- 3 distribution of demands, different solar and wind profiles,
- 4 and forced outages. We've run these thousands of
- 5 simulations, we can calculate the probability of a loss of
- 6 load, also known as a supply shortfall. The industry
- 7 standard timing metric for this analysis is to have less
- 8 than one outage in ten years, one LOLE of less than 0.1
- 9 events per year. Next slide, please.
- 10 So getting into the analysis it's been our first
- 11 question is whether sufficient capacity has been ordered to
- 12 meet our system reliability needs in 2023-6.
- Our modelers first estimated what resources are
- 14 likely to come online in order to meet the procurement
- 15 order. So here we've listed the nameplate capacity
- 16 estimates and NQC is effectively based on how much capacity
- 17 supports peak loads to the nameplate capacity that is
- 18 typically higher than the NQC value for renewables and
- 19 storage. Staff estimated that approximately 10 gigawatts
- 20 of battery storage, 8.3 gigawatts of solar, 2.5 gigawatts
- 21 of wind, 1.2 gigawatts of geothermal, and 1 gigawatt of
- 22 long duration storage is needed to meet the 11.5 gigawatts
- 23 NQC target.
- The geothermal and long-duration storage are
- 25 starred on this slide as they are considered long lead time

48

- 1 resources and are able to be delayed until 2028. On the
- 2 chart they're not included in the 2026 analysis, but they
- 3 are included in the 2026 plus year analysis.
- 4 So looking at this chart an LOLE below 0.1
- 5 events per year is interpreted as reliable. This is the
- 6 green area on the chart. As you can see the analysis
- 7 indicates sufficient capacity has been ordered for 2023-6
- 8 even if the long lead time resources are delayed beyond
- 9 2026. Next slide, please.
- In order to look at whether new gas provides
- 11 greater system reliability in the portfolio of new zero-
- 12 emitting resources staff created a bookend scenario that
- 13 replaces the new procurement with gas resources on a one-
- 14 to-one NQC basis. Looking at the chart we can see that the
- 15 gas portfolio is also reliable and meets its 0.1-event-per-
- 16 year LOLE standard.
- 17 The conclusion is that either approach,
- 18 procuring zero-emitting resources or gas resources, can
- 19 result in reliable system should you procure enough
- 20 capacity. Next slide, please.
- 21 So this brings us to our questions around
- 22 battery deployment and performance. The battery storage
- 23 market is still new and given our dependence on battery
- 24 storage for midterm reliability, based on our
- 25 interpretation of the procurement order we thought it was

- 1 prudent to explore battery performance and risks. In the
- 2 past year over 1,000 megawatts of battery storage has been
- 3 added to the CAISO grid. In this chart we can see battery
- 4 storage charging and discharging on the 2020 peak day shown
- 5 in the dashed yellow line, and that did not correlate with
- 6 net demand, indicating in 2020 it was primarily supplying
- 7 ancillary services.
- 8 However, in 2021 battery charging and
- 9 discharging, shown with the orange line, is correlated to
- 10 net demand supporting our net peak needs. So while
- 11 performance of this summer is promising, battery storage
- 12 performance should be continued to be monitored. Next
- 13 slide, please.
- 14 And again given the procurement orders upwards
- 15 of 10 gigawatts utility-scale batteries are projected to be
- 16 procured in order to meet those procurement orders in
- 17 addition to the behind-the-meter battery projections. This
- 18 has raised concerns over global supply chains not being
- 19 able to meet California procurement needs. Next slide,
- 20 please.
- 21 To investigate the potential impact the battery
- 22 procurement delays on midterm reliability due to either
- 23 procurement delays or inner-connection delays, the modeling
- 24 team created a scenario assuming a one-year delay to 20
- 25 percent of all new battery resources. On this chart we see

- 1 the delayed-battery scenario in red in comparison to the
- 2 on-time procurement scenario in blue.
- 3 The LOLE does go up if batteries are delayed, if
- 4 20 percent of new batteries are delayed, but it does not
- 5 increase above the 0.1-event-per-year standard, indicating
- 6 that a 20 percent storage delay by itself does not seem to
- 7 pose a risk to system reliability. Next slide, please.
- 8 Concerns have also been raised around whether
- 9 there will be sufficient energy to charge battery storage
- 10 during constrained conditions. To begin to explore this
- 11 the team applied a cap to all imports across the day at
- 12 5,600 megawatts, unlimited hydro generation to the average
- 13 minimum generation at all non-peak hours. As you can see
- 14 in the table the original procurement scenario in the
- 15 limited imports and hydro scenario have the same LOLE. So
- 16 it was determined that there was sufficient energy to
- 17 charge the storage.
- 18 The team then may reduce solar generation by 15,
- 19 30 and 45 percent to reflect very cloudy or smoky
- 20 conditions reducing solar output. The LOLE did not go
- 21 above the one-event-in-ten-year metric until both imports
- 22 and hydro were constrained and the solar output was reduced
- 23 by 45 percent.
- 24 Given the extreme nature of this scenario staff
- 25 has determined that it does not appear energy sufficiency,

- 1 will be a limiting factor to system reliability in the next
- 2 five years. Next slide, please.
- Finally, the team provided information regarding
- 4 potential new gas capacity at existing facilities should
- 5 new gas capacity be ordered. The siting team has
- 6 identified about 200 megawatts of efficiency and equipment
- 7 upgrades for 2022-3. Additionally, the CEC has permitted
- 8 1200 megawatts of new gas capacity that has not yet been
- 9 contracted and built. Next slide, please.
- 10 The analysis concludes that, given the
- 11 assumptions, it appears that sufficient capacity has been
- 12 ordered for midterm reliability from 2023-6. However,
- 13 additional retirements would increase the likelihood of
- 14 system reliability challenges.
- The CEC demand forecast is also being further
- 16 enhanced to capture the frequency in dispersion of extreme
- 17 climate events. This, along with increased electrification
- 18 may result in higher demand not captured in the current
- 19 analysis.
- The second conclusion is that a portfolio of
- 21 zero-emitting resources can provide the equivalent system
- 22 reliability compared to fossil fuel resources; however
- 23 battery performance, including outage rates, to be closely
- 24 monitored over the next several years to inform future
- 25 system reliability analysis and decisions.

- 1 And before I wrap up I'd like to thank our
- 2 incredible team that really worked at an incredible pace to
- 3 put this analysis together, including Mark Kootstra, Hannah
- 4 Craig, David Erne, Chris McLean, Angela Tanghetti from the
- 5 Energy Assessments Division and Elizabeth Huber, Brett
- 6 Fooks, Travis David and Jim Bartridge in the Siting
- 7 Division. I'd also like to thank the CPUC Energy Division
- 8 staff for working collaboratively with our team on this
- 9 analysis. And next slide, please.
- 10 And with that, the staff recommendation is to
- 11 adopt the Midterm Reliability Analysis. I'm happy to take
- 12 any questions. I have additional staff available to assist
- 13 with technical questions as well.
- 14 VICE CHAIR GUNDA: Thank you. Thank you, Liz,
- 15 for that wonderful presentation.
- 16 So I want to kind of open up for any discussion
- 17 that we might have, but before that take the public
- 18 comment. Madam Public Advisor, do we have any comment for
- 19 this?
- MS. GALLARDO: This is Noemi, the Public Advisor.
- 21 A reminder to attendees if you would like to make a
- 22 comment, please use the raise hand feature on the screen.
- 23 If you are on by phone press *9 to raise your hand, *6 to
- 24 unmute.
- Vice Chair Gunda, I do not see any hands raised

- 1 for this item, we may proceed.
- 2 VICE CHAIR GUNDA: Thank you I will kick off some
- 3 of the conversation on the dais and I'm just kind of note
- 4 some of my comments on this. So I'm going to follow the
- 5 general trend of how Commissioner McAllister does it, how
- 6 well in recognizing all the staff. So I just want to take
- 7 a moment to just recognize the incredible work that the
- 8 staff did.
- 9 So for those of you who were not tracking this it
- 10 was just three months as Liz noted. In June we had the
- 11 CPUC decision. And then the decision kind of required or
- 12 had requested efforts for CEC and CPUC to collaborate on
- 13 this to develop the analysis so all this work was done in
- 14 about three months, the amount of work that the staff did,
- 15 and then also pulling the report together for submission
- 16 today.
- 17 So I want to particularly note the contribution
- 18 from two teams at the CEC, the Energy Assessments Division,
- 19 the Siting team as Liz noted. Mark Kootstra, I want to
- 20 just really take a moment to recognize his leadership in
- 21 modeling. This is not easy, this is something new for the
- 22 CEC taking on this kind of work. So just want to thank him
- 23 for his patience with all the requests, including me and
- 24 then kind of moving the analysis forward.
- 25 And his colleague, Hannah Craig, who also had a

- 1 considerable amount of contribution in developing the
- 2 modeling along with Angela Tanghetti, Chris McLean and, as
- 3 Liz noted, the management team David Erne and Aleecia
- 4 Gutierrez EAD.
- 5 From STEP Division we had amazing contributions
- 6 from Elizabeth Huber, Jim Bartridge, Travis David, Brett
- 7 Fooks, and then also the management Shawn Pittard. Also
- 8 it's kind of hard to see the touchpoints that this kind of
- 9 work needs with the Executive Office and the Chief
- 10 Counsel's Office, so just thanks, noting the thanks to
- 11 those offices as well.
- 12 And Commissioner Douglas for her leadership on
- 13 the overall power plant program and our collaboration over
- 14 the last three to four months on a number of the
- 15 reliability issues, including the support, but also the
- 16 broader SB 100 implementation work. So there has been a
- 17 lot of work going on this summer and I just want to thank
- 18 every single person for all the hard work that has been
- 19 going in here.
- The last people that I want to note from our
- 21 Commission is Le-Quyen Nguyen. For those of you who know
- 22 she's Chief of Staff for the Chair, but has been patiently
- 23 behind the scenes pulling together a lot of work, so thank
- 24 you Le-Quyen for all your work on this.
- 25 And finally, you know I just feel very warm and

- 1 happy about Liz. I think Liz has been in the office for
- 2 three months. She has been at the Energy Commission for
- 3 about two years now, I think. And her contributions in SB
- 4 100 and since joining our office over the last three
- 5 months, really shepherding several reliability analysis
- 6 including the stack analysis that we talked about, the
- 7 earlier analysis.
- 8 And something Elliot mentioned, which was in the
- 9 Executive Order the Governor requested that we submit an SB
- 10 100 report in 60 days, and all the work Liz put in that as
- 11 well. So I just want to commend Liz, all your work. And
- 12 you do it really thoughtfully and with a lot of patience
- 13 and are articulate and really, really smart and persistent
- 14 on getting the work done. So thank you, and also thank you
- 15 for not going on a break before today, and seeing this
- 16 through today, so thank you so much. I really hope you can
- 17 take a break after today.
- 18 And as Liz mentioned there's a lot of
- 19 collaboration with the Public Utilities Commission on this.
- 20 But before naming the staff I just want to commend
- 21 Commissioner Rechtschaffen's leadership and President
- 22 Batjer's leadership on the IRP as well as reliability. And
- 23 specifically staff from CPUC: Simon Baker, Nathan Barcic,
- 24 James McGarry, Jason Ortego, Neil Raffan and Molly Sterkel
- 25 and also Commissioner Rechtschaffen's Chief of Staff Sean

- 1 Simon, so to all their good work.
- 2 So in closing I just want to recognize a couple
- 3 of things, that this is an extremely important product for
- 4 the Energy Commission. The Energy Commission has a role in
- 5 convening and developing the analytical work necessary to
- 6 put options on the table as we move forward and really shed
- 7 light on emerging issues. And I think this report, along
- 8 with the Appendix A in the report, which is the beginning
- 9 of a new analytical product for CEC. Which is the
- 10 California reliability outlook that is going to happen --
- 11 moving on with the IEPR --will be that venue to collect and
- 12 gather all sorts of reliability analysis that our staff
- 13 prepare to really inform the reliability of the state and
- 14 then future opportunities and considerations.
- I want to close by noting that a lot of what
- 16 we've seen since last summer after the stressed conditions
- 17 in 2020 and then the unfortunate events in August is an
- 18 increased collaboration within the three agencies, two
- 19 agencies and CAISO. CAISO doesn't like to be called agency
- 20 -- so I don't if Delphine is on the call -- but just
- 21 generally the work has been incredibly collaborative. So
- 22 none of this work is done in silo and none of this work can
- 23 be done by any one team and so we're all coming together.
- 24 And I just want to thank the inter-agency collaboration and
- 25 the spirit that everybody on the dais here is setting as

- 1 well as the staff and the senior management.
- 2 So with that I'm just really glad we are done
- 3 with this and I will be looking forward to supporting that.
- 4 But I just want to check if there are any comments from the
- 5 dais or questions.
- 6 COMMISSIONER DOUGLAS: Commissioner or --
- 7 VICE CHAIR GUNDA: Commissioner Douglas?
- 8 COMMISSIONER DOUGLAS: -- yeah, Vice Chair Gunda,
- 9 I just appreciate your comments and your hard work and
- 10 leadership on this very much and the hard work of the team.
- 11 There's no question that this analysis is putting us in a
- 12 much better position in terms of understanding both the
- 13 challenges in front of us and some of the options that we
- 14 have to move forward and address it in the midterm. And so
- 15 I very much appreciate the work and the partnership and
- 16 look forward to continuing it.
- 17 VICE CHAIR GUNDA: Thank you, Commissioner
- 18 Douglas. Commissioner McAllister?
- 19 COMMISSIONER MCALLISTER: Just quickly, I agree
- 20 with everything you said Vice Chair Gunda and also
- 21 Commissioner Douglas. And when you read the names of -- or
- 22 when Liz read the names of the people on the team, and then
- 23 you reinforced that I said, "Wow, what a dream team of
- 24 analysts we have," and just the brainpower behind this.
- 25 And just the tools and the thoughtfulness with which staff

- 1 uses those tools really comes through in both the questions
- 2 they're asking and the answers that they're getting. So I
- 3 really think it's a great foundation for continued,
- 4 increasingly high-quality interactions with the PUC and the
- 5 CAISO. So thanks everyone, thanks Liz for that and all the
- 6 team. And for your leadership as well Vice Chair Gunda.
- 7 VICE CHAIR GUNDA: Thank you, Commissioner
- 8 McAllister.
- 9 Commissioner Monahan, please.
- 10 COMMISSIONER MONAHAN: I'm just going to keep on,
- 11 but I want to start with Vice Chair Gunda, because I think
- 12 your leadership generally has just been so stellar. And
- 13 this summer arguably has been like no other in terms of the
- 14 amount of work that the Energy Commission has helped lead
- 15 in collaboration with ISO and the CPUC on reliability
- 16 issues. I mean, we all know, reliability is job one of our
- 17 Energy Commission and our sister agencies working on this.
- 18 And so I just want to say I've been professionally and
- 19 personally just impressed with you, Vice Chair Gunda, and
- 20 the full team of analysts that have been working on this.
- 21 I recognize also the contributions that
- 22 Commissioner McAllister has made in this space and that we
- 23 just appreciate all the work that has gone into doing these
- 24 reports, collaborating with our sister agencies and making
- 25 sure that we're doing all we can to keep the lights on as

- 1 we clean up the electricity supply. So just thanks to
- 2 everybody involved in this, very impressive workload.
- 3 VICE CHAIR GUNDA: Thank you, Commissioner
- 4 Monahan. As always, thank you for your kind words.
- 5 It's been a very, very interesting summer and I'm
- 6 really glad that we are moving past the summer and all the
- 7 incredible work. And also just recognizing that the
- 8 Administration's leadership on all that happened this
- 9 summer, including the Governor's Office's staff and kind of
- 10 trying to help improve the coordination between the several
- 11 agencies and them helping us work smoothly.
- 12 So with that if you're okay I will actually make
- 13 the motion of moving this item. And Commissioner
- 14 McAllister or Commissioner Douglas would you second it
- 15 please?
- 16 COMMISSIONER DOUGLAS: Yes, I second this motion.
- 17 VICE CHAIR GUNDA: Okay, with that I vote in
- 18 favor. Commissioner Douglas?
- 19 COMMISSIONER DOUGLAS: Aye.
- VICE CHAIR GUNDA: Commissioner McAllister?
- 21 COMMISSIONER MCALLISTER: Aye.
- 22 VICE CHAIR GUNDA: Commissioner Monahan?
- 23 COMMISSIONER MONAHAN: Aye.
- 24 VICE CHAIR GUNDA: Thank you. So the vote count
- 25 is 4-0 and the motion passes. Thank you Liz for your work

- 1 and hope you can take a break. Thank you.
- With that I'll move on to Item 5, Lead
- 3 Commissioner or Presiding Member Reports. Commissioner
- 4 Monahan, can I start with you, please.
- 5 COMMISSIONER MONAHAN: Sure. So I think as I
- 6 mentioned in our last meeting we're moving towards getting
- 7 a final clean transportation program investment plan, so
- 8 there was a lot of work just the last couple of weeks
- 9 around that. A draft plan was released, we held our second
- 10 advisory committee meeting on September 16th I think, I'm
- 11 not sure. And it included the \$1.165 billion from the
- 12 General Fund so this is like the biggest ever investment
- 13 plan, nothing comes close. Basically in this year eight
- 14 times more money came from the General Fund than we
- 15 normally have so it's just a much bigger, more robust plan.
- 16 And of course I think we're going to get a lot of feedback
- 17 and comments that we'll have to take into consideration as
- 18 we move to a final plan.
- 19 So in addition to the advisory committee meeting
- 20 we also are hosting next week with our Public Advisor,
- 21 Noemi, is pulling together a discussion with environmental
- 22 justice leaders and an Environmental Justice Roundtable.
- 23 And the main topic will be this draft investment plan.
- We also shared it with the EV Strike Force last
- 25 week, so it's been a big public viewing of the investment

- 1 plan. We really want to get as much public feedback as we
- 2 can on the plan so we can ultimately arrive on putting our
- 3 best foot forward in the final investment plan.
- I think I also mentioned that we were having a
- 5 retreat, Transportation Retreat, which we did hold in
- 6 Drew's backyard, so thank you, Drew. And for those who
- 7 don't know Drew has a wonderful backyard with lots of fruit
- 8 plants and he was like basically feeding us the fruits of
- 9 his labor through the retreat. We were COVID-safe, there
- 10 were no hugs, we kept three feet apart from each other.
- 11 But it was really a special time to be able to come
- 12 together, talk about how can we best position ourselves for
- 13 success and spending the \$1-plus billion wisely. Also how
- 14 to position ourselves for success in hopefully continuing
- 15 the Clean Transportation Program beyond its expiration in
- 16 2023.
- 17 So we had a really great cross-departmental
- 18 participation. So in addition to Drew, Noemi was there,
- 19 Lindsay from our Communications Office, Anna from
- 20 Government Affairs, we had all the office managers as well
- 21 as Hannon Rasool and just a really great discussion, great
- 22 opportunity. It was the first time we've all seen each
- 23 other since COVID, so that was something.
- In terms of meetings we had a Ports
- 25 Collaborative, so continuing in the footsteps of Vice Chair

- 1 Scott. And Ben De Alba, my Advisor, was really critical in
- 2 pulling that together, the discussion.
- 3 The last two meetings actually was focused on
- 4 hydrogen, there's been a lot of interest in hydrogen and
- 5 fuel cells. And this conversation we had a special speaker
- 6 come from AC Transit who has a long history in working on
- 7 hydrogen and fuel cells, lots of good questions and
- 8 conversation about its applicability for the ports.
- 9 I'm on the advisory committee of a new project by
- 10 the World Resources Institute. It's the electric school
- 11 bus program -- I don't know what it's called. And it
- 12 really has a really great, diverse set of advisors and it
- 13 includes actually the head of the American Federation of
- 14 Teachers who just published an op-ed in "Newsweek" calling
- 15 for electric school buses around public health and equity
- 16 issues. And with the aim of trying to unlock the
- 17 infrastructure bill, which has \$20 billion for electric
- 18 school buses.
- 19 So hoping that they can -- the lessons we have
- 20 learned in California can help inform what's happening
- 21 across the country with electric school buses. Although
- 22 California is a big target. We have the most school buses
- 23 in the country, so we're a big target as well.
- Next week is Asilomar, the Asilomar
- 25 Transportation Conference. Vice Chair Gunda has been there

- 1 before, I don't know if any of the other Commissioners have
- 2 been. It's been going on for 20-plus, 25, 30 years. I
- 3 think when I was a researcher at LBNL I went to one of the
- 4 first ones, which is strange to think how old I am. And
- 5 I've been helping Dan Sperling who's the head of the
- 6 Institute Transportation Studies organize the conference,
- 7 so that's been fun just pulling together all the different
- 8 workshops and getting speakers lined up. And I'm going to
- 9 be on the final panel trying to summarize what we are
- 10 learning.
- 11 So I think over 200 people are coming. This is
- 12 the first event I've ever been to in the COVID world with a
- 13 lot of people, so I'm slightly nervous. I'll leave my
- 14 mask on and use lots of hand sanitizer. But you know, they
- 15 have a lot of COVID-safe considerations.
- Oh, one future thing I just wanted to put on the
- 17 -- let you all know, so I'm hosting together with
- 18 Commissioner Rechtschaffen and GO-Biz Deputy Director Tyson
- 19 Eckerle a workshop on barriers to the rapid deployment of
- 20 charging infrastructure. We pulled together this because,
- 21 in part, because of the conversation that we've had with
- 22 several EVSE companies like Electrify America and EVgo.
- 23 And really trying, especially in consideration of
- 24 how much money we're going to try to get out the door to
- 25 build-out charging and hydrogen infrastructure we just want

- 1 to make sure that we're doing all we can to learn from the
- 2 community about how we can overcome unnecessary red tape
- 3 and move more swiftly.
- 4 So that's going to be October 12th. My Advisor,
- 5 Mona Badie, has been pulling that together and she's been
- 6 awesome doing all the all the planning and organizing of
- 7 it. So look forward to, in our next meeting, just telling
- 8 you what we hear and what we learned. And I think that's
- 9 it.
- 10 VICE CHAIR GUNDA: Thank you so much,
- 11 Commissioner Monahan.
- 12 So looking to Commissioner McAllister, would you
- 13 like to go next?
- 14 COMMISSIONER MCALLISTER: Sure. We had a
- 15 business meeting relatively recently, so this number two
- 16 for the month so I'll try to keep it short, and just cover
- 17 the last couple of weeks.
- 18 So I really just have to start off thanking IEPR
- 19 team just for the ongoing series of workshops. It does
- 20 draw from resources across the whole Commission, and thank
- 21 you to many of you for coming to those, of one flavor or
- 22 another, the various tracks that touch on all of our
- 23 offices. In particular I wanted to thank the Efficiency
- 24 Division just for the real proactive fleshing-out of the
- 25 building decarbonization topic.

We had a great workshop on quality inst.	allation
--	----------

- 2 of HVAC systems, which is necessarily a little bit wonky
- 3 and there's a fair amount of detail. But it is a place
- 4 where the state really does need to do better in terms of
- 5 making sure that these technologies that we're counting on
- 6 for our future decarbonization of the state really are sort
- 7 of being all they can be. And so that's a big workforce
- 8 and local government conversation that really does impact a
- 9 big swath of the economy. So really happy to be developing
- 10 solutions and really creative ideas in using technology to
- 11 help solve the quality installation problem.
- I wanted to also thank the BUILD team, Deana
- 13 Carrillo and the team in Renewables Division, that is
- 14 implementing that AB 1477 program for new low-income,
- 15 largely multifamily affordable housing. So we'll be
- 16 rolling that out early next year it looks like, but the
- 17 guideline development process is well underway. And there
- 18 was a public workshop that I just wanted to commend the
- 19 team on for just the positive feedback and just the well-
- 20 conceived workshop and the stakeholder participation that
- 21 it had engendered.
- 22 So you mentioned Asilomar, Commissioner Monahan,
- 23 so you made me feel a little old too. Because I've not
- 24 been to the transportation one, but I presented -- it
- 25 wasn't even the early days of that one -- but I think I

- 1 presented for the first time there in 1992 at the Summer
- 2 Study on Energy Efficiency in Buildings, which is also a
- 3 biannual event that happens at Asilomar, and hopefully will
- 4 again in-person soon. But that one started way back in the
- 5 I think the early '80s, maybe the late '70s, but it's a
- 6 real institution and a great forum for our issues as well.
- 7 And Asilomar really does inspire creative ideas, so it's a
- 8 great forum.
- 9 Let's see, I think I wanted to just -- well two
- 10 last things, well three quick things actually. One is that
- 11 we did have the most recent meeting for the Housing and
- 12 Climate Working Group, an interagency working group. So
- 13 that's going well, I think we're building quite a rapport
- 14 across the agencies and really starting to understand how
- 15 the synergies between the housing and energy can be
- 16 approached in a productive way. And certainly not be in
- 17 conflict, but actually be very complementary in terms of
- 18 decarbonizing our buildings.
- 19 And we're focusing on new construction for the
- 20 most part right now because those are what the housing
- 21 agencies largely do in terms of financing and sort of
- 22 working with builders to build more and etcetera, and find
- 23 ways to finance and support that construction.
- 24 Eventually we're going to roll, in the not-too-
- 25 distant future we're going to roll into existing buildings

- 1 and in particular around recent location of low-income
- 2 multifamily buildings. And incrementally, hopefully in the
- 3 not-too-distant future really expand to the breadth of
- 4 affordable housing in this state in trying to find
- 5 solutions there. So high hopes for that. It's going to be
- 6 a multiyear effort across a bunch of agencies and so I
- 7 think we're building a solid foundation for us having an
- 8 impact in the coming years.
- 9 Let's see, I will be going to the NASEO annual
- 10 meeting in a couple weeks in Portland, Maine, so that will
- 11 be my first sort of major in-person meeting. So there's a
- 12 vaccine requirement. Kudos to NASEO for putting in place a
- 13 proof of vaccination for in-person attendance there, so I
- 14 think that's a good leadership especially given the fact
- 15 that it's all 50 states and all the territories. And there
- 16 were a few different opinions about that policy but
- 17 obviously we absolutely support it. But lots of
- 18 interesting work there.
- 19 And I think I'll try to bring home some paths
- 20 ahead, particularly for offshore wind. We want to help
- 21 NASEO rekindle that discussion and plug Commissioner
- 22 Douglas and your office into that conversation in earnest
- 23 again.
- Lastly, I just wanted to mention the University
- 25 of San Diego every year has a symposium on energy and

- 1 climate. It's named after my late wife Leslie. She
- 2 started it back in the day about, I think this is the 13th
- 3 one. And it's law-focused, right? It's at the law school
- 4 in San Diego. And this year the themes are planning the
- 5 electric system for extreme weather events. And also that
- 6 aspect or that theme is on November the 5th. And then a
- 7 week later on the 12th planning energy systems to
- 8 accommodate climate solutions, going forward. And so I
- 9 think, obviously, very related themes.
- 10 But Commissioner Gunda, thank you very much for
- 11 speaking there and doing a keynote. And I'll be moderating
- 12 a session with Commissioner Houck from the PUC. So anyway,
- 13 encourage you all to check that out and staff as well, and
- 14 particularly our legal staff in the CCO's Office.
- 15 And then the USD law school has had a program at
- 16 the Energy Commission where we sort of give them a meaty
- 17 topic to dig into and then law students kind of unpack it
- 18 and bring forward solutions. So hopefully we can keep that
- 19 program going in the post-COVID area as well, it helps to
- 20 have them come up and be in-person. So anyway I wanted to
- 21 just get that on your radar screen. And that's it for me,
- 22 thanks very much.
- 23 VICE CHAIR GUNDA: And thank you so much,
- 24 Commissioner McAllister.
- 25 Commissioner Douglas?

1	COMMISSIONER DOUGLAS: Yes. Thank you Vice Chair
2	Gunda, just a couple reports from me. It's actually been a
3	pretty eventful couple of weeks since our last business
4	meeting. On the offshore wind side the Coastal Commission
5	held an informational hearing on offshore wind and on their
6	role in the upcoming leasing process. They basically do a
7	consistency determination at the leasing stage and again
8	after projects are proposed and there's been a more
9	detailed environmental review of those projects.
10	So we worked very closely with the Coastal
11	Commission staff and other state agency staff to be part of
12	a joint-agency presentation to the Coastal Commission to
13	let the Commissioners get a sense of what's coming their
14	way. And what the state agencies are doing collaboratively
15	to be prepared for the informational needs and outreach and
16	stakeholder engagement and other parts of that process. So
17	that was on September 9th. And we actually submitted a
18	joint state agency letter, or two of them, to the Bureau of
19	Ocean Energy Management on the 10th and related to the
20	leasing process. And so that's moving forward as
21	predicted, and so BOEM and the state will be working
22	together to talk through next steps and get a better sense
23	of how we interface in the next stages of that process.
24	More recently, 8525 passed and that calls on the
25	Energy Commission to it passed and was signed by the

- 1 Governor. And so that calls on the Energy Commission to
- 2 pull together a strategic plan for offshore wind
- 3 development in California, looking longer term, setting in
- 4 place a planning goal for offshore wind, and then working
- 5 with agency partners and with stakeholders on a whole suite
- 6 of issues and opportunities around offshore wind in
- 7 California. So we are gearing up to do that and working
- 8 with our agency partners to talk through who does what and
- 9 how we pull this effort together. We're very much excited
- 10 about this opportunity.
- And at the same time we have also gotten to the
- 12 next stage of the SB 100 build-out process, which is
- 13 related. In that process the Energy Commission,
- 14 Commissioner Gunda and I in particular here, are working
- 15 with the Public Utilities Commission and the Independent
- 16 System Operator and other partners. To really look at, to
- 17 take the SB 100 report and really look at what that
- 18 portfolio or what the scenario is, what the build-out could
- 19 look like on the ground in-state and out-of-state, so that
- 20 we can start laying the groundwork for success in the
- 21 broader endeavor of meeting our long-term climate and
- 22 energy goals. And also ensuring that this long-term
- 23 thinking is available to inform midterm and even near-term
- 24 decisions as California really ramps up procurement and
- 25 starts to look hard at where transmission is needed.

1	So we put out a starting point document that
2	builds on the core scenario in the SB 100 report and
3	modifies it in a couple key ways in order to form what we
4	view is a really informative and helpful place for the
5	Independent System Operator to begin and develop a 20-year
6	transmission outlook. And that longer-term transmission
7	outlook is very valuable because it looks at where we might
8	need to build larger amounts of resources. And of course
9	it gives us the opportunity to see how multiple large
10	projects might interact with each other. Or to see how gas
11	retirements in some areas interact with batteries and
12	renewable energy coming online in other areas and other
13	ways too. What are the ways to make that system work
14	effectively together.
15	So the Independent System Operator had its
16	initial public workshop on a number of topics, but they
17	touched on the starting point document and the 20-year
18	transmission outlook. And Commissioner Gunda and I have
19	been engaged in any number of stakeholder calls and
20	meetings to just walk people through the starting point
21	document and what it means and what it doesn't mean. And
22	how it's going to be used in the transmission planning
23	context in the 20-year transmission outlook. And how we
24	hope to use it to touch off a number of more detailed land-
25	use conversations, from engagement with local governments

- 1 to engagement around questions of just looking at statewide
- 2 renewable energy opportunities and constraints to some more
- 3 I think regional, specific focus areas.
- 4 You know, what does it take to realize some of
- 5 the potential that we see in the San Joaquin in light of a
- 6 number of converging factors there? What does it take and
- 7 how should we think about approaching additional
- 8 opportunities in the desert, what about the northern
- 9 Sacramento Valley region? And what's the role of in-state
- 10 and out-of-state wind and how does offshore wind fit in?
- 11 And this is where it interacts, of course, with the
- 12 strategic plan for offshore wind, because different amounts
- 13 of offshore wind the starting point assumes 10 gigawatts of
- 14 offshore wind. If we have less we'll need more land-based
- 15 resources if we have more we'll need fewer.
- And so it's all very closely related and it's all
- 17 exciting work and getting very real right now, because
- 18 these are not resources that will appear overnight. We're
- 19 really talking about laying the groundwork for a very large
- 20 build-out that will take time to get in place. It'll take
- 21 time to think through and implement the transmission needs.
- 22 It'll take time to get projects procured and constructed,
- 23 and providing energy to renewable and clean energy to the
- 24 grid.
- 25 So it's the kind of process that does require

- 1 long lead times. And it's good to be looking this long-
- 2 term and able to connect it to nearer term decisions. So
- 3 that's what's been keeping me particularly busy in the last
- 4 month or so and it's been great. I want to thank a large
- 5 team in the STEP Division and also EAD that's been
- 6 supporting these efforts.
- 7 And I think that's all I've got for -- actually
- 8 no, I've got one more thing for today. I also wanted to
- 9 brag that I am up-to-date on all of my mandatory trainings
- 10 for the state of California. It is September and I'm done,
- 11 so I just wanted to make that clear. Thanks very much.
- 12 VICE CHAIR GUNDA: Thank you, Commissioner
- 13 Douglas. Thanks for the reminder on the training. We'll
- 14 get to that.
- 15 So I think that we are really glad that Chair
- 16 Hochschild was able to join, so I want to go to Chair
- 17 Hochschild next.
- 18 CHAIR HOCHSCHILD: Hey guys, well I am so sorry
- 19 to be so late. I joined just for the Commissioner updates,
- 20 but I feel like I've been in the entire Commission meeting,
- 21 so that's great. I just wanted to say again we have such
- 22 an amazing group of Commissioners at the Energy Commission.
- 23 I am so grateful for that every day, all the commitment and
- 24 hard work on so many different fronts.
- I had hoped to be able to swear in formally Vice

- 1 Chair Gunda this morning, but we will reschedule that. I
- 2 wanted to just begin by say the reason I wasn't able to
- 3 join the meeting. As some of you know, a family I've been
- 4 very close to for last 20 years, the Quinto family lost
- 5 their son Angelo on December 23rd with an incident with the
- 6 Antioch police using a knee-to-the-neck hold. And I've
- 7 been very, very involved with the (indiscernible) life
- 8 outside of Energy Commission work on pushing for some
- 9 reforms, the biggest of which is the Angelo Quinto Act,
- 10 which is AB 490. And that got signed I'd have to say by
- 11 the Governor in Los Angeles just this morning.
- 12 So I'm here with Senator Bradford and Senator
- 13 Holden, the Attorney General Rob Bonta, the Governor and
- 14 some others. And that was in a position with asphyxia
- 15 holds in California, along with a bunch of other reform
- 16 legislation that got signed today. So a very emotional
- 17 morning and I appreciate your understanding for me to be
- 18 there for that.
- I did want to share a couple energy-related
- 20 updates. Probably the most exciting thing was I guess the
- 21 beginning of last week I dedicated a new Tesla factory in
- 22 California, it's in Lathrop. It is a battery factory. A
- 23 massive building, 800,000 square feet, just building
- 24 utility-scale and commercial-scale lithium-ion batteries
- 25 for energy storage. They will provide between 1,000 and

- 1 2,000 jobs. They're sold out all the way through 2022 and
- 2 a half of '23, so a good indication of where the storage
- 3 market is going with the increasing demand that we're
- 4 seeing. And just exactly the kind of thing that we're
- 5 working towards, this vision with Lithium Valley building
- 6 up the whole lithium ecosystem. And it ties very directly
- 7 to the work we're doing, Commissioner Douglas and I and
- 8 others, on building up lithium recovery in the Salton Sea.
- 9 And we're trying to track back more manufacturing.
- 10 We'll be doing an event on October 6th with about
- 11 a dozen other battery companies, working with them on what
- 12 do they need to scale up in California. And we will be
- doing this \$250 million EVP manufacturing grants. We'll be
- 14 able to put battery manufacturing as part of that so
- 15 there's some new resources, together with CAEATFA money and
- 16 other sources. And we hope to be doing a lot more of these
- 17 kind of dedications, so that was a really exciting moment
- 18 last week.
- I especially wanted to thank Le-Quyen and Liz
- 20 Gill and Vice Chair Gunda and others who worked on this 60-
- 21 day report, which I sent that in I guess two nights ago.
- 22 This was completed and sent by staff, together with our
- 23 colleagues at the PUC and CAISO, etcetera and CARB to the
- 24 Governor's Office. And I just wanted to recognize all the
- 25 hard work. We had promised to get that in within 60 days

- 1 and we did that, and there was a lot of late nights and
- 2 weekends, so really appreciate and recognize all that.
- 3 Good meeting yesterday with the Department of
- 4 Navy and we're going to be doing an MOU signing ceremony in
- 5 the coming months to continue the really robust
- 6 relationship we've had pioneering clean energy
- 7 technologies, electric vehicles and others with the
- 8 military in California. I want to thank my military
- 9 advisor, Mike Gravely, Le-Quyen came with me for that as
- 10 well. And we put in altogether about \$50 million over the
- 11 years into all these clean energy technologies in
- 12 collaboration with the military. And that I think is a
- 13 great opportunity to set some models and examples that can
- 14 be adopted elsewhere around the country, so I'm really
- 15 proud of that pioneering work and grateful for that
- 16 relationship.
- 17 And then finally I just wanted to say I'm sorry I
- 18 missed Elliott Mainzer from CAISO today, but I was able to
- 19 spend three or four days with him at a conference, the
- 20 MIFIC Conference (phonetic) up in Washington state. And
- 21 what a pleasure it's been to have him on board at CAISO,
- 22 and just a great partner as we move to advance reliability
- 23 and decarbonization and affordability together. So it's
- 24 been a wonderful and very, very close working relationship
- 25 with Elliott since he's been on (indiscernible).

- 1 With that I think I will stop there and pass it
- 2 back to you.
- 3 COMMISSIONER GUNDA: All right, thank you. Thank
- 4 you, Chair. So I'm just going to provide my updates. And
- 5 it's been a pretty long two-and-a-half weeks since the
- 6 business meeting, and it seems to be a lot of things that
- 7 happened.
- 8 Before I start off I just want to note some
- 9 personal stories that Chair Hochschild and Commissioner
- 10 McAllister noted in their comments. And as just the Chair
- 11 mentioned I'm incredibly thankful for this group of
- 12 Commissioners and colleagues, where we can talk about these
- 13 things and be able to connect. And thank you, Chair
- 14 Hochschild, for your work on that, for bringing your heart
- 15 out to help move that forward and being there to support
- 16 the Governor today.
- 17 And Commission McAllister, it's always hard to
- 18 remember that hardship that you had in your life. And I
- 19 just as a colleague and a friend want to just note a
- 20 continued kind of love and support for you as you kind of
- 21 tackle life's events, and so thank you.
- 22 So with that I will go into my updates. It's
- 23 been an interesting couple of weeks of learning for me
- 24 through opportunities to speak. I feel like every time I
- 25 speak at an event there's an opportunity for me to really

- 1 think through what is it that we are trying to do here and
- 2 kind of the message becomes better. And also, as I note,
- 3 have kind of the feedback from stakeholders and colleagues
- 4 elsewhere to help kind of move the conversation forward.
- 5 So I did a couple of interviews with "Politico."
- 6 I just want to thank Lindsay Buckley for helping me. The
- 7 interviews were around reliability and what happened this
- 8 summer. It's kind of course, kind of a look-back on summer
- 9 2021. And that was an interesting conversation to have to
- 10 really kind of try and summarize what we've been going
- 11 through over the last 18 months.
- 12 And then I had an executive roundtable with
- 13 Silicon Valley Leadership. And then specifically it was a
- 14 really good conversation, a number of DER providers. And
- 15 specifically, behind-the-meter Tesla, Google, a number of
- 16 companies were there. And a couple of important things
- 17 came up which I'm hoping to continue the conversation with
- 18 them, which is the NEM 3.0 and the implications came up in
- 19 those conversations. And also the CSLB decision, a recent
- 20 decision to restrict the installation of storage devices
- 21 through C-10 licensed holders, generally kind of was an
- 22 important aspect. So I'm hoping to continue this
- 23 conversation and learn more and see how we are able to
- 24 support in the overall goals of the state. And also there
- 25 was a lot of issues that were raised around just general

- 1 barriers to DER integration and how do we work through
- 2 those issues.
- I also had a chance to speak at the annual
- 4 meeting of the Independent Energy Producers, specifically
- 5 providing the SB 100 vision. And one of the things that's
- 6 really coming to me is that as we move towards this SB 100
- 7 goal it's really foundational for us to think through two
- 8 particulars, the reliability and equity, and how do we
- 9 really reinforce them in every conversation, every work
- 10 that we do as we march towards SB 100 goals.
- I also had a chance to attend the high DER
- 12 (phonetic) workshop that Commissioner Houck kicked off at
- 13 CPUC. Extremely impressed with the body of work that CPUC
- 14 is planning to do in the Version 2.0, because the overall
- 15 outlook, overall planning for the DER. In that workshop,
- 16 our staff specifically Erik Lyon and David Erne, made a
- 17 presentation on some of the work we have been doing on both
- 18 the data gathering for DER, but also generally some of the
- 19 variables results that they have been able to summarize.
- 20 Talking to DER providers and some of these companies that
- 21 are able to do modeling on DER data and on how best to
- 22 create value for DERs moving forward. It was really,
- 23 really well received and I was incredibly impressed with
- 24 the presentation. Also I want to note Tom Flynn and Hilary
- 25 Poore of EAD who have been working on that particular work.

1 I	was	able t	to,	and I	had	the	opportunity	to

- 2 attend or visit my first wind energy center, the first wind
- 3 farm ever. So at the ribbon-cutting given for the Scott
- 4 Haggerty Wind Energy Center, the East Bay Community
- 5 choice's new kind of repower. It was a really great
- 6 conversation, impressed to see the repower looking at
- 7 developing, or repowering with new state-of-the-art wind
- 8 turbines that are resistant to wildfires which was really
- 9 great to see that and hear from them.
- I also had a chance to speak to the Association
- 11 of California Water Agencies Committee yesterday,
- 12 specifically looking at the opportunities for the water
- 13 agencies to support reliability. It was a really good
- 14 conversation. There's a lot of interest from the water
- 15 agencies, and I really want to commend their work and also
- 16 their proactive thinking on how best to support
- 17 reliability. We are hoping to develop a roundtable with
- 18 them to follow through and have those conversations. Some
- 19 of this work I'm able to do with Chair Hochschild and some
- 20 of them with Commissioner Douglas. And I thank both of
- 21 them for their kind of commitment and leadership in
- 22 convening these roundtables.
- 23 And then finally, as the Chair noted, in the
- 24 Emergency Proclamation Governor Newsom specifically called
- 25 for a report to be developed by CEC in consultation with

- 1 CARB, CPUC as well as CAISO to look at some of the actions
- 2 that we can take to accelerate SB 100 efforts.
- 3 Again, thanks to the staff work specifically Liz
- 4 Gill, Le-Quyen Nguyen, Aleecia Gutierrez as well as Terra
- 5 Weeks from the Chair's office for leading that effort and
- 6 putting that together. It was an interagency effort. And
- 7 then we were able to submit on time, even though it was
- 8 11:00 p.m. The Chair was able to send the email on time on
- 9 the 60th day. And really look forward to feedback from the
- 10 Governor's Office and continue to move some of the things
- 11 that are identified in that report.
- 12 CHAIR HOCHSCHILD: (Overlapping colloquy.) In
- 13 college I had some papers that were due at 5:00 o'clock
- 14 that I turned in at 4:59, so it felt like that. Yeah.
- 15 (Laughter.)
- VICE CHAIR GUNDA: And so just on the BUILD I
- 17 mentioned earlier today that you know we launched a new
- 18 product, which is the California, Reliability Outlook that
- 19 we're going to continue to do within the IEPR. You know,
- 20 just as we continue to develop the body of work we have
- 21 another bill, a Stern bill, SB 423, on firm zero-carbon
- 22 resources. And the bill requires CEC in consultation with
- 23 PUC, CAISO and CARB to submit that to the Legislature as a
- 24 part of IEPR, an assessment of firm zero-carbon resources
- 25 that support a clean, reliable and resilient electric grid.

- 1 So it's just a body of work that's coming
- 2 together, similar to what we're doing on the building
- 3 decarbonization that Commission McAllister is leading. I
- 4 think we're beginning to see a lot of different products
- 5 all coming together into this reliability and resiliency
- 6 framework for the near, mid, and long term.
- 7 You know, as Commissioner Douglas noted, she kind
- 8 of provided a lot of information on the SB 100. I just
- 9 want to commend Commissioner Douglas's ability to pull
- 10 together stakeholders and advance the conversation on the
- 11 SB 100 implementation. The more I hang out with her the
- 12 more I shout-out her. I really began to learn the
- 13 importance of this long lead-term planning.
- 14 And I just want to reemphasize the scale at
- 15 which, for example, Liz presented today. The 11,500
- 16 megawatts of new NQC required by CPUC translates to 25,000
- 17 megawatts of nameplate capacity. That's just
- 18 unprecedented, that's over the next five years. And we are
- 19 looking at an 80,000-megawatt system in California and then
- 20 we're adding 25 to that in less than five years. And we
- 21 have to continue to do that over and over and over and to
- 22 really think through the interconnection issues, the
- 23 permitting issues it's really important that we streamline
- 24 and have the ability to deploy them at scale that they are
- 25 looking for.

1 And I think the work th	nat Commissioner Douglas
---------------------------	--------------------------

- 2 and I am able to work with Commissioner Douglas on in terms
- 3 of the SB 100 implementation, I think, will be key to that
- 4 work.
- 5 So those are all the reports. I want to thank
- 6 everybody in the team, and then specifically Liz Gill so
- 7 that she is able to get a little bit of a break from all
- 8 this work.
- 9 With that we will move -- I don't know if anybody
- 10 has any other comments. If not I'll just move to the next
- 11 item.
- Okay, seeing none, so with that we already
- 13 covered Item 6 the Executive Director's Report so I'm going
- 14 to go on to Item 7 the Public Advisor's Report.
- MS. GALLARDO: Hi, there. This is Noemi, the
- 16 Public Advisor. I do not have a report, but just want to
- 17 say yay for a smooth meeting we've had. And also for the
- 18 win, maybe even I'd say victory of justice that Chair
- 19 Hochschild mentioned earlier.
- 20 And with that Vice Chair I could move on to Item
- 21 Number 8, Public Comment to provide instruction if you're
- 22 ready for that.
- 23 VICE CHAIR GUNDA: Yes, please. Thank you.
- MS. GALLARDO: Of course. So this is the period
- 25 for any person wishing to comment on information items or

- 1 reports of the meeting agenda or any other item. Each
- 2 person has up to three minutes to comment and comments are
- 3 limited to one representative for organization. We may
- 4 reduce the comment time depending on the number of
- 5 commenters.
- 6 Use the raise hand icon to indicate your interest
- 7 in making public comment. If you're on the phone press *9
- 8 to raise your hand and *6 to unmute. After you are called
- 9 on please restate and spell your first and last names,
- 10 state your affiliation if you are representing a tribe,
- 11 agency, organization or any other entity. Do not use the
- 12 speakerphone when talking because we won't hear you
- 13 clearly.
- 14 All right that's the end of the instructions.
- 15 And I'm going to look for hands. I do not see any, Vice
- 16 Chair Gunda, we may proceed.
- 17 VICE CHAIR GUNDA: Thank you, Madam Public
- 18 Advisor.
- 19 With that let's go to Item Number 9, Chief
- 20 Counsel's Report.
- 21 MS. BARRERA: Good morning Commissioners. The
- 22 Chief Counsel does not have a report this morning, thank
- 23 you.
- 24 VICE CHAIR GUNDA: Thank you.
- Unless any other Commissioners have anything else

1	to comment on? I'm seeing none.
2	With that thanks everyone for being here today
3	and helping me walk through my first iteration of this.
4	Thank you, Chair, for having me lead this today. And with
5	that I will adjourn the meeting.
6	CHAIR HOCHSCHILD: Thank you so much, thanks
7	everybody.
8	(The Business Meeting adjourned at 11:58 a.m.)
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

REPORTER'S CERTIFICATE

I do hereby certify that the testimony in the foregoing hearing was taken at the time and

place therein stated; that the testimony of said witnesses were reported by me, a certified electronic court reporter and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

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

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of October, 2021.

-----Ing Ray

TROY RAY CER-369

TRANSCRIBER'S CERTIFICATE

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

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

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of October, 2021.

1222

Myra Severtson Certified Transcriber AAERT No. CET**D-852