DOCKETED			
Docket Number:	19-BUSMTG-01		
Project Title:	019 Business Meeting Transcripts		
TN #:	226347		
Document Title:	Transcript of 01092019 Business Meeting		
Description:	N/A		
Filer:	Cody Goldthrite		
Organization:	California Energy Commission		
Submitter Role:	Commission Staff		
Submission Date:	1/22/2019 8:47:01 AM		
Docketed Date:	1/22/2019		

BUSINESS MEETING

BEFORE THE

CALIFORNIA ENERGY COMMISSION

In the Matter	of:)
)19-BUSMTG-01
Business	Meeting)
)

CALIFORNIA ENERGY COMMISSION

THE WARREN-ALQUIST STATE ENERGY BUILDING

ART ROSENFELD HEARING ROOM - FIRST FLOOR

1516 NINTH STREET

SACRAMENTO, CALIFORNIA 95814

WEDNESDAY, JANUARY 9, 2019
10:00 A.M.

Reported by: Susan Palmer

APPEARANCES

Commissioners

Robert Weisenmiller, Chair Karen Douglas Janea Scott Andrew McAllister David Hochschild

Staff Present: (* Via WebEx)

Drew Bohan, Executive Director
Kourtney Vaccaro, Chief Counsel
Lisa DeCarlo, Staff Attorney
Kristen Driskell, Efficiency Division
Jackie Moore, Staff Attorney
Leonidas Payne, Energy Commission Project Manager
*Jared Babula, Staff Attorney
Erik Stokes, Energy Deployment and Market Facilitation
Office
Alana Mathews, Public Adviser

	Agenda	Item
Lisa DeCarlo Susan Cochran	2 2	
Mary Dyas	3	
Alejandro Galdamez Nick Fugate	4 5	
Al Alvarado Rachel Salazar	6 7	
Joshua Croft	8	

Others Present (* Via WebEx)

Interested Parties

Robert Sarvey, Helping Hand Tools	2
Scott A. Galati, DayZen LLC representing	g 2
Vantage Data Centers	
Spencer Myers, Vantage Data Centers	2
Eric Poff, Sacramento Municipal Utility	3

APPEARANCES (Cont.)

Others	Present	(*	Wia	WebEx)
OCHETS	LTCDCIIC	(νта	$M \subset D \cap V$

Interested Parties (Cont.)

District, SMUD				
Joseph Schofield, SMU	JD			3
Tenley Ann Dalstrom,	California	Clean	Energy	8
Fund, CalCEF				

Public Comment (* Via WebEx)

Michelle E. Chester, Somach Simmons & Dunn, P.C.	4
on behalf of Atlas Copco North America LLC	
Charles J. Kim, Southern California Edison	4
*Chris Knuffman, Quincy Compressor	4
Bryan Boyce, PE, Energy Solutions	4
Delphine Hou, California Independent System	5
Operator, CAISO	
* Simon Baker, California Public Utilities	5
Commission	

I N D E X

				Page
Proc	oceedings			8
Item	ems			
1.	CONSENT CALENDAR			9
	a. ALLIANCE TO SAVE ENERGY			
	b. THE REGENTS OF THE UNIVERSITY OF ON BEHALF OF THE DAVIS CAMPUS	CALIFORNIA		
	c. INVESTMENT PLAN UPDATE FOR THE A			
2.	SMALL POWER PLANT EXEMPTION FOR THE MOBACKUP GENERATING FACILITY PROJECT (1)		49,	86
	a. Possible closed session deliberation described petition for reconsideration [Government Code Section 11126(c)(3)]			63
3.	CAMPBELL COGENERATION PROJECT (93-AFC	-03C)		10
4.	APPLIANCE EFFICIENCY REGULATIONS RULES COMMERCIAL AND INDUSTRIAL AIR COMPRES			15
	a. NEGATIVE DECLARATION FOR THE PRO- EFFICIENCY REGULATIONS FOR COMME- INDUSTRIAL AIR COMPRESSORS			
	b. APPLIANCE EFFICIENCY REGULATIONS AND INDUSTRIAL AIR COMPRESSORS	FOR COMMERCIAL		
5.	CALIFORNIA ENERGY DEMAND UPDATED FORE	CAST, 2018-2030		34
6.	CALIFORNIA PUBLIC UTILITIES COMMISSION	N AGREEMENT		65

7.			RAPID INNOVATION DEVELOPMENT TO GREEN RIDGE)	69
	a.	LUCE	NT OPTICS, INC.	
	b.	UBIQ	UITOUS ENERGY, INC.	
	С.	HELI	OTROPE TECHNOLOGIES, INC.	
	d.	GLIN'	T PHOTONICS, INC.	
8.	CALI	FORNI	A CLEAN ENERGY FUND DBA CALCEF VENTURES	78
	a.	CalS	EED Initiative (2018 Prototype Awards)	
		i.	CodeCycle LLC, Oakland, California, Expanding Coverage of Advanced Compliance Technology	
		ii.	Nativus, Solana Beach, California, Hyper-Efficient Rotary Air Conditioner	
		iii.	PowerFlex Systems Inc., Los Altos, California, Optimal Load Sharing of DCFC and Level-2 Charging at Work	
		iv.	Sepion Technologies, Emeryville, California, EV BOOST (Electric Vehicle - Battery Optimization Opportunities for Sustainable Transportation)	
9.	Minu	tes		8 9
10.	Lead	Comm	issioner or Presiding Member Reports	8 9

11. Chief Counsel's Report

- a. Pursuant to Government Code Section 11126(e), the Energy Commission may adjourn to closed session with its legal counsel to discuss any of the following matters to which the Energy Commission is a party:
- i. In the Matter of U.S. Department of Energy (High Level Waste Repository) (Atomic Safety Licensing Board, CAB-04, 63-001-HLW); State of California v. United States Department of Energy (9th Cir. Docket No. 09-71014)
- ii. Communities for a Better Environment and Center for Biological Diversity v. Energy Resources Conservation and Development Commission, and California State Controller, (Alameda County Superior Court, Case No. RG13681262)
- iii. State Energy Resources Conservation and Development Commission v. Electricore, Inc. and ZeroTruck (Sacramento County Superior Court #34-2016-00204586)
- iv. Natural Resources Defense Council, Inc., et al.
 v. United States Department of Energy (Federal
 District Court, Northern District of California,
 #17-cv03404).
- v. City of Los Angeles, acting by and through, its Department of Water and Power v. Energy Commission (Los Angeles Superior Court, Case No. BS171477).
- vi. State Energy Resources Conservation and Development Commission v. City of San Jose, JUM Global, L.L.C. (Sacramento Superior Court, Case No. 34-2018-00230652).

11.	Chief Counsel's Report (Cont.)	96
	b. Pursuant to Government Code section 11126(e), the Energy Commission may also discuss any judicial or administrative proceeding that was formally initial after this agenda was published; or determine whether facts and circumstances exist that warrant the initial of litigation, or that constitute a significant exposto litigation against the Commission.	r ation
12.	Executive Director's Report	96
13.	Public Adviser's Report	97
14.	Public Comment 18	3 , 43
Adjo	purnment	99
Repo	orter's Certificate	100
Tran	nscriber's Certificate	1 01

_												
1	D	D	\cap	\sim	777	777		т	N	\sim	\sim	
1	P .	_	()	ι.	г.	г.	1)		1.71	(-		

- 2 JANUARY 9, 2019 10:03 a.m.
- 3 CHAIRMAN WEISENMILLER: Good morning. Let's start
- 4 the Business Meeting with the Pledge of Allegiance.
- 5 (Whereupon the Pledge is recited)
- 6 CHAIRMAN WEISENMILLER: I was just going to start
- 7 with a couple of brief items. I think first, all of us
- 8 want to welcome the new Governor. It's exciting times.
- 9 Obviously, Governor Brown will always be in our history, in
- 10 our hearts, but we wish he and Anne well and Colusa.
- I was also going to just announce generally that
- 12 we haven't finished this IEPR but the next IEPR,
- 13 Commissioner Scott will be the lead on that. She's working
- 14 on the scoping of it. It will probably focus primarily on
- 15 transportation and equity issues. But just so everyone
- 16 knows that part.
- 17 I'm going to make a slight adjustment to the
- 18 schedule. Looking at sort of the number of attendees and
- 19 time, I'm going to shift Item 2 to after Item 5. I think
- 20 we have probably more people here for 4 and 5 than for 2,
- 21 and 2 will take a fair bit of time given a closed session.
- 22 So anyway, just giving people a heads up on the timing.
- 23 So let's start with the disclosures and then
- 24 we'll go on to Consent.
- 25 COMMISSIONER DOUGLAS: Great. Thank you, Chair

- 1 Weisenmiller. So I have two disclosures. It is this time
- 2 of year again and I'm teaching a renewable energy law class
- 3 at King Hall at UC Davis. So on Item 1b on the agenda UC
- 4 Davis is a prime contractor. On Item 7d UC Davis is a
- 5 subcontractor on that item. And neither of those items
- 6 pertain to the law school or the King Hall, but
- 7 nevertheless I wanted to make this disclosure. Thank you.
- 8 COMMISSIONER MCALLISTER: On Item 1a I'm going to
- 9 recuse myself. I'm on the Board of the Alliance to Save
- 10 Energy. And that item is directly related to that entity
- 11 and our membership there.
- 12 CHAIRMAN WEISENMILLER: Good. So let's take up
- 13 on the Consent Calendar everything but Item a, everything
- 14 but a, yeah so.
- 15 COMMISSIONER DOUGLAS: I move Consent Calendar
- 16 except for item A.
- 17 COMMISSIONER SCOTT: Second.
- 18 COMMISSIONER MCALLISTER: Second.
- 19 CHAIRMAN WEISENMILLER: All those in favor?
- 20 (Ayes.)
- 21 CHAIRMAN WEISENMILLER: So the Consent Calendar,
- 22 except for Item a is passed 5-0.
- 23 So Commissioner McAlister is leaving the room.
- 24 (Commissioner McAllister left the room.)
- 25 CHAIRMAN WEISENMILLER: So now, let's go to Item

- 1 a.
- 2 COMMISSIONER DOUGLAS: Move Consent Calendar Item
- 3 1a.
- 4 COMMISSIONER SCOTT: Second.
- 5 CHAIRMAN WEISENMILLER: All those in favor?
- 6 (Ayes.)
- 7 CHAIRMAN WEISENMILLER: This passes 4-0, with one
- 8 recusal.
- 9 So now again we're going to skip Item 2 and go
- 10 directly to Item 3.
- MS. DYAS: Good morning, Commissioners. My name
- 12 is Mary Dyas. I'm with the Compliance Office of the
- 13 Siting, Transmission, and Environmental Protection
- 14 Division.
- 15 I'm the Energy Commission Staff Compliance
- 16 Project Manager for the Sacramento Power Authority's
- 17 Campbell Cogeneration Project. And with me this morning is
- 18 Staff Counsel Lisa DeCarlo and staff is also in attendance.
- 19 Today, staff is requesting approval of a petition
- 20 to amend the Commission Final Decision for the Campbell
- 21 Cogeneration Facility to install a wet compression system
- 22 upgrade to replace and upgrade existing burners and to
- 23 increase the startup carbon monoxide emission limit to
- 24 reflect actual startup emissions.
- The 158-megawatt cogeneration project was

- 1 certified by the Energy Commission in 1994 and the project
- 2 began commercial operation in 1997. The facility is
- 3 located at 3215 47th Avenue in an unincorporated area of
- 4 Sacramento County. The project is on approximately 5.8
- 5 acres adjacent to the former Campbell Soup facility, in
- 6 which cogeneration ceased in 2016.
- 7 On November 2nd, 2018 the Sacramento Power
- 8 Authority filed a Petition to Amend with the Energy
- 9 Commission requesting to modify the Campbell Cogeneration
- 10 Project to install a Siemens wet compression system upgrade
- 11 in order to reclaim electrical production typically lost
- 12 during high ambient temperature conditions, to replace the
- 13 existing burners with upgraded Siemens HR3 burners, and to
- 14 increase the startup carbon monoxide emission limit to
- 15 reflect actual startup emissions. The modifications will
- 16 not increase either electrical generation or fuel
- 17 consumption beyond the existing license limits.
- 18 Staff determined that the technical area of air
- 19 quality will be affected by the proposed project changes
- 20 and has proposed Revised Conditions of Certification in
- 21 order to ensure compliance with laws, ordinances,
- 22 regulations and standards.
- 23 Staff recommends that four existing Energy
- 24 Commission Conditions of Certification be modified to
- 25 reflect the changes in the carbon monoxide limit. Staff

- 1 also recommends that 42 other Conditions of Certifications
- 2 be modified with administrative changes to align them with
- 3 the current permit with the Sacramento Metropolitan Air
- 4 Quality Management District.
- 5 These revisions including the modifications of
- 6 the carbon monoxide limit would not cause any additional
- 7 air quality impacts or adversely affect the ability of the
- 8 project to comply with laws, ordinances, regulations and
- 9 standards.
- 10 On January 3rd, 2019 the Sacramento Power
- 11 Authority submitted comments on staff's analysis and staff
- 12 is in agreement with the comments.
- On January 8th, 2019 an information request
- 14 letter was docketed by the Union Pacific Railroad Real
- 15 Estate Division. Staff contacted a representative of the
- 16 Real Estate Division and confirmed that the response to the
- 17 letter is only required if proposed work affects the rail
- 18 road. In this particular case, the proposed Petition to
- 19 Amend does not involve the railroad and therefore no
- 20 response is needed.
- 21 Staff has determined that the changes proposed in
- 22 the Petition to Amend comply with the requirements of Title
- 23 20 Section 1769(a) of the California Code of Regulations
- 24 and recommends approval the project modification and
- 25 associated revisions of the Air Quality Conditions of

- 1 Certification.
- 2 CHAIRMAN WEISENMILLER: Thank you.
- 3 Let's go to Applicant.
- 4 MR. POFF: Good morning. My name is Eric Poff.
- 5 I am the Manager for the Thermal Generation Assets for
- 6 SMUD. Beside me is Joe Schofield, the Deputy General
- 7 Counsel for SMUD. And on SMUD's behalf, we would just like
- 8 to thank the Commissioners for hearing the petition this
- 9 morning. We would also like to thank the CEC staff,
- 10 California Energy Commission staff for review and approval
- 11 of the petition. And we also would like thank the
- 12 Sacramento Metropolitan Air Quality Management District
- 13 staff for their review and approval of the petition.
- 14 Finally, I'd like to address the letter that we
- 15 received late yesterday from Union Pacific. I also reached
- 16 out to the point of contact with Union Pacific earlier this
- 17 morning and was informed, as CEC staff was, that the letter
- 18 is a form letter that is sent out whenever they receive a
- 19 notification. They receive approximately 5,000
- 20 notifications a year and this is their standard process.
- 21 I informed her that our project is specifically
- 22 related to the combustion turbine building. It would have
- 23 no impact on the railroad's right-of-way. And she informed
- 24 me that no further action was needed.
- We are open for any question that the Commission

- 1 may have. Thank you.
- 2 CHAIRMAN WEISENMILLER: Thank you.
- 3 Let's start with are there any comments from
- 4 anyone in the room? Any comments from anyone on the line?
- 5 (No audible response.)
- 6 CHAIRMAN WEISENMILLER: Then let's transition
- 7 over to the Commission, to the full Commission.
- 8 Commissioner Douglas?
- 9 COMMISSIONER DOUGLAS: Well, just some brief
- 10 comments. I've reviewed the materials on this proposed
- 11 amendment and I support it. I think it obviously is
- 12 important to be able to generate power that's needed during
- 13 times when air temperatures are hot and the power's really
- 14 needed. And so I think it's a valuable proposed change. I
- 15 appreciate staff's rigorous review of the air quality and
- 16 the update of the conditions to reflect that.
- 17 So I don't know if there are any other questions.
- 18 In that case I'll approval of this item.
- 19 COMMISSIONER SCOTT: Second.
- 20 CHAIRMAN WEISENMILLER: Okay. All those in
- 21 favor?
- 22 (Ayes.)
- 23 CHAIRMAN WEISENMILLER: This item passes 5-0.
- 24 Thank you.
- MR. POFF: Thank you.

1	CHAIRMAN	WEISENMILLER:	Let'	s qo	on	to	Item	4.

- 2 MR. GALDAMEZ: Okay. Good morning,
- 3 Commissioners. My name I'm Alejandro Galdamez. I work for
- 4 the Efficiency Division under the Appliances Office. I'm
- 5 here seeking adoption of the regulation for air compressors
- 6 and the negative declaration under CEQA.
- 7 I'm going to talk about what we concluded in
- 8 regards to the requirements of the California Environmental
- 9 Quality Act, CEQA.
- 10 The proposed standard will reduce electricity
- 11 consumption, criteria pollutants and other particulates.
- 12 The materials used for the manufacturer as well as the
- 13 lifetime of the covered appliances will not change due to
- 14 the proposed regulation.
- We also did not receive any comments challenging
- 16 our determination under CEOA where we determined that the
- 17 proposed regulation has no significant adverse effect to
- 18 the environment.
- 19 We therefore recommend for the Commission to
- 20 adopt the proposed negative declaration under CEQA.
- 21 Going back to the proposed standard let me first
- 22 give you some background for the regulation. The US
- 23 Department of Energy published a final rule notice on
- 24 December 5th, 2016. Unfortunately, DOE did not finalize
- 25 the process and published the proposed regulation into the

	1	Code	of	Federal	Regulations	Title	10.	And	since	the	rule
--	---	------	----	---------	-------------	-------	-----	-----	-------	-----	------

- 2 was not published and therefore not finalized, California
- 3 was not and is not preempted for setting the standard as a
- 4 state efficiency standard.
- 5 The scope of the proposed regulation is
- 6 compressors, air compressors that will -- for commercial
- 7 and industrial air compressors that are rotary, lubricated,
- 8 liquid or air cooled and have a fixed variable speed
- 9 brushless electric motor, with nominal horsepower between
- 10 10 and 200 horsepower. In addition, the air compressor is
- 11 only for those that operate under gauge pressure of 75 and
- 12 200 pounds per square inch.
- 13 The test procedure under the proposed regulation
- 14 was finalized by the Department of Energy and therefore is
- 15 incorporated by reference. It's located in the Code of
- 16 Federal Regulations Title 10, subpart T, of Appendix A.
- In addition, and in order to reduce test burden
- 18 to manufacturers, we are proposing to allow for the use of
- 19 alternative efficiency determination methods, or better
- 20 known as AEDMs for compressors. This method is also
- 21 incorporated by reference and is in the Code of Federal
- 22 Regulations, Title 10, sections 429.63 and 429.470 to be
- 23 exact.
- 24 The Energy Commission staff is proposing the same
- 25 efficiency level as the one proposed under DOE. This graph

- 1 depicts that. It's the green line right here. Any
- 2 compressor that performs on or above this green line is
- 3 basically compliant. Any compressor under the line will
- 4 have to be reengineered and cannot be offered or sold in
- 5 California.
- 6 We determined or concluded that the proposed
- 7 regulation is technically feasible since there are
- 8 compressors that currently operate above or at the
- 9 efficiency level of the previous slide.
- 10 In addition, there are technologies available for
- 11 redesign. Some of examples of this are multi-staging, air-
- 12 end improvements and auxiliary components improvement.
- 13 The Energy Commission agrees with DOE's
- 14 determination that this and other technologies are
- 15 currently available to achieve compliance to the proposed
- 16 regulation.
- To better illustrate the technical feasibility I
- 18 am including this slide for one of the four different types
- 19 of compressors that DOE studied. The graph is for a rotary
- 20 fixed-speed lubricated air cooled air compressor.
- 21 As it can be seen here, the majority of available
- 22 compressors under the scope are above the Efficiency Level
- 23 2, the blue line on the graph. I only included one graph
- 24 since all the other three compressors are similar on the
- 25 number of compressors that are already compliant to the

- 1 proposed regulation.
- 2 Energy Commission staff concluded, after
- 3 receiving some comments, that the first year electricity
- 4 savings calculated are for about 17 gigawatt hours, which
- 5 equates to \$2.4 million in savings for California.
- 6 The lifecycle annual electricity savings for
- 7 California were concluded to be around 217 gigawatt hours
- 8 per year. The annual net benefit was calculated to be
- 9 approximately 22 million with a 3 percent discount rate.
- 10 This is a net benefit to cost ratio that varies
- 11 from 2:1 to 6:1 depending on the type of compressor.
- We received in total 11 comments. Three of them
- 13 were in total support. Six of the comments supported the
- 14 regulation, but wanted some changes. We also received two
- 15 comments in opposition for the proposed regulation.
- 16 Energy Commission staff has concluded, after
- 17 considering all the comments, that the proposed standard is
- 18 technically feasible and cost effective. And recommends
- 19 the adoption of the proposed regulation by the California
- 20 Energy Commission, with a compliance date of January 1st,
- 21 2022.
- With that, I have finished my presentation and
- 23 I'm here to answer any questions.
- 24 CHAIRMAN WEISENMILLER: Thank you.
- Let's start with public comments. Michelle

- 1 Chester.
- MS. CHESTER: Good morning, Commissioners. My
- 3 name is Michelle Chester. I am with firm of Somach Simmons
- 4 & Dunn. And I'm here today on behalf of Atlas Copco North
- 5 America.
- 6 We have been an active participant in the ongoing
- 7 appliance energy rulemaking for the air compressors and
- 8 appreciate the opportunity to comment on and discuss with
- 9 staff the proposed rulemaking.
- 10 We are asking today that you postpone the vote on
- 11 this item or deny moving forward with this rulemaking as
- 12 written. We do support proposed requirements for air
- 13 compressors, but as we've commented this support is
- 14 contingent on revisions to the proposed regulatory language
- 15 to allow for the use of historical ISO 1217 test data to
- 16 certify compliance with the Energy Efficiency Standards.
- 17 The Commission's proposed rule intends to follow
- 18 federal efficiency and testing procedures, but
- 19 implementation of DOE's testing standard was suspended
- 20 before manufacturers received the clarity they needed
- 21 regarding procedures for compliance certification.
- In order to provide manufacturers that certainty
- 23 to certify compliance of their products for sale in the
- 24 California market, and to provide certainty for consumers
- 25 in the California market, we are asking that you explicitly

- 1 allow for use of historical ISO 1217 test data for
- 2 compliance certification. We do not believe this approach
- 3 would result in the sacrifice to the Commission's desire to
- 4 energy efficiency goals.
- 5 The ISO 1217 test method is widely used by
- 6 manufacturers and is proven to provide accurate readings of
- 7 a unit's energy efficiency. While the DOE test method is
- 8 based on the ISO 1217 test method, DOE test procedures
- 9 differ most significantly in that it requires testing of
- $10\,$ two units of the same model, while the ISO 1217 test method
- 11 requires testing of just one unit.
- 12 There are differences between the two test
- 13 methods. But the differences do not result in significant
- 14 differences between the data. Requiring use of DOE's test
- 15 procedures would invalidate almost all historical ISO 1217
- 16 data since older tests were run on one machine, not two of
- 17 the same model.
- 18 Additionally, the delayed operative date of
- 19 January 1st, 2022 does not provide relief to manufacturers.
- 20 Atlas Copco units manufactured before 2022 have already
- 21 achieved the desired energy efficiency levels, as shown by
- 22 prior ISO 1217 test data and methods.
- Those same models with the same level of energy
- 24 efficiency supported by ISO 1217 test methods and data
- 25 cannot be certified for sale on the California market

- 1 without the expensive and time-consuming task of retesting
- 2 those models to the federal standard without any additional
- 3 improvements in energy efficiency.
- 4 Additionally, we are concerned that staff had not
- 5 responded to Atlas Copco's comments that an important
- 6 reference to the Code of Federal Regulations has been
- 7 omitted from the proposed regulatory language. This is
- 8 specifically Section 431.343 under Title 10, concerning the
- 9 federal test methods upon which the Commission's rules
- 10 rely. Additionally, because today's vote on this item was
- 11 noticed before the close of the 45-day comment period and
- 12 before the January 3rd hearing on this matter, we're asking
- 13 that you take the time to consider any comments. And we
- 14 believe that it prematurely foreclosed any possibility of
- 15 providing 15-day language responding to these comments and
- 16 revising the language.
- 17 CHAIRMAN WEISENMILLER: Okay. Thank you.
- MS. CHESTER: Thank you.
- 19 CHAIRMAN WEISENMILLER: Charles Kim?
- MR. KIM: Thank you, Chair. Thank you,
- 21 Commissioners. I'm Charles Kim of the Southern California
- 22 Edison company.
- The proposed adoption is another example of the
- 24 CEC's leadership on energy efficiency. CEC's leadership,
- 25 therefore California's leadership on energy efficiency does

- 1 not just put regulation on a book. But it acts like a
- 2 force for market transformation.
- 3 Southern California Edison, like many other
- 4 utilities, has been incentivized in technologies including
- 5 air compressors, so that our customer has a choice of
- 6 purchasing more energy efficiency that brings savings and
- 7 that uses the energy wisely. And the proposed regulation
- 8 is going to bring more clarity to the baseline of our
- 9 incentive programs that we don't have right now. And then
- 10 it will continue act like a force for the market
- 11 transformation. The market transformation, working with
- 12 the regulatory folks with the incentive program, can
- 13 clearly bring benefits to Californians.
- 14 And the second thing that I want to mention is
- 15 that the proposed regulation is very, very cost effective.
- 16 The cost/benefit ratio is ranging from 2:1 to 6:1. That
- 17 gives an assurance that the proposed regulation will bring
- 18 benefits to our customers, therefore Californians, greatly.
- 19 That gives us assurance.
- 20 The other thing is that the proposed language is
- 21 technically feasible. If you look at the existing
- 22 compressors on the chart that your staff analyzed very
- 23 diligently, not just one or two products meet those
- 24 standards, existing products that I'm talking about, a
- 25 majority. Some of them is like 5 percent of the market,

- 1 existing data, existing products already meet those
- 2 proposed regulations.
- 3 California's (indiscernible) used proposal, which
- 4 proposed a high level efficiency. That is also cost
- 5 effective. But knowing the sensible approach the CEC is
- 6 taking, and then knowing that there's an effort that has
- 7 been taken at the DOE, and then (indiscernible) therefore
- 8 in California to bring and save the opportunities to
- 9 California that shows our leadership once again and we care
- 10 about those opportunities. And I'm very, very appreciative
- 11 for the CEC taking those leads to make this one happen.
- 12 So my commend goes to all the staff: Alex, Leah,
- 13 Chris, Kristen, and Pat Saxton to make this proposal
- 14 possible. So once again, I'm very thankful for this
- 15 opportunity. Thank you.
- 16 CHAIRMAN WEISENMILLER: Thank you.
- 17 Is there anyone else in the room with comments?
- 18 Then let's go on the line. Please, Mr. Kuffman, (phonetic)
- 19 go forward.
- MR. KNUFFMAN: Knuffman. Good morning,
- 21 Commissioners. Chris Knuffman, Quincy Compressor. We
- 22 appreciate the opportunity to comment. Quincy Compressor
- 23 makes rotary screw air compressors at our factory in Bay
- 24 Minette, Alabama. These machines are subject to the
- 25 Commission's proposed efficiency rule.

1	Quincy supports the adoption of the rule,
2	provided it is amended to allow the use of accurate data
3	from prior testing, in order to certify compliance with the
4	efficiency rule. Right now, such data cannot be used.
5	Quincy has conducted costly tests of its rotary
6	screw air compressors using the federal DOE method this
7	proposal would use to certify the compliance with the
8	California standard.
9	Since the January 4th, 2017 DOE test method was
10	published in the Federal Register, but primarily in the
11	past 12 months with a very high priority in our R&D lab,
12	Quincy has tested in excess of 60 different basic models
13	and has published DOE data on Quincy Compressor's website.
14	As many as 220 models must be shown to comply either with
15	testing or mathematical methods validated with test data.
16	Testing work to date would cost around \$240,000
17	at third-party lab rates. Even though Quincy has used the
18	correct tests and procedures, adoption of the proposed rule
19	as written would preclude the use of these tests results to
20	certify compliance. This is because no laboratory anywhere
21	has been certified by California to conduct this federal
22	test. Under current rules, it appears that no laboratory
23	can be certified until early 2020. Nor does it appear that
24	certification retroactively validates earlier test results,

24

even though there is no question about the accuracy of the

25

- 1 results.
- 2 Quincy Compressor asks that the Commission direct
- 3 the issuance of a proposed amendment to fix this problem.
- 4 Quincy asks that the Commission seek comment on the
- 5 proposed revised language presented with Atlas Copco's
- 6 December 21st, 2018 comments. Language which would
- 7 include, and allow the use of prior DOE tests or prior
- 8 industry test data from ISO 1217, on which DOE's methods
- 9 are based. That revision would add language to Section
- 10 1606 of the rule to authorize such use as accurate prior
- 11 test data for certification and validation.
- 12 Quincy understands that the adoption of such
- 13 requested language would be subject to a 15-day notice and
- 14 comment procedural requirement before the Commission can
- 15 act and make the final action on such relief.
- 16 Thank you for your time.
- 17 CHAIRMAN WEISENMILLER: Thank you.
- 18 Is there anyone else?
- MR. BOYCE: Good morning. My name is Brian
- 20 Boyce. I'm with Energy Solutions on behalf of the
- 21 California Investor Owned Utilities. Thank you very much
- 22 for the opportunity to speak.
- 23 The IOUs strongly support the proposed commercial
- 24 and industrial rotary air compressor standard before the
- 25 Commissioners. The compressor standard will be a

- 1 significant achievement as it will be one of the first
- 2 standards in the world for this equipment. The standard is
- 3 technical feasible and cost effective. The Energy
- 4 Commission estimates that the standard will save 217
- 5 gigawatt hours of energy annually by 2035, the year of
- 6 stock turnover.
- 7 The Energy Commission should require the DOE test
- 8 procedure for compressors. The test procedure was approved
- 9 through a notice and comment (phonetic) rulemaking at DOE.
- 10 DOE made significant concessions to manufacturers between
- 11 the notice and proposed rule and final rule stages. The
- 12 changes brought the test procedure in closer alignment with
- 13 the industry standard test procedure, ISO 1217. Areas
- 14 where DOE continued to deviate from ISO 1217 included more
- 15 stringent sampling requirements and tighter tolerances.
- 16 This ensures accurate ratings.
- 17 The Energy Commission also made several
- 18 significant accommodations to manufacturers during this
- 19 rulemaking process. First, the effective date was extended
- 20 from one year after adoption to nearly three years, which
- 21 is much longer than the statutory requirements of the
- 22 Warren-Alquist Act.
- 23 Second, the Energy Commission is allowing AEDMs,
- 24 which reduces the physical lab test burden for
- 25 manufacturers, a practice typically employed at the federal

- 1 level, but unusual for California.
- 2 Third, manufacturers can use old test data if
- 3 they can prove that the tests were conducted in accordance
- 4 with the newer DOE requirements. Allowing older test data
- 5 that is not DOE compliant is a risky move that could run
- 6 afoul of preemption laws at the federal level.
- Regarding the efficiency standard itself, the
- 8 Energy Commission has elected to require a scope of
- 9 products and efficiency levels equivalent to what DOE
- 10 chose, known as Efficiency Level 2.
- 11 While the IOUs recommended EL3 due to its saving
- 12 more energy, while still being cost effective, we
- 13 understand that as this is the first energy standard for
- 14 rotary compressors there is wisdom in choosing the lower
- 15 efficiency level to allow the marketplace to transition to
- 16 this new paradigm.
- 17 In summary, the Energy Commission has proposed a
- 18 technically feasible energy standard for compressors based
- 19 on the consensus-based DOE test procedure. California's
- 20 standard is based on DOE's pre-published standard, which
- 21 itself was mere days away from finalization in early 2017.
- 22 The standard will be cost effective and would result
- 23 insignificant benefits for Californians. Thank you.
- 24 CHAIRMAN WEISENMILLER: Okay. Anyone else?
- Okay. So staff, do you have any comments or any

- 1 responses to any of the comments?
- MR. GALDAMEZ: Just that DOE test, oh sorry, I'm
- 3 Alejandro again. The DOE test data that is currently
- 4 happening right now under the DOE test procedure will be
- 5 accepted for certification of the appliance. Just to
- 6 clarify, because I think there's a little confusion if DOE
- 7 test data that is -- I mean, DOE test procedure data that
- 8 is currently being analyzed, because if they're following
- 9 the DOE test procedure if that will be accepted by us. And
- 10 the answer is basically yes.
- 11 COMMISSIONER MCALLISTER: Can I ask for sort of a
- 12 deeper explanation of why Quincy's concerns that will allay
- 13 concerns that were expressed by Quincy. Because I think
- 14 there's some misunderstanding about what a certified lab
- 15 actually is, so it would be good to have some deeper
- 16 clarity on that.
- MR. GALDAMEZ: You mean the process of how we go
- 18 by certifying the lab?
- 19 COMMISSIONER MCALLISTER: Yeah. I mean, in the
- 20 common -- I mean, maybe Kristen can explain, but in the
- 21 common understanding of what a certified test lab is it's
- 22 more like a nationally certified test laboratory, which is
- 23 a much more complicated thing than what we're talking about
- 24 here. So can one of you kind of dig into that a little
- 25 bit?

- 1 MS. DRISKELL: Sure. This is Kristen Driskell.
- 2 I'm the Deputy Director of the Efficiency Division.
- 3 We require test labs to come into our database as
- 4 approved test labs. That is a different process from
- 5 industry certification as Commission McAllister noted.
- 6 What we require, among other things, is that the test labs
- 7 have conducted the applicable test procedure within the 12
- 8 months before they come in for approval. So that's the 12-
- 9 month window that Quincy is talking about if they can't use
- 10 the test results 12 months before that, what do they do?
- 11 That just says that they've run the test
- 12 procedures sometime in the last year. We're trying to
- 13 emphasize that they know how to run the test, they've done
- 14 it before. Any test results that are done according to the
- 15 test procedure, whether they occur before the test lab is
- 16 approved or after the test lab is approved, is fine for
- 17 certification to our database. And our regulations are
- 18 pretty clear on this and this is across all appliances, not
- 19 specific to compressors.
- Does that answer, help elaborate on that issue?
- 21 COMMISSIONER MCALLISTER: Yeah. And I guess the
- 22 -- what does certification mean from our perspective in
- 23 terms of it allows them to do what?
- MS. DRISKELL: To be clear we don't certify test
- 25 labs. We simply approve test labs. The requirements for

- 1 approval, I think there's five or six requirements. I
- 2 mentioned the one about having conducted the tests in the
- 3 last 12 months. They also have to certify that their test
- 4 labs are calibrated according to the appropriate test
- 5 methods and I forget all of the other requirements. I
- 6 apologize, but it's a pretty simple process. It's a simple
- 7 application to the Commission. You submit it through our
- 8 database. And then within easily one to two business days
- 9 we approve the application, unless we we're aware of an
- 10 issue with that test lab.
- 11 COMMISSIONER MCALLISTER: So I guess what I'm
- 12 trying to get at is that an industry -- an in-house testing
- 13 lab is perfectly fine, right?
- MS. DRISKELL: Yes. It's pretty common,
- 15 actually.
- 16 COMMISSIONER MCALLISTER: Yeah. So I think
- 17 hopefully you can get on same page with Quincy and allay
- 18 those fears, because it sounds like they're doing the right
- 19 thing and testing to the right procedure and will have the
- 20 right data for us.
- 21 MS. DRISKELL: Yes. If I can briefly follow up
- 22 on a couple of other comments that were made and make sure
- 23 we respond to them here. So thank you for bringing up
- 24 Quincy. That was a good response.
- 25 Atlas Copco also raised a few issues that I think

- 1 we should just touch on. They mentioned historical test
- 2 data under ISO 1217. And I just want to be clear that
- 3 manufacturers are required to submit data under penalty of
- 4 perjury to our database. And that the data that they're
- 5 submitting is based on testing that has been done in
- 6 accordance with the test procedures in Section 1604, which
- 7 is in this case the federal test procedure which we are
- 8 preempted from having a different test procedure, so that's
- 9 why we have that one in there.
- 10 If they are willing to certify that their test
- 11 data is in accordance with that test procedure in Section
- 12 1604 then we have no objection. If on the other hand, they
- 13 feel they need to retest in order to make that
- 14 certification, then that's what they will have to do. But
- 15 the burden is really on the manufacturer to make sure that
- 16 the test data they submit is in accordance with the DOE
- 17 test procedure.
- 18 They mentioned needing to test two units of the
- 19 same model. That may be true if they use an alternative
- 20 efficiency determination method. Sometimes that requires
- 21 sampling and using multiple tests of the same model or even
- 22 two different models tested. However, for our regulations
- 23 we only require testing of a single unit in order to
- 24 certify that test data to the database, for that model.
- 25 They mentioned incorporation by reference of 10

- 1 CFR Section 431.343. We don't feel it's necessary to
- 2 incorporate that specific section. That section says DOE
- 3 incorporates by reference ISO 1217. However, we
- 4 incorporated the actual test procedure in Section 431.344,
- 5 which in turn incorporates ISO 1217. So to incorporate 343
- 6 would be duplicative, so we didn't do it here. And we
- 7 haven't done it traditionally in our regulations.
- 8 And last, Ms. Chester just touched on this at the
- 9 end about having noticed this business meeting before the
- 10 end of the comment period. This is not unusual and it's
- 11 not a violation of either the APA or any due process
- 12 requirements, unless Jackie Moore tells me otherwise, but I
- 13 don't think she will.
- 14 And it's really something that we do as a matter
- 15 of course. Had we decided as staff to propose 15-day
- 16 language we could have either recommended to our Executive
- 17 Director to pull the item before the business meeting, or
- 18 come to you today and recommend that you send us back to
- 19 the 15-day language, neither of which is our
- 20 recommendation. We recommend moving forward with this
- 21 proceeding.
- 22 CHAIRMAN WEISENMILLER: Okay. So let's
- 23 transition to the discussion by the Commissioners.
- 24 Commissioner McAllister?
- 25 COMMISSIONER MCALLISTER: So thanks for that last

- 1 point. I was going to make it as well, and we'll just I
- 2 think reiterate for emphasis that if we don't make any
- 3 changes to what's already out there for 45-day then we
- 4 don't need that extra time. It doesn't mean we haven't
- 5 listened, right? We have listened and we've considered and
- 6 that will be reflected in all the forthcoming
- 7 documentation.
- 8 But if we're going to make changes then we have
- 9 to extend. And so I guess really the question is whether
- 10 these two test procedures are or are not equivalent. And
- 11 it sounds like we, even Atlas doesn't think they are, and
- 12 so it's pretty clear we have to use a new one. So I don't
- 13 really see what if anything would change with more time.
- 14 Industry has not put that sort of information in the
- 15 record. And it seems that based on the statement they
- 16 would not. So given that I think we should move forward,
- 17 because this is the way it will end up. Any comments on
- 18 this?
- 19 COMMISSIONER DOUGLAS: No. I found the
- 20 discussion helpful though and appreciated staff's responses
- 21 to the issues raised.
- 22 COMMISSIONER MCALLISTER: Yeah. And I want to
- 23 just emphasize before the vote, the process is the
- 24 lifeblood of this. And so I want to emphasize again that
- 25 all the information that industry has at its disposal ought

- 1 to be put into the record if industry thinks that it's
- 2 going to affect -- or anybody, any stakeholder -- that it's
- 3 going to affect the outcome.
- 4 So I just seem to do this every time we vote on
- 5 an appliance standard, but it all gets listened to and it
- 6 all gets read and it all gets treated. So whether
- 7 everybody doesn't have to agree and sing Kumbaya at the
- 8 end, but that is the process. And so if folks want a
- 9 different outcome they'd argue persuasively for it.
- 10 So with that, I'll move Item 4.
- 11 COMMISSIONER HOCHSCHILD: Second.
- 12 CHAIRMAN WEISENMILLER: All those in favor?
- 13 (Ayes.)
- 14 CHAIRMAN WEISENMILLER: Item 4 passes 5-0. Thank you.
- 15 Let's go on to Item 5.
- MR. FUGATE: I believe I have a presentation. So
- 17 good morning, Commissioners. My name is Nick Fugate. I'm
- 18 with the Energy Assessments Division and I'm here today to
- 19 propose adoption of an update to the California Energy
- 20 Demand Forecast for 2018 to 2030. The forecast was
- 21 originally adopted in February of 2018, and the update I'm
- 22 presenting here reflects changes we have observed in the
- 23 past year. Because our forecast is a biennial process, and
- 24 because it is used by many agencies in annual planning, we
- 25 provide these updates to ensure that planners are working

- 1 with current projections.
- 2 At the very highest level the demand forecast,
- 3 which answers questions about how much electricity we need,
- 4 when and where we need it, lays the foundation for a whole
- 5 host of state-sponsored planning activities aimed at
- 6 keeping California's electricity reliable, affordable, and
- 7 environmentally responsible. And more specifically, it
- 8 feeds into resource planning at the CPUC to ensure that
- 9 ratepayer dollars are invested where, and only where, they
- 10 are needed; and also into transmission studies at the ISO
- 11 to identify necessary or economic infrastructure
- 12 investments. And lastly, the forecast provides important
- 13 information for setting and tracking progress toward the
- 14 state's energy and climate goals.
- 15 For past updates we refreshed only the economic
- 16 and demographic projections that drive our forecast leaving
- 17 most everything else unchanged. But electric vehicles and
- 18 behind-the-meter PV are expected to have an increasingly
- 19 significant impact not just on total energy demand, but on
- 20 the shape of that load and how it rises and falls in a
- 21 given day, month, or year. And so for this update not only
- 22 have we refreshed our projections of these load modifiers,
- 23 but we have improved our hourly model in order to better
- 24 assess their impacts.
- 25 And now that we have this hourly model, and

- 1 because monthly peak loads are an important consideration
- 2 for resource adequacy, we are proposing now to adopt for
- 3 the first time a monthly peak forecast for the California
- 4 ISO and individual IOU planning areas.
- 5 And we first introduced the hourly forecast last
- 6 year as a tool for assessing the impact that a shifting
- 7 peak hour, caused by significant penetration of EVs, PV,
- 8 efficiency, and time-of-use rates might have on peak
- 9 demand. It's an important tool, but our initial attempt
- 10 had a couple issues.
- 11 First, we patterned the hourly forecast after a
- 12 specific but relatively average year, an average weather
- 13 year. But even an average year has unusual highs and lows,
- 14 and those peculiarities carried through the forecast
- 15 period.
- Second, we used different years for different IOU
- 17 planning areas, so that when you added them up to analyze
- 18 the ISO as a whole the loads didn't behave as you'd expect,
- 19 so there was a coincidence issue.
- 20 So for this update, staff developed a new method
- 21 for assigning loads to particular hours. Rather than using
- 22 a specific year we used average historical loads by day
- 23 type like the first Tuesday in April or the third Saturday
- 24 in October, for example. And then we made adjustments, so
- 25 that when you take a step back and look at a particular

- 1 month or year you see the kind of variance you'd expect to
- 2 see. We tested this new method against historical loads
- 3 and found that it produces reasonable peaks. And because
- 4 we're no longer using distinct years the coincidence issue
- 5 is resolved.
- 6 Now say for example, peak load on a system
- 7 happens at 5:00 o'clock. That peak is going to be whatever
- 8 customers are using minus whatever load is still being
- 9 served by behind-the-meter PV at 5:00 p.m. In the summer
- 10 months that's a fair amount. If we forecast out ten years
- 11 just assuming that that peak will continue to happen at
- 12 5:00 p.m. then we'll still be assuming that PV is
- 13 significantly reducing peak load.
- But as you go further out, load modifiers, they
- 15 start to change the shape of the load and they push the
- 16 peak hour further into the evening. So say by the end of
- 17 the forecast the peak is happening at 7:00 p.m. and PV
- 18 output is little to none at that time. And if we include
- 19 those original peak reductions from behind-the-meter PV,
- 20 the ones we determined based on a assumed 5:00 p.m. peak
- 21 hour, then we would be under-forecasting peak.
- Our hourly model lets us forecast a more
- 23 reasonable long-term peak. And as you can see here the
- 24 peak shift impact on the ISO system that I'm talking about
- 25 is over 5,000 megawatts by 2030.

1 Establishing reasonable projections for mon

- 2 peaks is an important step in ensuring that we have
- 3 adequate resources available to meet demand throughout the
- 4 year. Each line here represents a select year, so you can
- 5 see how peaks grow differently across different months. PV
- 6 production varies by season driving down peak load in the
- 7 summer, but allowing it to grow in the spring. This is
- 8 another example of how we're using the hourly model and why
- 9 it's important.
- 10 I'm going to transition now to more general
- 11 forecast results, but a little context. As part of every
- 12 forecast we produce a set of high, mid and low-demand
- 13 scenarios that capture assumptions, particularly around
- 14 energy efficiency policies and programs that are concrete,
- 15 so we know when and how they're going to implemented.
- 16 These are our baseline scenarios. Of course California has
- 17 some ambitious energy efficiency goals and there is a level
- 18 of savings beyond what we include in the baseline scenarios
- 19 that is still likely to occur, but there's less certainty
- 20 about what new or expanded programs might contribute to
- 21 those savings.
- 22 So we have what we call additional achievable
- 23 efficiency scenarios, which are load reductions consistent
- 24 with our baseline, but developed separately.
- I said earlier that one of the reasons we do

- 1 these updates is to refresh our economic projections, which
- 2 really drive our forecast. If there are significant
- 3 changes, if the economy takes a turn, we want to reflect
- 4 that. For this update however we're in the less exciting
- 5 situation where those economic projections have held
- 6 steady, particularly in the mid case.
- 7 So at the state level we don't see much change in
- 8 the updated forecast. More EVs drive residential growth up
- 9 a bit and there is some increased growth in the industrial
- 10 sector, but that's offset by decreases in commercial and
- 11 agriculture.
- 12 So our updated baseline sales forecast reaches
- 13 287,000 gigawatt hours by 2030, in the mid case, which is a
- 14 little more than half a percent lower than what we've
- 15 previously forecasted.
- Our baseline peak forecast in the mid case also
- 17 shows little change in growth relative to the last time.
- 18 If we'd grown these peaks out from the same starting point
- 19 in 2018 then the difference would be difficult to see. But
- 20 for the previous forecast 2018 was a projected value and
- 21 here we're using a lower value for 2018 that reflects
- 22 information we now have about what actual peak loads that
- 23 occurred last year. By 2030, our updated peak forecast is
- 24 nearly 2 percent lower, in the mid case.
- 25 For planning it's unusual to use our baseline

1	scenarios	alone.	Instead,	what	California'	s	enerav

- 2 agencies do is agree to a set of managed forecasts, a
- 3 particular baseline forecast paired with a particular
- 4 additional achievable scenario and it is the managed
- 5 forecast that agencies plan to. So for most use cases,
- 6 this includes the mid baseline scenario and a mid-
- 7 additional achievable scenario.
- 8 When the planning is local however that tends to
- 9 add another level of uncertainty, not just how much, but
- 10 where demand reductions will occur. And so a lower
- 11 additional achievable scenario is typically used.
- 12 So here you can see the impact that these
- 13 additional achievable scenarios have on reducing demand in
- 14 the baseline forecast. What amounts to a little under 1
- 15 percent annual growth in the baseline for the ISO,
- 16 translates to a relatively flat or even a declining managed
- 17 forecast.
- 18 The delta between the baseline and mid-mid
- 19 managed scenarios includes roughly 28,000 gigawatt hours of
- 20 additional achievable efficiency and over 2600 gigawatt of
- 21 additional achievable PV, which is PV that is expected in
- 22 new construction as a direct result of the Energy
- 23 Commission's most recent building standards update.
- 24 Additional achievable scenarios have a similar
- 25 impact on peak, though even in the managed cases peak load

- 1 continues to grow. This is due in part to the peak shift
- 2 impact I discussed earlier.
- 3 So one of the strengths of our forecast is that
- 4 it's grounded in a public stakeholder process. This year
- 5 we held two IEPR workshops, and a number of DAWG meetings
- 6 review inputs, assumptions, methods, and results. We
- 7 received guidance from JASC on an ongoing basis and
- 8 participated in a number of staff-to-staff conversations,
- 9 both with other agencies and with utility staff. At times
- 10 the participation was vigorous and we appreciate all the
- 11 time that stakeholders took to review our work and provide
- 12 feedback.
- Many of the formal comments we received were
- 14 forward looking, suggesting for example, a review of PV
- 15 profiles of long-term CCA growth, of time-of-use rate
- 16 impact assumptions, and of data sharing procedures. These
- 17 are all things that we will have an opportunity to take up
- 18 this year in the 2019 forecast.
- 19 We did make one adjustment to our forecast for
- 20 NCNC and that's Northern California Non-California ISO,
- 21 based on formal comments and then also based on additional
- 22 weather and load information that SMUD provided for us.
- 23 The change lowered our consumption and peak forecasts for
- 24 that planning area by several percent.
- 25 Typically our forecast is accompanied by a

- 1 narrative description, what we call our forecast report. I
- 2 want to note that we still intend to publish that report
- 3 and expect it to be available in February.
- Also, we are not presenting for adoption today
- 5 our usual set of LSE and balancing authority forms. We
- 6 hope to have some additional discussions with stakeholders
- 7 before finalizing those. And we'll make them available as
- 8 soon as possible.
- 9 We plan to kick off the 2019 forecasting process
- 10 with a workshop on January 17. This is our economic
- 11 outlook workshop.
- Next year's process will have a preliminary
- 13 revised framework, which should allow plenty of opportunity
- 14 to review inputs, assumptions, and methods with
- 15 stakeholders. Also to engage on several of the issues that
- 16 I just described.
- 17 Lastly, I'd like to thank all of the staff who
- 18 supported this forecast update. There were many, and
- 19 recognize specifically the efforts of Cary Garcia, Sudhakar
- 20 Konala, and Chris Kavalec who worked quite a few long hours
- 21 on this forecast update and also prioritized stakeholder
- 22 communication.
- 23 And so I will conclude my presentation by
- 24 recommending that the Commission adopt this update to the
- 25 California Energy Demand 2018 to 2030 Forecast.

1 CHAIRMAN WEISENMILLER: Thank you

- 2 Let's go to public comment. Let's start
- 3 obviously with comments from those in the room. CAISO?
- 4 MS. HOU: Good morning, Chair. Good morning,
- 5 Commissioners. My name is Delphine Hou from the California
- 6 ISO. And I'm here to absolutely support adoption of this
- 7 item and also to convey our sincere appreciation to the
- 8 Commission and the incredible staff for developing,
- 9 especially the hourly forecast for use in our transmission
- 10 planning processes, but also ultimately for generation
- 11 procurement.
- 12 So the hourly granularity for us is absolutely
- 13 critical in the ability to understand how we can manage the
- 14 grid reliably, so that we can meet the state's energy
- 15 policies. We really think that the forecast is incredibly
- 16 important as a core foundation for process alignment
- 17 between the Commission, the CAISO and ultimately the
- 18 California Public Utilities Commission.
- 19 So we want to actually extend our sincere thank
- 20 you to Chris Kavalec who spent many, many hours working
- 21 very closely with us, we hope that he can go on Christmas
- 22 break right after this, and also to Nick Fugate, Cary
- 23 Garcia and also Siva Gunda for his incredible leadership.
- 24 So again, thank you, and we highly support this item.
- 25 CHAIRMAN WEISENMILLER: Thank you.

- 1 Any other comments from anyone in the room? Then
- 2 let's go to the telephone line. We have Simon?
- MR. BAKER: Yes, do you hear me now?
- 4 CHAIRMAN WEISENMILLER: Yes, we can.
- 5 MR. BAKER: Thank you. Good morning, Chair.
- 6 Good morning, Commissioners. My name is Simon Baker, I'm
- 7 the Deputy Director of the Energy Division at the
- 8 California Utilities Commission. I too want to express our
- 9 support for adoption of the forecast.
- 10 As was noted in the staff presentation, this
- 11 forecast is very important for the CPUC in a number of
- 12 different resource planning processes: integrated resource
- 13 planning, distributed resource planning -- that's a new
- 14 function for the IEPR forecast in distributed resource
- 15 planning, so we're looking forward to the application of
- 16 that -- and then also in resource adequacy.
- I want to recognize the good collaboration that
- 18 we've had between the agencies. This dates back more than
- 19 a decade of really intensified collaborations. That's been
- 20 very good. And this IEPR update cycle has been no
- 21 exception. CEC staff really worked extremely hard on this
- 22 work product. It was an unusually big scope for an update
- 23 cycle. Things that are not typically done during an IEPR
- 24 update cycle, like updating the PV and EV adoption
- 25 projections, were done.

In particular, we at PUC, we appreciate the work	1	In	particular,	we	at	PUC,	we	appreciate	the	work
--------------------------------------------------	---	----	-------------	----	----	------	----	------------	-----	------

- 2 that was done to update the time-of-use assumptions. And
- 3 most importantly, the work done to produce monthly peak
- 4 forecasts, which are now based on a refined hourly model.
- 5 We appreciate that this has been brought into the IEPR
- 6 process and we anticipate using the results in our resource
- 7 adequacy proceeding.
- 8 We're aware the staff worked nights and weekends.
- 9 I want to recognize the diligent efforts of Siva Gunda,
- 10 Nick Fugate, Chris Kavalec, Cary Garcia and others.
- 11 And also just note that we really appreciate the
- 12 adherence to the schedule. As another regulatory agency
- 13 subject to the pressures of getting deliverables, complex
- 14 deliverables out on time and also taking stakeholder
- 15 comment, we know how it can be a challenge sometimes to do
- 16 that and want to appreciate the work that was done to
- 17 adhere to the schedule. So on behalf of the CPUC, I just
- 18 want to thank all of you at the Energy Commission for this
- 19 good work and we support adoption.
- 20 CHAIRMAN WEISENMILLER: Great. Thank you.
- 21 Anyone else either in the room or on the phone?
- 22 (No audible response.)
- 23 CHAIRMAN WEISENMILLER: Okay. Then let's
- 24 transition to the Commissioners. I'll say a few words and
- 25 I think Commissioner McAllister will probably have some

- 1 comments too.
- Obviously, this is one of the key Energy
- 3 Commission tasks is the Demand Forecast, which is then used
- 4 by the other agencies in the state for planning. So it's
- 5 really important we do this well. We've done it for
- 6 decades, but we're really facing more complexity at this
- 7 point. As you heard, there's a lot of focus on
- 8 disaggregating the forecast, both spatially to get more
- 9 disaggregated even down to the distribution level, and
- 10 temporally to get more to hourly.
- 11 And at the same time, there's a lot of technology
- 12 changes that are quite significant with behind-the-meter
- 13 photovoltaics and electric vehicles. And also climate
- 14 change.
- So again it's something which is certainly
- 16 challenging to deal with. As people indicated that this
- 17 was an unusual cycle in that I think for the next, I'm
- 18 going to say few years, for both photovoltaics and electric
- 19 vehicles and ultimately CCAs, we're looking more at an
- 20 annual update as opposed to trying to forecast what's going
- 21 on for the next whatever, five years on that?
- 22 But again, it's really a time for a lot of
- 23 challenges in terms of just dealing with the opportunity.
- 24 A lot of opportunities for our staff to really rethink some
- 25 of the pieces and to really bring into play some new tools.

- 1 So again, we really want to thank people for that activity
- 2 and at the same time trying to deal with the realities of
- 3 scheduling in terms of the other agencies. That's why we
- 4 have a slightly different approach this year of getting out
- 5 the basic numbers with reports to come, so that the PUC can
- 6 start building the numbers in.
- 7 So again, thanks everyone for the activities on
- 8 this. Commissioner McAllister?
- 9 COMMISSIONER MCALLISTER: Yeah, I think with
- 10 challenge comes opportunity. So I'm incredibly optimistic
- 11 actually, because I think we have a great team in place.
- 12 And I think you heard that in the comments. You know,
- 13 Siva, Nick, Cary, Chris, Sudhakar and just the whole group,
- 14 I think are rising to the challenge, and it is a challenge.
- 15 But a lot more data, we're in 2019 now. We're --
- 16 more data is both an opportunity and requires a big effort.
- 17 I think there're going to be all sort of corollary benefits
- 18 of putting place the analytical tools that we need for the
- 19 forecast. I think we're going to be able to ask all sorts
- 20 of other questions that are related and dig into the
- 21 details of locales and load shapes, demand shapes. I think
- 22 there's just a lot of upside to this, a big lift that we're
- 23 all doing. So, you know, it's going to really be worth it.
- 24 It already is worth it, but I think it's going to emerge as
- 25 being incredibly valuable increasingly over time.

1	I wanted to just thank really the engagement by
2	the PUC staff and also ISO on this, particularly around the
3	RA issue that we've been working through and incorporating
4	that into the forecast; in particular Keith and Delphine
5	from the ISO, and Simon and crew from the PUC, and also
6	Commissioner Randolph. I think the leadership at the
7	commissioner level at the PUC has been great. And so
8	building kind of super structure of oversight, I guess.
9	But really sort of guidance and direction at the
10	Commissioner level is increasingly necessary as this
11	complexity emerges as well. And so I think staff has been
12	incredibly open to that and very helpful at all the
13	agencies. And it's been a really good foundational year for
14	this effort.
15	So as the Chair said, I think there's kind of no
16	way around having more significant efforts happen in the
17	off years of the IEPR. And this is sort of a first major
18	example of that, but it probably will continue as we
19	confront all these challenges and new questions come up and
20	we have to tweak things a little bit more iteratively. But
21	I'm really happy with where this landed and I want to just
22	again thank all the staff.

- 23 All right. So I will move Item 5.
- 24 COMMISSIONER DOUGLAS: Second.
- 25 CHAIRMAN WEISENMILLER: All those in favor?

- 1 (Ayes.)
- 2 CHAIRMAN WEISENMILLER: So Item 5 passes 5-0.
- 3 Thank you.
- 4 So now we'll go to Item 2 and I've just got a few
- 5 words on the process for Item 2. Item 2 is a Small Power
- 6 Plant Exemption for the McLaren Backup Generating Facility
- 7 Project. The Commission will consider and act to approve
- 8 or deny the Petition for Reconsideration filed by Helping
- 9 Hand Tools.
- 10 Before we begin hearing from the parties, I'd
- 11 like to explain the process. Because Helping Hand Tools is
- 12 the moving party, it will present its arguments first
- 13 followed by the Project Applicant and then the Commission
- 14 staff. Helping Hand Tools will have the final say and reply
- 15 to the other party's arguments.
- 16 Each party will have up to ten minutes for
- 17 opening argument and Helping Hand Tools will have up to
- 18 five minutes for its reply argument. The Commissioners may
- 19 ask questions during and after the arguments.
- 20 Once parties' arguments have concluded, the
- 21 Commissioners will go into closed session as specified in
- 22 Item 2 of the agenda, which provides notice of a possible
- 23 closed session for a deliberation, pursuant to Government
- 24 Code Section 11126(c)3. We will take public comments on
- 25 this item before going into closed session.

- 1 Before the arguments begin, we would like the parties
- 2 to introduce themselves for the record starting with
- 3 Helping Hand Tools.
- 4 MR. SARVEY: This is Robert Sarvey on behalf of
- 5 Helping Hand Tools.
- 6 MR. GALATI: Scott Galati representing Vantage
- 7 Data Centers.
- 8 MR. MEYERS: Spencer Myers, Senior Director of
- 9 Construction for Vantage Data Centers.
- MS. DECARLO: Good morning, Lisa DeCarlo, Energy
- 11 Commission Staff Attorney. With me is Leonidas Payne,
- 12 Energy Commission Project Manager and on the phone is Jared
- 13 Babula, also Energy Commission Staff Attorney, who was
- 14 assigned to the project and he is available in case
- 15 detailed questions arise.
- 16 CHAIRMAN WEISENMILLER: Great. We're now ready
- 17 to hear from Helping Hand Tools.
- 18 MR. SARVEY: Thank you, Commissioners.
- 19 The decision makes an error in that it equates
- 20 the annual emissions calculated from the project for 50
- 21 hours, with the air quality impacts from the project for 50
- 22 hours. They're not the same.
- The decision claims, on page 14, that NO2 air
- 24 quality impacts have been evaluated with all generators
- 25 operating for 50 hours per year. That's not so. According

- 1 to the decision, those 50 hours of modeling adequately
- 2 address the potential for air quality impacts, from 19
- 3 hours of emergency operations. Once again, annual
- 4 emissions have been quantified; air quality impacts have
- 5 not been modeled for 50 years.
- If you take a look at the evidence, on page 5-3.9
- 7 of the initial study it states, "With one engine running,
- 8 for comparison with the National Ambient Air Quality
- 9 Standards and California Ambient Air Quality Standards, the
- 10 most conservative hourly emission rate was used assuming
- 11 one hour of testing at 100 percent load." There has been
- 12 no testing of these generators simultaneously over 50 hours
- 13 or even together. Only one generator has been modeled for
- 14 one hour. That's it.
- 15 So also the evidence on page 5.3-11 of the
- 16 approved mitigated declaration for the project states, "The
- 17 emergency generators would only be tested for four hours
- 18 annually and five minutes monthly, a total of five hours
- 19 per year." However, the operation of a pair of generators,
- 20 with one located above the other or both having the same
- 21 stack exit, could cause eight hours of operation running
- 22 (phonetic) two generators to impact a given receptor
- 23 location and result in a significant impact for the 98
- 24 percentile eight highest value for the National Ambient Air
- 25 Quality Standard.

	1	We	know	from	the	evidence	that	а	19-hour	outac
--	---	----	------	------	-----	----------	------	---	---------	-------

- 2 has occurred at Vantage's other Santa Clara data center.
- 3 So the evidence doesn't support the decision's conclusion
- 4 that there will be no significant air quality impact from
- 5 operation of 47 diesel generators, operating at one time,
- 6 because it's never been modeled.
- 7 What the impact would be from all the 47
- 8 generators operating at once, once again, has not been
- 9 analyzed. According to CEC staff's reply on 2HT's Petition
- 10 for Reconsideration, the only time all generators might be
- 11 possibly running at the same time would be if there was an
- 12 emergency scenario. But there is no condition in this
- 13 decision or in Santa Clara's mitigated declaration that
- 14 would not allow them to fire all 47 generators up, at once,
- 15 any time they want to.
- 16 As the Vantage press release I provided you -- I
- 17 hope you had a chance to review it -- demonstrates, on
- 18 April 26, 2017 Vantage operated all 30 3-megawatt
- 19 generators at once at their other data center project
- 20 located two miles away from the McLaren project.
- 21 This was shortly before the CEC staff incorrectly
- 22 concluded that the other data center, Santa Clara 1, should
- 23 not be subject to Energy Commission jurisdiction despite
- 24 the fact that the data center has 75 megawatts of load.
- 25 As far as the potential generating capacity of

- 1 the McLaren Data Center, Vantage's press releases claims
- 2 that they're going to have three onsite 50-megawatt
- 3 substations at this project. I'll let you explain to them
- 4 why they need three.
- 5 2HT also believes that the SPPE process requires
- 6 the CEC to engage the environmental justice community in
- 7 processing this permit. We understand you disagree, but we
- 8 must continue to point out the federal and state
- 9 environmental justice responsibilities. And thank you.
- 10 CHAIRMAN WEISENMILLER: Thank you.
- 11 Applicant?
- MR. GALATI: Thank you, Commissioners. Scott
- 13 Galati.
- I filed a response to the Petition for
- 15 Reconsideration. I'd like to break it into three pieces.
- 16 First, what the Commission should be deciding is, is there
- 17 an error of fact or law or is there any new evidence that
- 18 could not have been raised during the hearings that the
- 19 Commission had here, that would warrant us stepping back
- 20 and reconsidering the decision.
- 21 To put this in perspective, the Energy Commission
- 22 made a decision exempting this project. The Air District
- 23 has issued the ATCs. The generators have been delivered to
- 24 the site and are sitting on the site now. The demolition
- 25 has been completed for Phase 1. The city has issued its

- 1 foundation permit for Phase 1 and that construction is
- 2 ongoing. The substation is being built by Silicon Valley
- 3 Power.
- 4 This was made clear to the Commission, at the
- 5 Committee at the time, that we were under a very tight
- 6 timeframe to be able to meet our requirements and that we
- 7 were going to go to construction as soon as we could. And
- 8 we've done that.
- 9 The pieces I want to separate into two, is what
- 10 you may have in front of you, what was docketed this
- 11 morning. What Mr. Sarvey just talked about before is a
- 12 document from 2017. You can reject it based on the
- 13 Petition for Reconsideration, because Mr. Sarvey could have
- 14 brought this evidence to the Committee and we could have
- 15 had a conversation about it. I'm happy to address it
- 16 should the Commission want, however I think you should just
- 17 reject it.
- 18 If you don't reject it on those grounds, you
- 19 could reject it on the grounds that he was supposed to file
- 20 anything, any reply he had on January 4th. He didn't. So
- 21 luckily, I had my phone on during the other items and I was
- 22 able to read this document. We are prepared to address it
- 23 should you want us to address it.
- 24 The second piece, and the primary piece that I
- 25 think you should focus on is that -- and I'll let staff

- 1 address the issue of whether a Small Power Plant Exemption
- 2 could even allow this Petition for Reconsideration. My
- 3 reply? I support staff. I do not believe we should be
- 4 here, that there is no Petition for Reconsideration
- 5 opportunity under your regulations or the statute for a
- 6 Small Power Plant Exemption.
- 7 But if you do consider this petition, this
- 8 Intervener has been very involved in this project.
- 9 Nothing, nothing in his Petition for Reconsideration is not
- 10 been raised in writing multiple times. For example, the
- 11 generating capacity issue, there's no fewer than eight
- 12 documents filed by Helping Hand Tools repeating the exact
- 13 same arguments. There were no -- we talked about it at
- 14 both evidentiary hearings, where the exact same arguments
- 15 were made. We came to the business meeting where the exact
- 16 same objection was made. I don't think we need to continue
- 17 any more on generating capacity.
- 18 And you would send a very strong message to the
- 19 rest of the interveners that Petitions for Reconsideration
- 20 are not another bite at the apple. They are not for
- 21 rehashing. They are only for that new evidence that you
- 22 couldn't have obtained during the hearing or some error.
- 23 So let me address the error.
- Mr. Sarvey equates modeling with evaluation. He
- 25 creates NO2 modeling with analysis. What you heard from

- 1 your staff and from the Applicant was that modeling NO2
- 2 impacts during an emergency wouldn't give you the
- 3 appropriate information due to the uncertainty of what the
- 4 background criteria would be. What the analysis that we
- 5 believe you relied on in the final decision was that not
- 6 individual modeling, but the fact that NOx emissions are
- 7 offset.
- 8 Now let me just take a step back, because while
- 9 the Commission, during AFC proceedings, looks at things
- 10 from a CEQA perspective, looks at things from a compliance
- 11 with LORS perspective, may have done a much more in-depth
- 12 analysis. But other agencies who implement CEQA don't
- 13 always model, for example, for NO2 impacts. In fact, this
- 14 project with its 32 generators, which was the original
- 15 iteration of this project, went through CEQA review with
- 16 the City of Santa Clara where none of that modeling was
- 17 required for them to determine that there was no
- 18 significant impact.
- 19 So really what's happening is Mr. Sarvey said,
- 20 "This is how you should do it." The Committee heard that
- 21 and chose not to. That's not an error of law. That's not
- 22 an error of fact. That's a disagreement, a disagreement
- 23 that was discussed. We had probably an hour of an
- 24 evidentiary hearing on this subject alone where experts
- 25 were there. So this is not the time to redo that. We can

- 1 feel very comfortable that the Committee and then
- 2 ultimately the Commission considered all of these arguments
- 3 and there is nothing new.
- 4 Lastly, I would like you to send a very strong
- 5 message that not only should petitions like this not be
- 6 brought for a Small Power Plant Exemption, but there has to
- 7 be finality. People are making decisions, large financial
- 8 decisions, on that finality. And that's what this client
- 9 has done. They followed the rules. We came here. We
- 10 resolved our issues. And we had no disagreement with
- 11 staff. And now we have air permits and we are in the
- 12 middle of construction.
- So please, in your closed session, come back
- 14 quickly and deny this Petition for Reconsideration.
- 15 CHAIRMAN WEISENMILLER: Mr. Galati?
- MR. GALATI: Yes?
- 17 CHAIRMAN WEISENMILLER: I'm not going to rule on
- 18 whether or not we're accepting the document. But just in
- 19 case, I'd like you to respond to it, which would get it
- 20 potentially in the record and give Mr. Sarvey a chance to
- 21 respond to your response, so we have a complete -- again,
- 22 we may or may not decide to let it in. But (indiscernible)
- 23 --
- MR. GALATI: That we can do then. So
- 25 Commissioner, I'll give the overview, if I can. And if we

- 1 need any additional detail Mr. Myers is here and can
- 2 provide that.
- 3 So there are two campuses, the McLaren Campus,
- 4 which is the Small Power Plant Exemption that you
- 5 identified, is a build from the ground up by Vantage. The
- 6 other campus was a campus that it bought and had been built
- 7 in different piecemeal, so to speak, and expansions over a
- 8 period of time. That was not designed in the same way that
- 9 McLaren has been designed.
- 10 And so what they've been able to do before was to
- 11 test individual buildings. In 2017, they chose to shut
- 12 down the facility and test if it all worked together. That
- 13 was unique to that campus. It is not what we have with
- 14 McLaren. It will not be done for McLaren. And therefore,
- 15 it is absolutely irrelevant to anything that you're
- 16 discussing.
- 17 In addition, the 150-megawatt substation is, just
- 18 like everything else that Vantage has done is about
- 19 providing redundancy. There is another 50-megawatt
- 20 transformer should one break. The Committee is well aware
- 21 that Silicon Valley Power can only deliver, under our
- 22 agreement, up to 100 megawatts, not 150. We have also
- 23 agreed that the rules would require us, if we expanded
- 24 beyond 100 megawatts, to come back and have a conversation
- 25 with the Commission. The Commission included a

- 1 Condition of Approval, which we think is unnecessary and
- 2 maybe not enforceable in the same way that the Committee
- 3 does, but it doesn't matter. We've told the city that we
- 4 would take the condition and the city will include such a
- 5 condition.
- 6 So everything Mr. Sarvey has said about this new
- 7 document is irrelevant and again, trying to keep your eye
- 8 off the prize, which is what is his grounds and what does
- 9 he need to prove to win in a Petition for Reconsideration,
- 10 even if one is allowed.
- 11 Thank you, Commissioners.
- 12 CHAIRMAN WEISENMILLER: So staff?
- MS. DECARLO: Thank you, Lisa DeCarlo. On
- 14 December 20th, 2018 Energy Commission staff submitted a
- 15 reply to Helping Hand Tools' Petition for Reconsideration.
- 16 And I'll just quickly summarize the gist of our response.
- 17 Staff recommends the Energy Commission deny
- 18 Helping Hand Tools' Petition for Reconsideration on the
- 19 basis of the Energy Commission's statutory and regulatory
- 20 provisions do not provide for reconsideration of Small
- 21 Power Plant Exemption determinations.
- Once granted, a Small Power Plant Exemption
- 23 exempts a project from all provisions in Chapter 6 of the
- 24 Warren-Alguist Act, including Section 25530, a provision
- 25 that would otherwise allow the Energy Commission to order a

- 1 reconsideration of decisions or orders made under the
- 2 chapter.
- 3 This is a plain reading of the statute, but there
- 4 is also a practical reason for reaching this conclusion. A
- 5 Commission decision on exemption is not the final step
- 6 before a project approval. It is simply one step in a long
- 7 process, a long public process, allowing a project to
- 8 subsequently go before all other state, local and regional
- 9 entities that the Energy Commission would ordinarily stand
- 10 in the shoes of, so seek applicable permits.
- In this case, McLaren will need to obtain permits
- 12 from both the City of Santa Clara and the Bay Area Air
- 13 Quality Management District.
- 14 Understanding this limited role, our regulations
- 15 provide for an expedited process to consider Small Power
- 16 Plant Exemption applications, within ideally 135 days.
- To read into this process, an automatic delay of
- 18 an extra 30 days for a Petition for Reconsideration, with
- 19 the potential for an extra 90 days or even more on top of
- 20 that, if the Energy Commission agrees to consider
- 21 reconsideration, would result in potentially doubling the
- 22 amount of time originally called for in processing the
- 23 application.
- 24 The potential for such a delay does not seem
- 25 reasonable for a decision where the Energy Commission has

- 1 determined that it will not issue a permit for the project
- 2 and that instead the project will need to seek its permits
- 3 from the various other entities with jurisdiction, and
- 4 comply with those public processes.
- 5 Allowing for reconsideration in this situation
- 6 also has the potential to create confusion as to when
- 7 exactly these other entities may exercise their
- 8 jurisdiction. And Mr. Galati has provided some detail
- 9 about how that affects McLaren at this point.
- 10 Even if reconsideration were provided for here,
- 11 however Petitioner has not met the burden required to show
- 12 that it is warranted. Reconsideration is only warranted
- 13 where a petitioner can show that there is new evidence or
- 14 an error of fact or change or error of law.
- On page 2 of the petition, Helping Hand Tools
- 16 itself admits that the matter it raises in the petition,
- 17 matters that it raises, were raised before in the
- 18 proceeding. And both staff's and the project owner's
- 19 responses to the petition provide a thorough accounting of
- 20 where in the record these issues have previously been
- 21 raised and addressed, as has Mr. Galati's presentation
- 22 today.
- 23 Therefore, Petitioner has failed to meet its
- 24 burden even if the Commission were to determine that
- 25 reconsideration was appropriate in an SB 3 (phonetic)

- 1 process.
- 2 For all of these reasons staff recommends denial
- 3 of the petition and we are available to answer any new
- 4 questions you may have.
- 5 CHAIRMAN WEISENMILLER: Thank you.
- 6 Mr. Sarvey?
- 7 MR. SARVEY: Oh, yes. Obviously for us to take
- 8 this issue to court we have to exhaust our administrative
- 9 remedy. In order to do so we have to give you an
- 10 opportunity to look at the facts, which I've outlined. And
- 11 without that we're just going to get thrown out of court,
- 12 so this is your opportunity to change your mind when I have
- 13 demonstrated to you that you're looking at the wrong issue.
- 14 You're looking at the annual emissions from this thing, as
- 15 opposed to the modeling, the one-hour NO2 impact from these
- 16 generators running. And that's been modeled.
- 17 I've been in contact with the Air District. To
- 18 my knowledge no permit has been issued to this project.
- 19 And to my knowledge they haven't even provided a permit to
- 20 the Air District for 47 generators. They do have one for
- 21 32, but I do not believe it's been approved.
- 22 So if you make no changes today, to this
- 23 reconsideration, you must include a condition preventing
- 24 them from running these things simultaneously just to test
- 25 them like they did here at their other Vantage Data Center.

- 1 That was absolutely wrong to test 47 diesel generators.
- 2 They can test them one at a time. They can find out all
- 3 their issues. There is no reason to turn on 47 diesel
- 4 generators just to test.
- 5 So I would ask you, if nothing else in this
- 6 reconsideration, provide a condition that prevents that
- 7 from happening. And I thank you for your time.
- 8 CHAIRMAN WEISENMILLER: Thank you.
- 9 Is there any public comment from anyone in the
- 10 room? Any public comment from anyone on the line?
- 11 (No audible response.)
- 12 CHAIRMAN WEISENMILLER: Okay. Now the Commission
- 13 will now go into closed session. We will return to open
- 14 session, I would say about noon, maybe? You know, again I
- 15 can't say we've had a great track record on this aspect of
- 16 our forecast, but we'll let you know when we're back.
- 17 (Off the record at 11:52 a.m.)
- 18 (On the record at 12:03 p.m.)
- 19 CHAIRMAN WEISENMILLER: Okay. We're back on the
- 20 record after deliberating in closed session. We'll now
- 21 vote on the Petition for Reconsideration. Is there a
- 22 motion?
- 23 COMMISSIONER DOUGLAS: Yes, there is a motion. I
- 24 move that the Commission deny the Petition for
- 25 Reconsideration on the grounds that Helping Hand Tools has

- 1 not presented any new evidence that despite the diligence
- 2 of the moving party could not have been produced during the
- 3 evidentiary hearings in the case. Or that the final
- 4 decision adopted November 7th, 2018 contains an error in
- 5 fact or change or error in law.
- 6 Petitioner has not established that the document
- 7 presented today, dated May 17th, 2017, could not have been
- 8 submitted previously.
- 9 I further move that we continue this item to the
- 10 end of the business meeting to give the Chief Counsel's
- 11 Office time to prepare a proposed order consistent with
- 12 this motion and the Commission's deliberations. And
- 13 present it for our consideration and approval.
- 14 COMMISSIONER SCOTT: Second.
- 15 CHAIRMAN WEISENMILLER: Okay. All those in
- 16 favor?
- 17 (Ayes.)
- 18 CHAIRMAN WEISENMILLER: This motion passes 5-0.
- 19 We'll continue this item. We'll be back in
- 20 session at 1:00. And at that point we're hoping that the
- 21 Chief Counsel's Office can distribute a proposed decision.
- 22 Then we will consider that proposed decision after Items 6,
- 23 7, and 8, presuming that will give people sufficient time
- 24 to review it including us.
- 25 And so we will be back at that stage: 1:00

- 1 o'clock the decision, and then we'll vote on it or consider
- 2 it after 6, 7, and 8.
- MR. GALATI: Thank you very much.
- 4 (Off the record at 12:06 p.m.)
- 5 (On the record at 1:02 p.m.)
- 6 CHAIRMAN WEISENMILLER: Okay. We're back in
- 7 session, please?
- 8 MS. COCHRAN: Good afternoon Chair and
- 9 Commissioners, returning to Item 2 that you had asked that
- 10 an order be prepared. An Order on the Petition for
- 11 Reconsideration has been placed on the dais for all of your
- 12 review. I've also presented copies of that same draft to
- 13 Mr. Galati and to Ms. DeCarlo. I'm not seeing Mr. Sarvey
- 14 in order to present one to him. I did give additional
- 15 copies to the Public Adviser to provide. And it will be
- 16 available on the screen, on the P drive, for purposes for
- 17 later discussion. My understanding is that this matter
- 18 will be brought back after Item 8 for action.
- 19 CHAIRMAN WEISENMILLER: Right. Thank you.
- Let's go to Item Number 6.
- 21 MR. ALVARADO: Good afternoon, Chair Weisenmiller
- 22 and Commissioners. I'm Al Alvarado. I'm the Program
- 23 Manager in the Siting, Transmission and Environmental
- 24 Protection Division. I'm here to present a proposed
- 25 resolution seeking your approval for a second interagency

- 1 agreement between the California Public Utilities
- 2 Commission and the Energy Commission.
- 3 The first interagency agreement, which was
- 4 approved by the Public Utilities Commission and the Energy
- 5 Commission back in 2017, which has the Energy Commission
- 6 staff providing technical support for preparing California
- 7 Environmental Quality Act documents for infrastructure
- 8 regulatory applications. The Siting Division is completing
- 9 one transmission line analysis that we prepared for the
- 10 Public Utilities Commission and is currently on a second
- 11 project.
- 12 The second interagency agreement includes
- 13 technical services required for resource planning, studies,
- 14 energy infrastructure project evaluations, and analytical
- 15 support for Federal Energy Regulatory Commission
- 16 proceedings.
- 17 We have been working closely with Energy Division
- 18 staff to identify the different types of analysis that they
- 19 could use from help with the Energy Commission staff. And
- 20 we've identified a scope of work that is in the draft
- 21 interagency agreement, which would involve electric and
- 22 natural gas system simulation modeling. We would also
- 23 include assessments for energy infrastructure projects,
- 24 evaluations of alternatives and costs for transmission
- 25 projects, land use and environmental screening analysis of

- 1 proposed infrastructure projects, and also geographic
- 2 information system applications.
- 3 The staff in the Siting Division and the Energy
- 4 Assessments Division has the technical skills and years of
- 5 related experience to conduct the types studies identified
- 6 by the PUC.
- 7 The CPUC will reimburse the Energy Commission for
- 8 these technical services up to \$1 million over a three-year
- 9 period. And we believe that this second interagency
- 10 agreement is a positive step towards a continued
- 11 collaboration with the PUC. So with that we're thereby
- 12 seeking your approval of this resolution and interagency
- 13 agreement.
- 14 CHAIRMAN WEISENMILLER: Thank you.
- 15 Let's start at is there any public comment from
- 16 anyone in the room? How about on the phone?
- 17 (No audible response.)
- 18 CHAIRMAN WEISENMILLER: Okay. So let's
- 19 transition over to the Commissioners. I was at least going
- 20 to start by indicating that this is an effort that
- 21 President Picker and I started a while back, where we could
- 22 provide assistance to the PUC in some of the environmental
- 23 review, which would certainly help them deal with some of
- 24 their workload issues and certainly also help us to address
- 25 some of our issues here. So it's been good that it's been

- 1 successful and now we're looking at expansion on certainly
- 2 one, the Governor's Military Affairs Council met in August.
- 3 They talked about a particular gas pipeline project that
- 4 was important to them.
- 5 COMMISSIONER DOUGLAS: I'll just add, I really
- 6 appreciate Chair Weisenmiller and President Picker's
- 7 leadership on this collaboration with the PUC. I think
- 8 that it's definitely a win-win for both of our agencies.
- 9 The PUC is getting some very strong -- access to some very
- 10 strong analytical capability here at the Energy Commission.
- 11 It's absolutely an efficient way for us to work together
- 12 and it's a way for us to help solve problems and do
- 13 analyses that are very relevant to both of our agencies
- 14 now.
- And so I'm in strong support of this. I'm very
- 16 pleased to see the staff here, and of the PUC, step up and
- 17 take advantage of this collaboration and build on it.
- 18 Are there other comments on this?
- 19 CHAIRMAN WEISENMILLER: I was just going to make
- 20 the observation that I know the employee union leader
- 21 approached me and certainly reminded me generally, of the
- 22 fact that when we do contracts we cannot contract for
- 23 things that can be done by state civil servants. And so
- 24 certainly that applies in this condition too, right?
- 25 COMMISSIONER DOUGLAS: All right, very good. So

- 1 I'll move approval of Item 6.
- 2 COMMISSIONER MCALLISTER: Second.
- 3 CHAIRMAN WEISENMILLER: All those in favor?
- 4 (Ayes.)
- 5 CHAIRMAN WEISENMILLER: This passes 5-0. Thanks.
- 6 MR. ALVARADO: Thank you.
- 7 CHAIRMAN WEISENMILLER: Let's go on to Item 7.
- 8 MS. SALAZAR: Good afternoon, Commissioners. My
- 9 name is Rachel Salazar and I work with the Energy Research
- 10 and Development Division. I'm here seeking approval of
- 11 four new grant agreements that resulted from an EPIC
- 12 solicitation titled "Bringing Rapid Innovation Development
- 13 to Green Energy," or BRIDGE for short.
- 14 BRIDGE provides follow-on funding to the most
- 15 promising early-stage technologies that received a previous
- 16 funding award from an eligible federal funding agency or
- 17 Energy Commission research program.
- 18 The solicitation stems from ongoing coordination
- 19 with the DOE's ARPA-E Program, and allows startup companies
- 20 to continue development of their technologies without
- 21 having to wait years for a topic-specific solicitation to
- 22 be released. And I'll provide a brief overview of the four
- 23 projects now.
- 24 The first agreement is with Lucent Optics to
- 25 further develop and test a flexible panel that defuses

- 1 light more optimally. These panels are made from an
- 2 ultrathin plastic and contain strips of LEDs that reflect
- 3 light across the panel. The lightweight flexible design
- 4 allows panels to be incorporated into flat or curved
- 5 surfaces, or to be used as standalone luminaires. They can
- 6 also be wrapped around objects for a more unique lighting
- 7 display.
- 8 By increasing the amount of lumens per watt, less
- 9 luminaires are needed, providing both energy and cost
- 10 savings.
- 11 The panels are also easier and cheaper to
- 12 install, especially in new construction office spaces. For
- 13 example, by replacing the traditional lighting troppers
- 14 (phonetic) with these panels, box-type housing for
- 15 florescent and LED lamps would no longer be needed.
- 16 Lucent will work to complete development and
- 17 scale up the panels to meet traditional linear large-area
- 18 fixture sizes. They will also reduce production costs to
- 19 stimulate greater adoption of solid state lighting.
- 20 COMMISSIONER HOCHSCHILD: Can we ask questions as
- 21 you go through?
- MS. SALAZAR: Sure.
- 23 COMMISSIONER HOCHSCHILD: Just a real quick one,
- 24 what's the expected life cycle of the product?
- MS. SALAZAR: Oh, goodness, nothing here.

- 1 COMMISSIONER HOCHSCHILD: Do you know, Erik, off
- 2 hand where?
- MR. STOKES: We have to probably have to go back
- 4 to the proposal and see if that information (indiscernible)
- 5 or ask the recipient if they have that information.
- 6 COMMISSIONER HOCHSCHILD: Okay.
- 7 CHAIRMAN WEISENMILLER: Erik, can I have you
- 8 identify yourself for the record?
- 9 MR. STOKES: Oh, I'm sorry. Erik Stokes, Manager
- 10 for the Energy Deployment and Market Facilitation Office of
- 11 the Research and Development Division.
- MS. SALAZAR: In the second agreement Ubiquitous
- 13 Energy will continue development of their innovative glass
- 14 coating technology to offer a more dynamic window product
- 15 that will generate electricity and reduce heat gains.
- 16 Similar products offer consumers a reduction in heat gains,
- 17 but are expensive and have unfavorable color temps.
- 18 Additionally, none of them utilize the solar heat being
- 19 reflected away to generate energy for onsite usage.
- The ClearView Power technology is a solar
- 21 producing coating that can be applied directly to windows.
- 22 By absorbing both ultraviolet and infrared light the
- 23 technology can lower HVAC demands by up to 30 percent.
- 24 What's more, Ubiquitous has achieved color neutrality in
- 25 the coating allowing consumers a more natural aesthetic.

- 1 Ubiquitous achieved early success in applying
- 2 their coating on a 6 x 6 piece of glass. And they are now
- 3 looking to develop new processing techniques for
- 4 integrating the technology into standard window
- 5 manufacturing scaling up to produce 14 x 20 prototypes.
- 6 These will be tested to ensure they meet commercially
- 7 viable levels of durability, energy savings, electricity
- 8 generation and aesthetics.
- 9 COMMISSIONER HOCHSCHILD: I actually have the
- 10 same question about do you know the expected life cycle,
- 11 Erik, for this?
- MR. STOKES: (Off mic) I think that we can look
- 13 back at what they've been able to prototype on their 6 \times 6
- 14 glass panel. They've gone up to 96 percent yields with
- 15 their current testing on 6 x 6 or (indiscernible) is
- 16 establish some of those how long will this technology hold
- 17 up? Specifically will it meet kind of specifications you'd
- 18 need for a (indiscernible) market. And that's part of the
- 19 testing that (indecipherable) this project.
- 20 COMMISSIONER HOCHSCHILD: Yeah, the reason I ask
- 21 is for some of the film applications, they can have pretty
- 22 poor degradation ratios. And you can test that in the
- 23 ovens where they test it and stuff. And it is a concern I
- 24 have that you may have great performance in year one, two,
- 25 three, that then drops off pretty precipitously. So just

- 1 going forward I mean it'd be great to get estimates on this
- 2 kind of thing. That's a question I really think we should
- 3 be looking at.
- 4 Because it's not just the initial performance,
- 5 it's the -- for example with Crystalline PV in glass, like
- 6 we know that's a 25-year warranty product, right? But this
- 7 has been kind of the Achilles Heel when people have tried
- 8 this before. And I think there's been some steps forward,
- 9 but it'd be great to know more. Yeah.
- MS. SALAZAR: In the third agreement, Heliotrope
- 11 Technologies will demonstrate another dynamic window
- 12 product. Their electrochromic windows overcome common
- 13 limitations to broader market penetration such as high
- 14 costs, unfavorable aesthetics and a lack of controls
- 15 allowing windows to properly respond to occupant and
- 16 building needs throughout seasonal climates.
- 17 Heliotrope's nanocrystal technology is a low-cost
- 18 solution that overcomes all of those limitations. The
- 19 windows can be customized to reach different transparency
- 20 levels for optimal heat gain and insulation performance and
- 21 are offered in a neutral gray tint.
- 22 Heliotrope aims to achieve a price point below
- 23 \$25 per square foot, which is well below the \$50 to \$80
- 24 price range for electrochromic windows and cost competitive
- 25 with other dynamic window products.

1	Heliotrope	will	further	develop	their	control

- 2 algorithms before installing advanced prototypes at sites
- 3 including Lawrence Berkeley National Lab where film
- 4 monitoring can validate energy savings and ensure consumer
- 5 acceptance before commercialization.
- 6 And in the last agreement, Glint Photonics will
- 7 approach lighting efficiency with a different metric.
- 8 Typically when we think about increasing lumens per watt to
- 9 increase efficiency, but with light utilization you can
- 10 target light to where it's most needed rather than lighting
- 11 an entire space. Glint provides a low-profile luminaire
- 12 product line that can be mounted stationary, and are
- 13 capable of projecting beams that can be steered and
- 14 broadened as needed.
- 15 For this project Glint will develop the software
- 16 control systems to enhance their products and enable remote
- 17 adjusting, eliminating the need for time-consuming and
- 18 unfaith manual adjustments whenever a scene change is
- 19 needed.
- They will also further develop two luminaires
- 21 that incorporate the automated controls. One for spaces
- 22 with high ceilings needing only periodic adjustments such
- 23 as cargo ships and art galleries, and one with motion
- 24 sensor tracking intended for enhanced task lighting. Both
- 25 products will be provided for less than \$200 and should

- 1 achieve at least 25 percent energy savings over
- 2 conventional luminaires.
- 3 And that concludes my presentation today. I'm
- 4 happy to answer any questions you may have.
- 5 CHAIRMAN WEISENMILLER: Great.
- 6 So first is there any public either in the room
- 7 or the phone? Okay, great.
- 8 So again transitioning back to the Commissioners
- 9 then, you know, this is an exciting new approach, BRIDGE
- 10 has been. And we've had a long relationship with ARPA-E.
- 11 You know, actually before we even got the authorization to
- 12 restart Cheryl Martin was a big -- who was then head of
- 13 ARPA-E was a bit supporter and resigned our agreement for
- 14 state to have a relationship with ARPA-E on the technology
- 15 side. Their relationship to what we do, they tend to be
- 16 more in the early stage although interesting enough, they
- 17 focus on a lot on to-market parts. And also focus a lot on
- 18 hopefully more on homeruns than incremental improvements.
- 19 But we've found over time that there is a lot of
- 20 back and forth. There are times where they work on a
- 21 project in California, which then becomes something that
- 22 becomes part of our stable. And we've also had ones where
- 23 we have done something and somehow it then ends up in their
- 24 stable in spite of the fact we're sort of somewhat further
- 25 along than we thought.

1	So	basically,	we're	lookina	to	help	these

- 2 synergies there. And certainly continue to try to learn
- 3 from what they're doing and that they try to work with us
- 4 on what we're doing and vice versa. So it's been pretty
- 5 good.
- 6 As we struggle on average to trying to take ideas
- 7 from lab to market it's always hard. And as Commissioner
- 8 Hochschild pointed out there's always questions like, okay
- 9 this looks great. And what happens as you put it out in
- 10 the field and how long is it going to last and what its
- 11 performance going to be over time?
- But anyway it's good for us to continue to deepen
- 13 the relationship with them, even though obviously at this
- 14 point it's changed from something through our relationship
- 15 where they've really made a marquis early on and at this
- 16 point I think they'd rather not tell other people in the
- 17 Trump Administration that they know us. But anyway, but
- 18 we're still working together pretty well.
- 19 COMMISSIONER SCOTT: I got a great briefing from
- 20 staff on this and I wanted to note that the approach is
- 21 also very exciting to me on this. I like the name for
- 22 BRIDGE. And the idea that we can find more efficient and
- 23 effective ways to leverage other funding pots that are
- 24 available by having a funding pot like this one, that
- 25 allows us to align schedules and timelines, so that you

- 1 don't have maybe an ARPA-E grant and then it takes nine
- 2 months for us to develop a solicitation around something.
- 3 And then a year later they get awarded and then you have
- 4 these gaps between funding.
- 5 It's another fantastic idea that I told the EPIC
- 6 team I'd like to bring into the ARFVTP as well, so I think
- 7 the funding approach here is really great, as well. And I
- 8 will -- did you have anything?
- 9 COMMISSIONER MCALLISTER: Yeah, as always I've
- 10 got my eye on Building Standards even though we just
- 11 finished a cycle. But there's a couple of great
- 12 technologies that have a lot of potential if they pan out
- 13 and but this is how it starts, right? It's find a good
- 14 technology that we can then maybe have as a voluntary
- 15 compliance path. And then eventually if it really pans out
- 16 to be durable and robust and market ready then we can
- 17 potentially meet ten years down the line and put it in the
- 18 mandatory code. So it's all good for progress, so thanks.
- 19 So I'll move this item.
- 20 COMMISSIONER SCOTT: Second.
- 21 CHAIRMAN WEISENMILLER: All those in favor?
- 22 (Ayes.)
- 23 CHAIRMAN WEISENMILLER: This item passes 5-0.
- 24 Thank you.
- MS. SALAZAR: Thank you.

1 COMMISSION	ER HOCHSCHILD:	Thank v	you all.
--------------	----------------	---------	----------

- 2 CHAIRMAN WEISENMILLER: Before we go on to 8, I
- 3 was going to ask the Public Adviser is she could email a
- 4 copy of the proposed decision to Mr. Sarvey? Thanks.
- 5 MR. CROFT: Good afternoon, Chair and
- 6 Commissioners. My name is Josh Croft from the Research and
- 7 Development Division. I am here today to request approval
- 8 of four awards totaling \$1.8 million from the Electric
- 9 Program Investment Charge's small grant program, the
- 10 CalSEED Initiative.
- 11 CalSEED provides small grants to entrepreneurs
- 12 with early stage clean energy technologies. Applicants
- 13 first apply for \$150,000 Concept Awards, which also come
- 14 with access to technical resources and business development
- 15 expertise. Those that successfully receive Concept Awards
- 16 are then eligible to compete for 450,000 additional dollars
- 17 to further develop their innovation. The awards under
- 18 consideration today are the first of those \$450,000
- 19 Prototype Awards.
- The Prototype Awards are given to CalSEED Concept
- 21 Award recipients who have shown the greatest technical and
- 22 commercial potential.
- This determination is made through a Business
- 24 Plan Competition where the CalSEED entrepreneurs take the
- 25 results of their previous CalSEED Concept Award as well as

- 1 business case information they developed during a CalSEED-
- 2 sponsored entrepreneurial boot camp.
- 3 They pitched their case to a panel of judges who
- 4 evaluate for technology impact, business strategy, and the
- 5 expertise and experience of the team. The first Prototype
- 6 Award Business Plan Competition took place in October 2018
- 7 and the companies with the top four scores are presented
- 8 here for your approval.
- 9 The four companies with the highest scores are:
- 10 CodeCycle, PowerFlex Systems, Nativus, and Sepion
- 11 Technologies
- The first company, CodeCycle, has a software
- 13 platform that converts energy code compliance activities
- 14 from a paper-based system to an easy-to-use software
- 15 interface. Targeted users are building designers,
- 16 contractors, and building inspectors.
- 17 The software allows designers to determine
- 18 compliance in real time. And during construction
- 19 inspectors know which inspection areas save the most energy
- 20 and can prioritize accordingly. The goal here is to make
- 21 code compliance easier during design and to guide the
- 22 inspection process during construction. Currently, the
- 23 software is being piloted in six cities and covers the
- 24 commercial lighting portion of code. The Prototype Award
- 25 will allow the team to expand code coverage to include

- 1 items such as the building envelope, HVAC, and the
- 2 residential energy standards. They are also looking to
- 3 partner with additional cities.
- 4 The next company, Nativus, has a new design for
- 5 room air conditioners that is significantly more efficient
- 6 and lighter. Conventional HVAC design loses efficiency due
- 7 to an insulating air boundary layer that lowers the
- 8 system's ability to move heat. Nativus's innovative design
- 9 combines the heat exchanger surface, the motor, and the
- 10 compressor with the fan, creating a single, rotating design
- 11 that addresses the boundary layer problem. At lab scale
- 12 Nativus has seen a 50 percent power reduction compared to
- 13 commercially available ACs of similar size, while being
- 14 able to provide similar cooling capacity.
- With the Prototype Award, Nativus will move
- 16 development of their technology to the prototype scale, and
- 17 will conduct further component and system-level validation,
- 18 ultimately seeking third-party testing and certification.
- 19 The next company is Powerflex. Facilities that
- 20 adopt EV charging can see their peak energy loads increase
- 21 significantly, which increases their bills and the strain
- 22 to the grid. Powerflex has developed a software platform
- 23 that jointly optimizes multiple levels of EV charging,
- 24 solar PV generation, energy storage, customer preferences,
- 25 and building load.

During the Concept Award, Powerflex implemented	l a
-------------------------------------------------	-----

- 2 real-time adaptive charging system that focused on Level-2
- 3 charging. They found that they could reduce peak load
- 4 charging by more than 40 percent while still meeting
- 5 customer charging demands.
- 6 With the Prototype award, Powerflex Systems will
- 7 develop and pilot a system that can jointly optimize Level-
- 8 2 and Level-3 charging on the same electrical
- 9 infrastructure in a way that is still optimal for solar
- 10 generation and building load, balancing these sometimes
- 11 conflicting objectives while reducing peak demand charges.
- 12 Sepion Technologies, the last company before you
- 13 today, has developed a battery membrane that can enable
- 14 market adoption of higher energy density batteries. In
- 15 batteries, Lithium-metal anodes offer higher energy
- 16 densities than traditional graphite anodes, but are held
- 17 back by ceramic membrane technologies, which have not been
- 18 able to be produced cheaply at scale.
- 19 Sepion has developed a new composite membrane,
- 20 which will provide the same protection to the Lithium-metal
- 21 battery and the same performance, but can be produced in a
- 22 roll-to-roll process resulting in lower costs and the
- 23 ability to easily scale into existing manufacturing.
- 24 During the Concept Award, Sepion demonstrated
- 25 their membrane's ability to protect the lithium metal

- 1 battery and maintain performance. With the Prototype
- 2 Award, the team will scale up production volume with roll-
- 3 to-roll manufacturing while demonstrating that the enhanced
- 4 performance and protection demonstrated at a small scale is
- 5 still there.
- 6 Thank you, and I'm happy to answer any questions
- 7 that you may have.
- 8 CHAIRMAN WEISENMILLER: Thank you.
- 9 First, are there any comments from anyone in the
- 10 room? On the line? Okay. So again, I'll start the
- 11 conversation at least.
- 12 As you indicated, this is the first of the
- 13 prototype awards, which is again I think we all felt really
- 14 good about giving out some small checks to small companies
- 15 to get some of their ideas along. This is taking it to the
- 16 next step on hopefully the more successful ones. I think
- 17 certainly this is an interesting suite of technologies and
- 18 I think all of us are looking forward to what the results
- 19 look like.
- 20 COMMISSIONER HOCHSCHILD: Yeah, if I could just
- 21 add on to your comments, Mr. Chairman? I was with Erik
- 22 Stokes I don't know, six or eight months ago, when a number
- 23 of these companies presented at the Innovation Forum for
- 24 the CalSEED Program in San Francisco. And it's great to

- 1 see these companies come back. I just really want to
- 2 validate this model.
- I confess, I was a little bit skeptical when we
- 4 started this, because the initial grants are so small that
- 5 I guestioned, \$150,000, is that enough to even do anything
- 6 meaningful? But what I think is clear is it becomes a
- 7 lever to raise other money and to get the kind of support
- 8 and interest and sort of mentoring that entrepreneurs need.
- 9 It's a real seal of approval.
- 10 And then I just have to say we're here approving
- 11 -- I just added up \$15 million of grants today and all of
- 12 these looks spectacular. We're here at a moment when the
- 13 federal government is shut down. Like we're not
- 14 functioning as a country, but as a state we're doing this.
- 15 And this is all -- these are going to be the technologies
- 16 and industries of the future. And I'm just really proud to
- 17 see this progress.
- 18 And I really want to thank you, Mr. Chairman, for
- 19 pushing as you have on this. I mean this is the -- I think
- 20 this is like the crown jewel of what we're doing now, is
- 21 investing in the technologies that are going to power our
- 22 future. I really want to thank all the staff who've been
- 23 working so hard on this, just a terrific array of
- 24 companies.
- 25 So yeah, happy to move the item when you're

- 1 ready.
- 2 CHAIRMAN WEISENMILLER: Actually, hold on one
- 3 second. I mean normally I never do this but never say
- 4 never. So unfortunately, CalCEF's participant here has
- 5 happened to step out just as we were dealing with this, and
- 6 has been sitting there all day long, so please come up.
- 7 Although again, never, never again, you know, that is
- 8 people have a chance to say something and they stop and
- 9 then we discuss it.
- MS. DALSTROM: My apologies, Commissioners. I
- 11 just wanted to take this opportunity to introduce myself.
- 12 I'm Tenley Dalstrom. I'm the Director of California
- 13 Programs at the California Clean Energy Fund. And the
- 14 CalCEF team is very excited to be here today to recommend
- 15 and celebrate CodeCycle, Nativus, PowerFlex Systems and
- 16 Sepion Technologies as our first group of CalSEED prototype
- 17 awardees.
- 18 These companies were selected through a rigorous
- 19 process, as Josh mentioned, of a Business Plan Competition
- 20 and pitch sessions, conducted in strong partnership with
- 21 the Cleantech Open West, and the help of judges who
- 22 graciously volunteered their time and expertise. These
- 23 four companies exemplify the diversity and ingenuity of the
- 24 state's clean energy entrepreneurs. And we look forward to
- 25 supporting their efforts to bring their innovations to

- 1 commercialization.
- 2 We'd like to thank our partners at Cleantech Open
- 3 West for the critical part they play in supporting the
- 4 CalSEED Program. We'd also like to thank the judges,
- 5 volunteers and technical advisory committee members for
- 6 their expertise, guidance and commitment to this effort.
- 7 Finally, I'd like to thank personally our Energy
- 8 Commission partners who include Joshua Croft, Anthony Ng
- 9 and Erik Stokes, who championed this program and worked
- 10 with our team to bring it to fruition.
- We deeply appreciate the opportunity to support
- 12 the growth of the clean energy economy in California and
- 13 the benefits it provides to the citizens of the state.
- 14 Thank you for the time.
- 15 CHAIRMAN WEISENMILLER: Thank you.
- 16 Commissioners, do you want to make a motion now?
- 17 Well, actually first, does anyone else have a comment? No.
- 18 COMMISSIONER HOCHSCHILD: I move the item with
- 19 enthusiasm.
- 20 COMMISSIONER MCALLISTER: Second with equal
- 21 enthusiasm.
- 22 CHAIRMAN WEISENMILLER: All those in favor?
- 23 (Ayes.)
- 24 CHAIRMAN WEISENMILLER: This passed 5-0. Thank
- 25 you.

- Now, we're going to go back to Item 2. And I
- 2 think we may have lost the Hearing Adviser, who she's
- 3 mailing out to.
- 4 (Off mic colloquy.)
- 5 CHAIRMAN WEISENMILLER: We're at Item 2 now.
- 6 MS. COCHRAN: Oh, I'm so sorry.
- 7 CHAIRMAN WEISENMILLER: That's fine.
- 8 MS. COCHRAN: My apologies.
- 9 As stated we presented a proposed draft of an
- 10 Order on the Petition for Reconsideration. One thing I
- 11 wanted to make sure that we noted was that this order is
- 12 predicated on the Commission's regulations as they existed
- 13 at the time that the request for reconsideration was
- 14 received. On January 1st of this year new regs took
- 15 effect. So this has based on the regs in place at the
- 16 time.
- 17 Also, in reviewing this I noted that I made three
- 18 typographical errors and so I have corrected the
- 19 Scrivener's errors. And it is available on the P drive if
- 20 we could pop it up?
- 21 First of all, on page 2 in the first paragraph of
- 22 Section 2 of the analysis, the word "section" should be
- 23 capitalized in the second line. Also the footnote on page
- 24 number 2, number 12, should read "Section 1720" not
- 25 "Section 1001 and following." And finally the footnote on

- 1 page 3, number 18 should delete the "see also" reference
- 2 TN-PDF.
- 3 So what's available onscreen is the final version
- 4 with those errors corrected.
- 5 So with that, my understanding is that Mr. Sarvey
- 6 is no longer here. The Public Adviser's Office will be
- 7 emailing a copy of this to him, so
- 8 CHAIRMAN WEISENMILLER: And it is the corrected
- 9 version?
- MS. COCHRAN: Yes.
- 11 CHAIRMAN WEISENMILLER: Okay.
- 12 And well first are there any public comment on
- 13 this proposed decision, either in the room or on the line?
- 14 (No audible response.)
- 15 CHAIRMAN WEISENMILLER: Among the parties, well
- 16 first the parties, excuse me. Let's start with -- I was
- 17 going to say well the Applicant is gone, so then we go to
- 18 staff.
- MS. DECARLO: Lisa DeCarlo, I do appreciate the
- 20 clarification that the decision is predicated on the
- 21 preexisting regulations and not our new ones. I think that
- 22 will be helpful going forward. And staff has no further
- 23 comments on the order.
- 24 CHAIRMAN WEISENMILLER: Okay. I don't see --
- MS. VACCARO: Chair Weisenmiller, this is

- 1 Kourtney Vaccaro. I think during the break I was present
- 2 when Mr. Galati was commenting on the order, so he did have
- 3 an opportunity to take a look at it. He did review it. It
- 4 was the one prior to the Scrivener's errors being
- 5 corrected, but substantively he saw the content. And my
- 6 recollection is he had a comment, but it really wasn't
- 7 substantive, so maybe we should (indiscernible)
- 8 MS. COCHRAN: That is correct. The comment he
- 9 made was the way that we had referred to the way the
- 10 Intervener, Helping Hand Tools, he thought that perhaps we
- 11 had made that plural instead of singular. But I pointed
- 12 out that we had coined Helping Hand (indecipherable)
- 13 CHAIRMAN WEISENMILLER: Okay. I guess we should
- 14 also email him a copy of this. So I sort of observably
- 15 served, but anyway I think at this stage I'm going to turn
- 16 it over to Commissioner Douglas.
- 17 Yes, Alana, do you have any comments back from
- 18 them? Okay, no.
- 19 COMMISSIONER DOUGLAS: All right. Well, in that
- 20 case I want to thank Susan and Kourtney for their work on
- 21 the order and I move approval.
- 22 COMMISSIONER HOCHSCHILD: Second.
- 23 CHAIRMAN WEISENMILLER: All those in favor?
- 24 (Ayes.)
- 25 CHAIRMAN WEISENMILLER: The order passes 5-0.

- 1 Thank you. Thank you.
- MS. VACCARO: Chair Weisenmiller, just again for
- 3 the point of clarification, this will be docketed just as
- 4 any other order or decision. And so members of the public
- 5 as well as everyone on the Listserv will have ready access
- 6 to this.
- 7 CHAIRMAN WEISENMILLER: Okay. All right, that's
- 8 good. Let's go on to minutes.
- 9 COMMISSIONER SCOTT: Move approval of the
- 10 minutes.
- 11 COMMISSIONER HOCHSCHILD: Second.
- 12 COMMISSIONER MCALLISTER: Second, oh.
- 13 CHAIRMAN WEISENMILLER: All those in favor?
- 14 (Ayes.)
- 15 CHAIRMAN WEISENMILLER: The minutes pass 5-0.
- 16 Lead Commissioner, Presiding Member, Commissioner Scott?
- 17 COMMISSIONER SCOTT: Yeah. Just real quickly I
- 18 wanted to take a moment to note what an honor and a
- 19 privilege it has been for me to get to work for Governor
- 20 Brown. I very much enjoyed his leadership, working on all
- 21 things transportation and energy related. And note that
- 22 I'm very much looking forward to working with Governor
- 23 Newsom, so just a note on the transition.
- 24 And then wanted to just let you all know that I
- 25 enjoyed some time off over the holidays with my family,

- 1 which was really wonderful. I hope everyone else had a
- 2 chance to do so as well and I wish you all a happy 2019.
- 3 It's going to be another really busy, interesting and fun
- 4 year.
- 5 COMMISSIONER MCALLISTER: Yeah, so likewise happy
- 6 2019, hard to believe we're already a week in.
- 7 So I wanted to echo that about Governor Brown.
- 8 Those comments are wonderful. And he did all these exit
- 9 interviews and stuff. And they talked to a number of his
- 10 appointees and high-level officials and stuff. And a
- 11 couple of them I noted said that, yeah when I talked to him
- 12 he said, really don't screw this up. And I said, hey he
- 13 told me that too, that must be his standard line.
- (Off mic colloquy.)
- 15 COMMISSIONER MCALLISTER: Yeah, exactly. But
- 16 things are moving in a great direction. I mean just all
- 17 the signals are one, you know, great appointees thus far
- 18 with the new Governor and our friend Kate Gordon is going
- 19 to be over at OPR, which is good. Unfortunately that's a
- 20 step down from the COB, from the Prop 39 COB. But we have
- 21 so much forward momentum that I think it's going to be
- 22 contagious and the folks coming are going to be eager to
- 23 collaborate with us and to have us (indiscernible).
- I just wanted to highlight the correlation with
- 25 the CPUC on some of the forecasting stuff again I think

- 1 came up during the meeting with that item, with the
- 2 forecast. But you know I think we'll -- again we have a
- 3 great foundation for cooperation at all levels with them.
- 4 And 2019 should build on that.
- 5 And then finally I wanted to recognize Karen
- 6 Holmes who retired recently. And she was just such a
- 7 stalwart. Maybe she'll be back as a retired annuitant,
- 8 we'll see, but so helpful on many of the things that I
- 9 worked on, on efficiency and data and the data regs,
- 10 particularly, clearly across the board and mentoring other
- 11 younger staff. She was just really a real team player, so
- 12 I enjoyed working with her and congratulate her on a nice
- 13 retirement.
- 14 COMMISSIONER DOUGLAS: You know, I'll be very
- 15 brief as well and just join my colleagues in their
- 16 comments. It's been a tremendous honor to be part of the
- 17 Brown Administration and to work with the Governor's Office
- 18 on so many really exciting initiatives in energy and
- 19 climate change. And I'm excited about the Newsome
- 20 Administration. I'm excited about the many things that we
- 21 will have on our plates and that we'll get done in 2019.
- 22 And I appreciate you, Andrew, bringing up Karen
- 23 Holmes as well. I was reflecting recently that there are
- 24 very few issue of a somewhat legal nature that walk into my
- 25 office where I don't have some memory or reflection of

- 1 Karen Holmes's involvement at some point in some way. And
- 2 of course that's particularly been true on the siting side,
- 3 but not only on the siting side. It is really across the
- 4 board on the Chief Counsel side that Karen Holmes was just
- 5 really this tremendous (indiscernible) so thank you.
- 6 COMMISSIONER HOCHSCHILD: Yeah, sometimes I feel
- 7 we're a little bit like the mafia, you can never truly
- 8 leave. We'll come get you. (Laughter.) And no, Karen's
- 9 been a tremendous asset. And I hope our paths cross again
- 10 in some capacity with her.
- 11 And I don't have many updates from the Commission
- 12 side of things, but just on just reflecting on the passage
- 13 of time it does feel like the years go by faster than ever
- 14 now. And I remember, Mr. Chairman, when I got sworn in the
- 15 first time my daughter, who was 7 saying at that, remember
- 16 at the SOPC (phonetic) that the (indecipherable) she's now
- 17 applying to high school. And I'm certainly going to have
- 18 to fend off boys. (Laughter.)
- But I think the time goes by fast, because the
- 20 work is really rewarding and it feels just remarkable to
- 21 look back and see what we've done, particularly this last
- 22 year, which for me in the 20 years I've been doing clean
- 23 energy policy, 2018 was far and away the most gratifying
- 24 year of my career. Everything's from lighting standards to
- 25 zero net electricity and all the rest that we got over the

- 1 finish line. I just continue to engage with a lot of folks
- 2 from other states who are looking and I think really
- 3 excited by what we're doing.
- 4 And I do feel the tide is turning on public
- 5 opinion on climate. I just actually wrote an Op-ed with my
- 6 mother about this. Now, for the first time, even within
- 7 Republican voters in the United States, not only do a
- 8 majority acknowledge climate change is real, but a fair
- 9 majority of Republicans in the United States support bold
- 10 federal action on climate change, which is the first time
- 11 that's happened. And I think what we're doing in
- 12 California is showing you can bring a state together and
- 13 that it can be beneficial to our economy and our society
- 14 and it's a real important test case. And so it's not new
- 15 to make that remark, but it is true. There's a lot of eyes
- on what we're doing. And I feel incredibly proud to work
- 17 with all of you.
- 18 I did especially want to acknowledge my
- 19 assistant, Kathleen, who retired just a week or two ago
- 20 after 17 years at the Energy Commission and we celebrated
- 21 her. I just want to wish her a happy retirement as well.
- 22 CHAIRMAN WEISENMILLER: Yeah, I was going to say
- 23 we can always speculate whether you getting more gray hair
- 24 either from your daughter growing up or from the work here,
- 25 but -- (Laughter.)

- I was going to note a couple of things. I mean
- 2 one is in the wrap-up in December I did have the
- 3 opportunity, Karen and I both went up, Commissioner Douglas
- 4 and I both went up to Paradise to see that. And that was
- 5 obviously very touching I think to be there.
- 6 And I also was back in D.C. for the National
- 7 Academy of Science meeting. They were looking at basically
- 8 decarbonization studies that obviously to try to get much
- 9 money out of the Trump Administration for that sort of
- 10 work, but they at least have some to help frame that. So
- 11 we'll see how that comes together in the spring. But
- 12 again, it was a pretty productive meeting.
- I think I mentioned earlier that certainly
- 14 Governor Brown has really set the bar for governors of the
- 15 state. That's why I encourage people to look at the new
- 16 book "The Browns of California" by Miriam Pawel. It really
- 17 looks at not only his legacy but his father's, who
- 18 certainly, you know, as you're trying to figure out who the
- 19 greatest California governors were Pat Brown's got to be
- 20 pretty high up. I mean obviously (indiscernible) --
- 21 COMMISSIONER HOCHSCHILD: I'm sorry. Who wrote
- 22 that?
- 23 CHAIRMAN WEISENMILLER: I was going to say
- 24 Miriam, I'm going to say Pawel.
- 25 COMMISSIONER HOCHSCHILD: Brown and Brown?

- 1 CHAIRMAN WEISENMILLER: Yeah.
- 2 COMMISSIONER HOCHSCHILD: Okay.
- 3 CHAIRMAN WEISENMILLER: She did a great book, or
- 4 actually did two great books: one on Caesar Chavez and one
- 5 on the farm workers, so a very, very thorough author on
- 6 stuff and this took a similar approach to Governor Brown.
- 7 And actually had access, I think he made one change, which
- 8 was to put the wording of the tombstone to his grandmother,
- 9 to make sure that was put in the book. But that was the
- 10 only change to that book. So again, I strongly encourage
- 11 that, but it certainly looks at not only the two of them,
- 12 but also going back to his grandfather coming over from
- 13 Germany. So in a way it does the arc of California history
- 14 from the gold rush era to yesterday, more or less. So, a
- 15 really fascinating story. Certainly I think we all know
- 16 Governor Brown is a fascinating character.
- Going forward, at least for a long time, it was
- 18 like if the phone rang really early or really late I always
- 19 had to guess who was it going to be. But anyway, I suspect
- 20 that will continue on some level.
- 21 Anyway let's go on to Chief Counsel's Report.
- Or actually before I do that, this out of
- 23 character, but I had a special request from Laurie, so I
- 24 mean normally as you can tell we all talk looking back.
- 25 And she asked me to put a plug in for the EPIC Symposium,

- 1 which will be held on February 19th at the Sacramento
- 2 Convention Center. I'm not going to go through the whole
- 3 plug, but just to say it's great. I certainly encourage
- 4 people's participation. It's free. It's open to the
- 5 public. It's going to cover really high points of what
- 6 we've done, great sessions. And I'm sure that you're going
- 7 to see more publicity on it as we go forward. So again,
- 8 just to make sure people add that on their calendar.
- 9 But anyway, Chief Counsel?
- MS. VACCARO: Nothing to report today.
- 11 CHAIRMAN WEISENMILLER: Executive Director?
- MR. BOHAN: Thank you, Chair. I'll be brief, but
- 13 I'm standing at podium for two reasons. First, I want to
- 14 show visual that can appear to the folks that are on WebEx
- 15 and also to let you know that we're looking at adding
- 16 additional cameras, because right now we have the one
- 17 behind me, which shows the dais and it's just a set shot.
- 18 And then we have the one here that shows the podium. And
- 19 we're looking at making it more dynamic, so we can move
- 20 around a bit. And then we don't have the situation where
- 21 there are talking heads that aren't apparent, because
- 22 they're sitting over here. And it's just a little awkward
- 23 to ask people to come up here every time.
- 24 COMMISSIONER HOCHSCHILD: Is there a feature that
- 25 photo shops out the gray hair?

- 1 MR. BOHAN: We can work on that. Yes. Yes, I'll
- 2 need that as well.
- What I wanted to show you that's a visual is this
- 4 Accomplishments Report document. This is different from
- 5 the Version 1, excuse me, Volume 1 of the IEPR that
- 6 Commissioner Hochschild led, which I think is an excellent
- 7 look back at the last eight years of our efforts. This
- 8 just looks at one year, dives a little deeper in the things
- 9 that might not have made the greatest hits, but are also
- 10 significant accomplishments. And you'll be getting a pack
- 11 in a folder like this. It also has individual one-pagers.
- 12 All this is on our website as well, but they go into each
- 13 of our primary areas.
- So I just wanted you to see those things and to
- 15 thank Albert for his work on pulling all this stuff
- 16 together and a particular shout out to Bailey Wobschall who
- 17 is our graphic artist extraordinaire who helps really make
- 18 this stuff look -- it can look good, but he makes it look
- 19 fantastic. Thank you.
- 20 CHAIRMAN WEISENMILLER: Public Adviser?
- 21 MS. MATHEWS: So I quess I'll have to stand at
- 22 the podium as well.
- I do want to say also that I am thankful to have
- 24 served in the Brown Administration and I look forward to
- 25 continuing under the venue, a Newsom Administration. And

- 1 thank you to all of the Commissioners who helped support my
- 2 role as the Public Adviser.
- It has been a very exciting year, I think in
- 4 2018, which opened up a lot of opportunity for me to carry
- 5 our commitment, our message and our commitment of and
- 6 priority, of being inclusive with disadvantaged communities
- 7 and focusing on our diversity commitment across the state
- 8 and even across the country. I've had opportunities to
- 9 speak at a couple of different conferences in other states.
- 10 So I'm very thankful for that, looking forward to
- 11 wrapping up those efforts. And I liked what Commissioner
- 12 Hochschild said, mentioning bold new leadership in steps.
- 13 And making sure that we continue our commitment to be even
- 14 bolder going forward, as we look at our three priorities of
- 15 increasing the diversity of our applicants and our funding
- 16 programs, increasing the benefits of our policies and our
- 17 programs to include everyone in California, and then
- 18 internally to increase the diversity of our workforce. So
- 19 that we can reflect the diversity of the state and benefit
- 20 and leverage the richness that that provides.
- The last thing I want to mention is on January
- 22 25th, we will have our next Disadvantaged Advisory
- 23 Community Meeting. All of that will be on the notice, but
- 24 I thought I'd put a plug in. It will be in Fresno, so I'm
- 25 glad that we've been able to change locations around the

1	state to make sure we have greater participation from
2	everyone. Thank you.
3	CHAIRMAN WEISENMILLER: Any public comment?
4	(No audible response.)
5	CHAIRMAN WEISENMILLER: This meeting is
6	adjourned.
7	(Adjourned the Business Meeting at 1:49 p.m.)
8	000
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 19th day of January, 2019.

Susan Palmer Certified Reporter

CERT 00124

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 19th day of January, 2019.

1

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