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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, JUNE 12, 2019 10:00 A.M.

Reported by: Peter Petty

APPEARANCES

Commissioners

Janea Scott, Vice Chair Karen Douglas Patricia Monahan

Staff Present: (* Via WebEx)

Drew Bohan, Executive Director Kourtney Vaccaro, Chief Counsel Jennifer Martin-Gallardo, Acting Public Adviser Matthew Layton, Engineering Office Manager Cody Goldthrite, Secretariat

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- 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)
- 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).
- vii. In re: PG&E Corporation and In re: Pacific
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	the Horac after facts of l:	Pursuant to Government Code section 11126(e), Energy Commission may also discuss any judicial dministrative proceeding that was formally initial this agenda was published; or determine whether and circumstances exist that warrant the initial tigation, or that constitute a significant expositionation against the Commission, which might incomplete the commission of the co	ation sure
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- 3 VICE CHAIR SCOTT: Good morning, everyone. We
- 4 will begin our June 12th Business Meeting with the Pledge
- 5 of Allegiance.
- 6 (Whereupon the Pledge of Allegiance is recited.)
- 7 VICE CHAIR SCOTT: All right, good morning and
- 8 welcome. Item Number 1, our Consent Calendar.
- 9 COMMISSIONER MONAHAN: Move consent.
- 10 COMMISSIONER DOUGLAS: Second.
- 11 VICE CHAIR SCOTT: And do we have any public
- 12 comment on Consent Calendar?
- 13 (No audible response.)
- 14 VICE CHAIR SCOTT: Okay. Seeing none, all those
- 15 in favor?
- 16 (Ayes.)
- 17 VICE CHAIR SCOTT: The motion carries 3-0.
- All right, next we will do Item 2, the Malburg
- 19 Generating Station.
- MS. VACCARO: Commissioner Scott?
- VICE CHAIR SCOTT: Yes.
- MS. VACCARO: For the record you might want to
- 23 make note that two of our Commissioners are absent. So
- 24 when we say a 3-0 vote what we're meaning is because we
- 25 don't have the other Commissioners here.

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- 2 has noted we have two Commissioners absent today, so we
- 3 have three of us up here on the dais. So when we say a
- 4 motion carries 3-0 that is all of us today. Okay.
- 5 Item Number 2, please.
- 6 MR. ALI: Good morning, Commissioners. My name
- 7 is Anwar Ali. I'm the Compliance Project Manager in the
- 8 Siting, Transmission and Environmental Protection Division.
- 9 With me today is Jared Babula, Staff Council, and Matt
- 10 Layton, the Engineering Office Manager. Also with us today
- 11 representing the Project Owner is Scott Galati and Kyle
- 12 McCormack. Also on the phone we have Vicky Lee from the
- 13 South Coast Air Quality Management District.
- 14 Today staff is seeking approval for the Project
- 15 Owner's request to modify the Final Commission Decision for
- 16 Malburg Generating Station.
- Malburg is a 134-megawatt natural gas fire
- 18 combined cycle located in the City of the Vernon in Los
- 19 Angeles County. It was certified by the Energy Commission
- 20 in 2003 and it began commercial operation in 2005.
- 21 The petition under consideration today would
- 22 upgrade physical components of the combustion turbine and
- 23 install new software. However, the operation of the new
- 24 turbine upgrade would require acquiring new Title V permit
- 25 conditions from South Coast Air Quality Management District

13

- 1 and modification to the Energy Commission Conditions of
- 2 Certification.
- 3 This turbine upgrade would increase the
- 4 efficiency and the capacity of the facility. As stated in
- 5 the staff analysis in March 2018 the staff management
- 6 approved replacement of physical components as a
- 7 maintenance activity, because it involved just a
- 8 replacement of functional equivalent components. However,
- 9 this approval dictated that the facility would not upgrade
- 10 under enhanced performance capabilities until after the
- 11 approval of (indiscernible) and by the Energy Commission.
- 12 The software installation and the associated commissioning
- 13 activities occurred in May 2019.
- 14 Staff management approved this software
- 15 installation, because of two things. The timing of these
- 16 as scheduled out by the Project Owner and second, because
- 17 of air quality emissions for the commissioning period would
- 18 be less than emissions approved for the original
- 19 commissioning.
- 20 After careful review of the petition staff
- 21 concludes the following. The proposed modification would
- 22 result in a slight increase in potential air quality
- 23 emissions. However, the increased emissions would not have
- 24 any significant air quality impacts. Additionally, no
- 25 additional mitigation would be required for these increased

- 1 emissions.
- 2 The increased efficiency of the capacity would
- 3 result in an approximate net increase of 8 megawatts in the
- 4 pro-production. (phonetic) The proposed modification would
- 5 not result in significant impacts on the environment,
- 6 public health and safety. And without option of the new or
- 7 revised air quality Conditions of Certification the project
- 8 would remain in compliance all of applicable rules. The
- 9 proposed modification to air quality Conditions of
- 10 Certification reflect the combustion turbine's upgrades and
- 11 other modifications to ensure consistency between the Air
- 12 District and the Energy Commission Final Decision language.
- 13 Based upon these facts the staff recommends
- 14 approval of the proposed modification to the Final
- 15 Commission Decision. I will be available to answer any
- 16 questions you have. Thank you.
- 17 VICE CHAIR SCOTT: Thank you. We'll now hear
- 18 from Applicant.
- MR. GALATI: Good morning, Madam Chair and
- 20 Members of the Commission. We have read the staff
- 21 assessment. We agree with the staff assessment's
- 22 conclusions and all of the conditions that are being
- 23 proposed in there. Just a point of clarification, the
- 24 South Coast has actually issued the final permit, so we
- 25 won't be coming back for any corrections between -- as

- 1 sometimes happens with a petition for amendment.
- 2 So we ask that you go ahead and approve this
- 3 petition and make the decision consistent with the South
- 4 Coast permit. Thank you.
- 5 VICE CHAIR SCOTT: Thank you. Do we have any
- 6 public comment in the room on this matter? Okay. Public
- 7 comment on the phone?
- 8 (No audible response.)
- 9 All right, Commissioner discussion, please?
- 10 COMMISSIONER DOUGLAS: Well, I just wanted say
- 11 that I'm in support of this amendment. I appreciate
- 12 staff's thorough analysis and if there are not additional
- 13 questions I'll move approval of Item 2.
- 14 COMMISSIONER MONAHAN: Seconded.
- VICE CHAIR SCOTT: All those in favor?
- 16 (Ayes.)
- 17 VICE CHAIR SCOTT: The motion carries 3-0. Thank
- 18 you very much.
- MR. GALATI: Thank you.
- 20 VICE CHAIR SCOTT: We will now move on to Item
- 21 Number 3, Bruce A. Wilcox, P.E., please.
- MR. OWNBY: Good morning, Commissioners. My name
- 23 is Adrian Ownby and I'm with the Building Standards Office
- 24 in the Efficiency Division.
- This item is a technical support contract with

- 1 Bruce Wilcox for up to \$4.5 million over 3 years. This
- 2 technical support contract is focused on the development
- 3 and implementation of the California Building Energy Code
- 4 Compliance software, otherwise known as CBECC.
- 5 CBECC is used to show compliance with the
- 6 building standards. It's also used by staff and
- 7 consultants and researchers to evaluate the impact of
- 8 proposed measures on the Energy Code.
- 9 This contract will provide crucial technical
- 10 support for both the development and implementation of the
- 11 2019 and the 2022 CBECC software. With that I'd like to
- 12 request approval of this contract and I'm happy to answer
- 13 any questions you might have.
- 14 VICE CHAIR SCOTT: All right.
- I do not have any blue cards here with me, but do
- 16 we have public comment in the room? Public comment on the
- 17 phone?
- 18 (No audible response.)
- 19 VICE CHAIR SCOTT: Okay, seeing one any
- 20 Commissioner discussion?
- 21 COMMISSIONER DOUGLAS: No. I'll move this item.
- 22 COMMISSIONER MONAHAN: Seconded.
- 23 VICE CHAIR SCOTT: All those in favor?
- 24 (Ayes.)
- VICE CHAIR SCOTT: The motion carries 3-0. Thank

- 1 you.
- Okay, we will now move on to Item Number 4, the
- 3 Office of Planning and Research/Strategic Growth Council.
- 4 MS. ANDERSON: Good morning Vice Chair and
- 5 Commissioners. My name is Hilarie Anderson. I'm with the
- 6 Siting, Transmission, and Environmental Protection
- 7 Division, and here with me today is Tom Gates, our Tribal
- 8 Liaison.
- 9 I am here today requesting your approval for an
- 10 interagency agreement between the California Energy
- 11 Commission and the Strategic Growth Council to partner in
- 12 the implementation of the Tribal Government Challenge
- 13 Program.
- 14 The Tribal Government Challenge Program has two
- 15 parts. First is a grant-funding opportunity that would
- 16 enable tribes within California for planning activities
- 17 related to energy efficiency improvements, renewable energy
- 18 generation, and climate energy resiliency. A total of \$2
- 19 million would be allocated to grants through a competitive
- 20 solicitation with a maximum grant award anticipated at
- 21 \$250,000.
- 22 Second, the partnership would conduct a
- 23 competitive solicitation for a statewide gap analysis. The
- 24 successful bidder would conduct an analysis to discover
- 25 underlying issues related to California tribes' ability to

- 1 adapt to climate change and issues related to energy
- 2 access, reliability, and sustainability. The gap analysis
- 3 would be for up to \$250,000.
- 4 This Interagency Agreement is for a total amount
- 5 of \$2,350,000. And the Tribal Government Challenge Program
- 6 would be funded by the American Recovery and Reinvestment
- 7 Act of 2009, or ARRA.
- 8 Staff recommends approval of this Interagency
- 9 Agreement. Thank you for your consideration and I'm here
- 10 for any questions.
- 11 VICE CHAIR SCOTT: Thank you.
- I do not have any blue cards up here with me, but
- 13 any public comment in the room? And is there anyone from
- 14 OPR who would like to speak on this topic? Seeing no, any
- 15 public comment on the phone? Also seeing no.
- 16 (No audible response.)
- 17 VICE CHAIR SCOTT: Okay, let's turn to
- 18 commissioner discussion.
- 19 COMMISSIONER DOUGLAS: All right, so on this one
- 20 I do know some traditional discussion and comments to make.
- 21 I'm really excited about this program. This is a
- 22 tremendous opportunity to help us partner with tribes and
- 23 help facilitate and learn from some of the really
- 24 tremendous grass roots potential and energy and desire to
- 25 make a difference that's coming from California Native

1	American	tribes.	We've	seen	tremendous	engagement	and

- 2 interest in energy from a number of tribal governments that
- 3 the Energy Commission has worked with over time and talked
- 4 to the last Tribal Energy Summit, for example and had the
- 5 opportunity to work with, in a broad number of ways.
- 6 I'm also very excited to move this program
- 7 forward through a partnership with OPR and the Strategic
- 8 Growth Council, because of their tremendous expertise in
- 9 working with local governments, working on planning issues,
- 10 working on delivery of programs that -- especially through
- 11 the Strategic Growth Council -- that help foster
- 12 sustainability in planning across a broad range of areas.
- 13 But that could really benefit from and grow from
- 14 (indecipherable) greater engagement with tribes that this
- 15 partnership will allow us to facilitate at OPR as well, and
- 16 Strategic Growth Council as well.
- 17 So I really want to thank the Energy Commission
- 18 staff for working with extremely hard to move this forward.
- 19 It was a multi-divisional team involving in particular
- 20 staff division and efficiency. It drew on some of the
- 21 tremendous expertise from the ARRA days that we have on
- 22 staff and our knowledge of how to move that money.
- 23 And really this program is evidence to me, and
- 24 just shows me some of the benefits of some of the
- 25 approaches we did take in ARRA, which was to at least for

- 1 some of that money put the money out the door in the form
- 2 of programs that would be loans that would have a repayment
- 3 stream. And it's the repayment stream from one of those
- 4 loan programs that is allowing us to do this program.
- 5 One more comment I'll make. Commissioner
- 6 McAllister isn't here. He has been and his office has been
- 7 a real partner in moving this program forward. The program
- 8 is actually modeled after the local government challenge,
- 9 which used the same funds in a prior year and which had
- 10 very similar goals aimed at local governments rather than
- 11 tribal governments. And so he was very interested in being
- 12 able to use the program design and ideas that they came up
- 13 with and focus that on tribal governments. And so he's
- 14 been a tremendous partner in this as well.
- So those are my comments. I just wanted to see
- 16 if my colleagues would like to speak on this.
- 17 VICE CHAIR SCOTT: I had some comments as well.
- 18 Thank you, Commissioner Douglas, for your leadership in
- 19 this space and to Commissioner McAllister as well with the
- 20 local government challenge.
- 21 I had an opportunity to attend the Tribal Summit
- 22 and also the meeting that we had here in Sacramento not so
- 23 long ago. The tribes I know are very excited about the
- 24 planning grants, which is fantastic. As you all know,
- 25 having equity and making sure that all Californians are

- 1 part of this clear energy transition is so incredibly
- 2 important. And we're not just talking the talk, but we're
- 3 walking the walk in this space and it's just really
- 4 exciting to me to see additional energy planning specific
- 5 to the tribes going forward in this way.
- 6 And I also appreciate the partnership with OPR
- 7 and with the Strategic Growth Council because I think all
- 8 of our agencies are bringing strength. And we'll have an
- 9 opportunity to really learn from one another. And the sum
- 10 of the parts is greater than the whole here, so I'm excited
- 11 about this one.
- 12 COMMISSIONER DOUGLAS: Yeah.
- 13 COMMISSIONER MONAHAN: Yeah, so I only have a
- 14 month under my belt at the Commission, so my remarks are
- 15 not steeped in the history that my colleagues have of this
- 16 program. But I was lucky enough to be briefed by staff and
- 17 I was just so impressed with the quality of just the
- 18 attentiveness, I think, to the special issues that we face
- 19 with tribal governments. And it was just very exciting to
- 20 hear how the CEC is really helping not just our work with
- 21 the tribes, but across the entire set of California state
- 22 agencies that have deepened our understanding about how we
- 23 work with independent governments.
- 24 And it takes a lot of careful thinking and
- 25 understanding of some of the issues that tribes face. So

- 1 yeah, this is something I would just give my wholehearted
- 2 endorsement for this program.
- 3 VICE CHAIR SCOTT: Great. Can I get a motion
- 4 please?
- 5 COMMISSIONER DOUGLAS: Move approval of this
- 6 item.
- 7 COMMISSIONER MONAHAN: Second.
- 8 VICE CHAIR SCOTT: Okay. All those in favor?
- 9 (Ayes.)
- 10 VICE CHAIR SCOTT: The motion carries 3-0. Thank
- 11 you so much.
- MS. ANDERSON: Thank you.
- 13 VICE CHAIR SCOTT: All right. Next is Item Number
- 14 5, the Cerritos Community College District.
- MS. HAAS: Good Morning Vice Chair and
- 16 Commissioners. I am Tami Haas, Lead over Workforce
- 17 Training and Development with the Clean Transportation
- 18 Program, also known as the Alternative and Renewable Fuel
- 19 and Vehicle Technology Program.
- 20 Staff is seeking approval for an interagency
- 21 agreement with Cerritos Community College District for just
- 22 over \$1 million. This agreement will fund electric school
- 23 bus training for bus operators and maintenance staff.
- 24 Through Senate Bill 110, the Legislature charged
- 25 the Energy Commission with retrofitting and replacing old

- 1 diesel school buses in disadvantaged and low-income
- 2 communities around the state. The Energy Commission is
- 3 implementing this charge through its School Bus Replacement
- 4 Program.
- 5 With the appropriation of \$75 million,
- 6 approximately 200 buses were identified for electric
- 7 replacements statewide. The transition from diesel to
- 8 electric bus technology creates a training need for bus
- 9 operators and maintenance staff in the awarded school
- 10 districts, county offices of education, and joint power
- 11 authorities.
- 12 The Contractor will provide electric school bus
- 13 operator and technician training to faculty from up to nine
- 14 community colleges around the state, who will then
- 15 facilitate the training of fleet technicians and bus
- 16 operators employed by all the school districts, etcetera,
- 17 who are awarded these electric buses.
- 18 The delivery of training will be timed with the
- 19 delivery of the electric buses, which is scheduled for
- 20 rollout between late 2019 and September 2022.
- 21 Thank you for your consideration of this item,
- 22 and I have Jannet Malig from the Cerritos Community College
- 23 District who would like to offer some comments. Thank you.
- 24 VICE CHAIR SCOTT: Thank you.
- Janet, please come up. Good morning.

1 MS	. MALIG:	Good	morning	. On	behalf	of	Cerritos

- 2 College and the California Community College system we want
- 3 to say thank you for this opportunity to be part of the
- 4 workforce development and the reductions of emissions and
- 5 clean fuel technology.
- 6 We really think that we have a great opportunity,
- 7 especially in disadvantaged communities to bring forth a
- 8 new technology and trained work force for this, so thank
- 9 you very much.
- 10 VICE CHAIR SCOTT: Great. Thank you.
- 11 Do we have any -- I don't have any blue cards,
- 12 but do we have public comment in the room? Public comment
- 13 on the phone? Seeing none, let's turn to Commissioner
- 14 discussion.
- 15 COMMISSIONER MONAHAN: Yeah, I'd like to say a
- 16 few words about this program. So I think anybody with kids
- 17 who ride school buses know that it's important, like the
- 18 safeguarding of our children's health is the most important
- 19 thing that we have. It's our greatest legacy. And kids
- 20 riding diesel school buses, especially long distances are
- 21 exposed to harmful pollutants that penetrate deep into the
- 22 lungs and reduce the longevity of their lives. And that's
- 23 such a profound horrible thing to consider that as we're
- 24 putting our kids on these diesel school buses so that go
- 25 safety to school, they're being exposed to these harmful

- 1 pollutants.
- 2 So this program is one of these -- just you feel
- 3 good, it brings tears to my eyes in terms of like this is
- 4 great for kids' health. And yet school districts are
- 5 struggling with basic needs. So how are we foisting this
- 6 new technology on them without giving them the support that
- 7 they need to make sure they understand how to charge these
- 8 vehicles and what it looks like to maintain these vehicles.
- 9 So I just want say that I think this program is a
- $10\,$ great supplement to the investments that we and ARB are
- 11 making on replacing diesel school buses with clean electric
- 12 buses. And it's what we're going to need a lot more of in
- 13 terms of if we want to electrify transportation more
- 14 broadly there's a lot of workforce training that has to
- 15 accompany that. So I just really strongly endorse this
- 16 investment. Thank you.
- 17 VICE CHAIR SCOTT: Yeah, I might just add I'm
- 18 also very excited about this project. Jannet, thank you for
- 19 being here, and Tami for overseeing this; the enthusiasm
- 20 and engagement that you bring to the program in making sure
- 21 that there's great workforce training. We also have our
- 22 terrific high school programs. I've had a chance to go to
- 23 about five or six high schools with Dianna and Tami. And
- 24 really just see this happening on the ground. People
- 25 getting excited about how to work on electric vehicles and

- 1 what kind of things do you need to learn. It's just an
- 2 incredibly important component. So I will ask for a motion
- 3 please.
- 4 COMMISSIONER MONAHAN: I motion to support.
- 5 VICE CHAIR SCOTT: Moved to approve.
- 6 COMMISSIONER MONAHAN: Move to approve, sorry.
- 7 COMMISSIONER DOUGLAS: Second.
- 8 VICE CHAIR SCOTT: All those in favor?
- 9 (Ayes.)
- 10 VICE CHAIR SCOTT: The motion carries 3-0. Thank
- 11 you.
- MS. HAAS: Thank you.
- VICE CHAIR SCOTT: All right, we will now move on
- 14 to Item Number 6, the Outreach Education and Collaborative
- 15 Planning for California's Central Valley, GFO-18-603,
- 16 please.
- MS. EJLALMANESHAN: Good morning Vice Chair and
- 18 good morning Commissioners. My name is Susan Ejlalmaneshan
- 19 with the Fuels and Transportation Division. Staff is
- 20 seeking approval of two projects that were proposed for
- 21 funding through our Outreach, Education & Collaboration in
- 22 Central Valley Solicitation under the Clean Transportation
- 23 Program, also known as the Alternative and Renewable Fuels
- 24 and Vehicle Technology Program.
- 25 Under this solicitation, we initially anticipated

- 1 providing up to \$1 million for projects that will
- 2 accelerate the rate of adoption of alternative fuels and
- 3 advanced technologies in the Central Valley.
- 4 The first agreement is with Fresno Metro Black
- 5 Chamber Foundation for about \$615,000 to support the rapid
- 6 growth of light-duty electric vehicles in the San Joaquin
- 7 Valley. This agreement will focus on three areas.
- First, this agreement will expand community-based
- 9 engagement and marketing of PEV car sharing and ridesharing
- 10 projects within the Valley. These projects target 11
- 11 disadvantaged communities in Fresno, Tulare, and Kern
- 12 counties. Once successful, these projects can be
- 13 replicated for other communities.
- 14 Second, this agreement's PEV marketing and
- 15 education campaign aims to break down stereotypes and false
- 16 impressions regarding PEVs. It will address the operation
- 17 of PEVs, the economic benefits of owning a PEV, and the
- 18 availability of clean vehicle incentives.
- 19 Third, and finally, this agreement will provide
- 20 hands-on interactions with PEVs as well as training and
- 21 employment for students as EV Ambassadors. Fresno Metro
- 22 Black Chamber intends to leverage its Central Valley
- 23 Business Diversity Partnership to incorporate involvement
- 24 of African American, Latino, and Southeast Asian
- 25 communities.

1 The next agreement	is	with	Gladstein	Neandross	&
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- 2 Associates for nearly \$700,000 to support the deployment of
- 3 clean medium and heavy-duty transportation in the Central
- 4 Valley. In contrast to the previous agreement, this
- 5 agreement focuses on outreach to commercial fleets.
- 6 First, this agreement will provide technical
- 7 assistance hotlines to answer questions regarding clean
- 8 transportation incentives, technology, infrastructure, and
- 9 best practices.
- 10 Second, the recipient will host workshops and
- 11 webinars that provide information about clean vehicles and
- 12 programs as well as case specific alternative fuel
- 13 feasibility, emission reduction calculations, and
- 14 infrastructure assessments.
- Third, this agreement will provide one-on-one
- 16 meetings with fleet operators to address operator-specific
- 17 questions and barriers to increase their confidence in the
- 18 technology.
- 19 Finally, the agreement will include traveling
- 20 teachers and a teacher training program that will develop,
- 21 distribute and implement air quality and clean
- 22 transportation workshops for K-5 students.
- 23 Staff is seeking approval of both grant awards
- 24 for Item Number 6.
- I would note that Ms. Tara Lynn Gray from Fresno

- 1 Metro Black Chamber is here and also a representative from
- 2 Gladstein Neandross & Associates is on the phone to provide
- 3 remarks and answer questions. Thank you for your
- 4 consideration of these items.
- 5 VICE CHAIR SCOTT: Great. Thank you. So let us
- 6 start in the room. Ms. Gray, did you have any comment
- 7 you'd like to make?
- 8 MS. GRAY: Good morning. My greatest and first
- 9 comment is thank you very much. As an advocate for
- 10 disadvantaged communities and the businesses that are
- 11 growing in in those communities we feel that this move not
- 12 only accomplishes the objectives of the Commission, but
- 13 goes a very, very long way in supporting equity in grant
- 14 making, supporting equity in small business development and
- 15 equity in job creation. We are thrilled about this award
- 16 and can't thank you enough for the opportunity.
- 17 VICE CHAIR SCOTT: Great. Thank you.
- Do we have any other public comment in the room?
- 19 (No audible response.)
- 20 VICE CHAIR SCOTT: Okay and then I know that we
- 21 have Mr. Terreri on the phone. Will you open his line,
- 22 please. Mr. Terreri, we are ready for you.
- 23 MR. TERRERI: Well, thank you. Good morning
- 24 Madam Chair and the Commission. On behalf of GNA we'd like
- 25 to say thank you for the opportunity with this proposal and

- 1 appreciate the opportunity to support commercial fleet
- 2 operators and particularly the small fleet operators in
- 3 adopting a transportation solution across the Central
- 4 Valley.
- 5 It's crucial work we're very grateful to begin.
- 6 Thank you.
- 7 VICE CHAIR SCOTT: Thank you. Do we have any
- 8 other public comment on the phone? Okay, I'm seeing no, so
- 9 let's turn to Commissioner discussion.
- 10 COMMISSIONER MONAHAN: Yeah, I'll start. First I
- 11 want to say that both of these proposals again are dealing
- 12 with this issue of fairness and equity as we clean up our
- 13 transportation system. I want to talk for a second about
- 14 the first one, which I think is really groundbreaking and
- 15 also risky. Like we don't know what we're doing. I don't
- 16 mean to be critical; I just mean this is new territory.
- 17 And there are barriers to electrification. There are
- 18 barriers to -- in terms of not everybody can afford to own
- 19 a vehicle. How do we share these clean vehicles in an
- 20 effective way, spread the benefits of transportation
- 21 electrification to all communities?
- I just want to say thank you to the Fresno Metro
- 23 Black Chamber Foundation for being visionary and taking on
- 24 this very challenging area.
- I think we should -- we need to try new frontiers

- 1 in this space. We need to take risks. And so I just give
- 2 kudos to you and your team for being visionary in this
- 3 space
- 4 About the GNA proposal around medium and heavy-
- 5 duty fleet electrification, again this is about cleaning up
- 6 the dirtiest trucks on the road. They're a very small
- 7 share of our actual vehicles on the road, but they're a big
- 8 share of diesel particulate matter, a big share of nitrogen
- 9 oxide emissions that cause smog forming pollution to form
- 10 and also cause small particles to form. So electrifying
- 11 and cleaning up our heavy-duty fleet is critically
- 12 important to public health.
- So both of these proposals I think are really
- 14 strong. And thanks to staff and to our grantee for
- 15 proposing these projects.
- VICE CHAIR SCOTT: I would just add it's been
- 17 really exciting to see this come together. We spent some
- 18 time thinking through like what would we like to do in the
- 19 Central Valley. It makes sense to do projects like this in
- 20 the Central Valley, because it's one of the areas in this
- 21 state that is hardest hit by air pollution and others. And
- 22 also really thinking through what do we need to do to make
- 23 sure communities across our Central Valley are part of this
- 24 again electric transformation into electric transportation.
- 25 And so I love that we got a light-duty component,

- 1 a medium duty and heavy-duty component. And I'm excited to
- 2 see how these come along, so I will ask for a motion
- 3 please.
- 4 COMMISSIONER DOUGLAS: I'll let Commissioner
- 5 Monahan make the motion, but I just wanted to pile on here
- 6 very briefly and say that I was really pleased to see this
- 7 solicitation targeted at the Central Valley as well. And I
- 8 think in some ways similarly to the tribal grants that we
- 9 just looked at, although they're not the same. It's
- 10 wherever we have an opportunity to tap into the people and
- 11 communities that we want to reach who are organizing and
- 12 who are looking for solutions and trying to generate local
- 13 strategies and solutions that will help further all of our
- 14 goals it's just exciting to be able to do that. So I'm
- 15 really pleased to see this.
- 16 COMMISSIONER MONAHAN: I'm going to learn from my
- 17 past mistake. I move to approve --
- 18 UNIDENTIFIED SPEAKER: Item 6, say "Item 6."
- 19 COMMISSIONER MONAHAN: Item 6, apparently I'm not
- 20 learning from mistakes. (Laughter.)
- 21 COMMISSIONER DOUGLAS: Second.
- VICE CHAIR SCOTT: All those in favor?
- 23 (Ayes.)
- VICE CHAIR SCOTT: The motion carries 3-0. Thank
- 25 you.

1	MS.	EJLALMANESHAN:	Thank	you.

- 2 VICE CHAIR SCOTT: Okay, we are now onto Item
- 3 Number 7, Zero Emission Vehicle and Zero Emission Vehicle
- 4 Infrastructure Manufacturing GFO-18-605.
- 5 MR. RILLERA: Good morning Vice-Chair and
- 6 Commissioners. My name is Larry Rillera. I am staff with
- 7 the Fuels and Transportation Division. I'm here to present
- 8 Item Number 7. All three agreements in this item are
- 9 funded through the Clean Transportation Program, also known
- 10 as the Alternative and Renewable Fuel and Vehicle
- 11 Technology Program.
- In December of 2018, the Energy Commission
- 13 released a solicitation for zero-emission vehicle and zero-
- 14 emission vehicle infrastructure manufacturing. The intent
- 15 of the solicitation was to develop and expand ZEV supply
- 16 chains in California.
- 17 The solicitation offered almost \$10 million for
- 18 two categories of projects: Category A was for projects
- 19 that manufacture ZEVs and ZEV components. Category B was
- 20 for projects that manufacture ZEV infrastructure such as
- 21 electric vehicle chargers and hydrogen refueling station
- 22 equipment. Today, staff will present agreements for
- 23 Category A projects.
- 24 Transportation Power is proposed for \$1.1 million
- 25 in funding. The agreement with Transportation Power

- 1 proposes to upgrade manufacturing capabilities to improve
- 2 the production of electric power trains, motor assemblies,
- 3 and battery packs for heavy-duty all-electric trucks. The
- 4 project will leverage almost \$1.5 million in private
- 5 investment that will create jobs while increasing the
- 6 efficiency of their manufacturing operations.
- 7 Proterra is proposed for \$1.8 million in funding.
- 8 The agreement with Proterra proposes to install
- 9 manufacturing equipment to help scale the production of
- 10 all-electric transit buses at their manufacturing facility
- 11 in the City of Industry. The project will leverage almost
- 12 \$2 million in private investment that will nearly double
- 13 production.
- 14 Zero Motorcycles is proposed for \$1.8 million in
- 15 funding. The agreement with Zero Motorcycles proposes to
- 16 install manufacturing equipment, and implement a series of
- 17 manufacturing changes, over the next two model years
- 18 including on-shoring motor manufacturing in the City of
- 19 Scotts Valley. The project will leverage almost \$2 million
- 20 in private investment that will increase manufacturing
- 21 efficiency and reduce production costs.
- 22 Staff is also recommending approval of staff's
- 23 determination that each of the three projects noted are
- 24 exempt from CEQA.
- 25 Staff would note that representatives from each

- 1 of the companies are present to provide remarks and answer
- 2 any questions.
- 3 Thank you in advance for consideration of these
- 4 items.
- 5 VICE CHAIR SCOTT: Thank you.
- 6 All right, so I do have some blue cards up here
- 7 with me. First, I have Antonio Montez and he'll be
- 8 followed by Kent Leacock.
- 9 MR. MONTEZ: Good morning, Commissioners. I'm
- 10 Antonio Montez, a Regional Product Manager for
- 11 Transportation Power. And I'd like to take this
- 12 opportunity to say thank you to the Energy Commission and
- 13 to express our appreciation for the Commission's continuing
- 14 support. Our first Commission-funded electric refuse truck
- 15 will be entering service in days here in the Sacramento
- 16 area.
- 17 Since we submitted our grant proposal earlier
- 18 this year our estimated demand for our EV drive systems by
- 19 the year 2022, which is a year following the end of the
- 20 grant, has increased from 300 per year to more than 1,000.
- 21 This new grant is a big part of our plans to expand our
- 22 California manufacturing capacity to meet this demand.
- 23 Thank you.
- 24 VICE CHAIR SCOTT: Thank you.
- I have Kent Leacock, followed by Jay Friedland.

1	MR.	LEACOCK:	Good	morning	Vice	Chair	Scott,
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- 2 Commissioner Douglas and newly-minted Commissioner Monahan.
- 3 My name is Kent Leacock and I'm a Senior Director for
- 4 Government Relations and Public Policy for Proterra. On
- 5 behalf of the Proterra team, we would like to thank all of
- 6 you, and the Energy Commission staff, for the most recent
- 7 Notice of Proposed Award for the scaling of zero emission
- 8 vehicle manufacturing in California project that will help
- 9 optimize the production of zero emission buses at our
- 10 manufacturing facility in the City of Industry.
- 11 Proterra is a major California success story.
- 12 With the strong support from the Energy Commission, we
- 13 moved our corporate headquarters to California in 2015 and
- 14 now manufacture our own battery modules and packs at our
- 15 headquarters in Burlingame. And the Energy Commission also
- 16 helped make possible building our zero emission public
- 17 transit buses here in California at our manufacturing
- 18 facility in the City of Industry.
- 19 We greatly appreciate the Commission's initial
- 20 support and partnership to help establish our manufacturing
- 21 facilities in California. Our first project, working with
- 22 the Commission, helped enable us to sell more than 700
- 23 buses to more than 90 fleet operators across 41 states and
- 24 provinces in the United States and Canada.
- 25 Having a presence in California was crucial to

- 1 that success. The buses built have logged over 8 million
- 2 service miles and displaced over 40 million pounds of
- 3 tailpipe emissions as well as established new opportunities
- 4 for tech transfer to other heavy-duty sectors, including
- 5 school buses.
- 6 Today's project will utilize the lessons learned
- 7 from operating our existing manufacturing facilities and
- 8 will improve manufacturing efficiency, productivity and
- 9 safety to meet the growing demand for zero emission buses
- 10 in California.
- 11 The project will deploy state-of-the-art
- 12 equipment and accelerate production, improve quality,
- 13 safety, lower production costs and create good living wage
- 14 jobs within the San Gabriel Valley.
- 15 Thank you again for the continued partnership to
- 16 expand zero emission heavy-duty vehicle manufacturing in
- 17 California that will help accelerate the deployment of
- 18 those vehicles as well as increase jobs and economic
- 19 opportunities for the state.
- We look forward to executing another successful
- 21 project together and would love to have, at the completion
- 22 of this project, have the Commissioners come down and see
- 23 the factory in its newest form. Thank you.
- 24 VICE CHAIR SCOTT: All right. Thank you.
- I have Jay Friedland, please.

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- 1 MR. FRIEDLAND: Good morning Vice Chair, Douglas,
- 2 Commissioner Scott and welcome Commissioner Monahan. I'm
- 3 here representing -- I'm Jay Friedland I'm here
- 4 representing Zero Motorcycles today.
- 5 First again we also want to thank you for your
- 6 continued support of our efforts. And this is a
- 7 particularly exciting grant for us, because as Commissioner
- 8 Scott got to see a couple of years ago, one of our goals is
- 9 to bring back our motor manufacturing from sort of the
- 10 disparate global supply chain, but primarily China, and
- 11 bring it back to the United States. And we're going to be
- 12 able to do that with this grant. So we're very, very
- 13 excited about that.
- 14 And I also want to thank staff for the hard work
- 15 that they've done in putting this together. And the whole
- 16 importance of the ARFVTP program, because now in its 11th
- 17 year it really has allowed companies like ours to grow and
- 18 manufacture in the state of California. And now we're the
- 19 second largest manufacturer of electric vehicles in the
- 20 State of California, of course behind Tesla.
- 21 It's also really important because as Larry was
- 22 saying, the supply chains even for us, a relatively small
- 23 manufacturer still, and the supply chain issues remain a
- 24 constant challenge. And particularly with the current
- 25 environment of tariffs and where can you source from where,

- 1 bring this manufacturing to California is critical.
- I also want to just mention that some people ask,
- 3 "Well, why are motorcycles important in this whole
- 4 transportation scheme?" And the key thing here is that the
- 5 fleet of motorcycles that is on the road today in
- 6 California actually provides 16 percent more pollution than
- 7 the fleet of light-duty vehicles, of cars. And that's
- 8 because cars have got tremendously clean over time.
- 9 And the ARB is working on this. They're actually
- 10 going to be proposing regulations next year. But in the
- 11 meantime getting zero emission motorcycles is very
- 12 important. And there are more companies that are coming
- 13 along that are doing this.
- So again, we really thank you for your leadership
- 15 on this and just really appreciate all of your support.
- 16 VICE CHAIR SCOTT: Okay. Thank you.
- Do I have any other public comment in the room?
- 18 (No audible response.)
- 19 VICE CHAIR SCOTT: All right. I have one public
- 20 comment on the phone. It is Marc Harel from AutoElectric.
- MR. HAREL: Hello, there. I appreciate the
- 22 opportunity to speak. I'm calling from overseas. I hope
- 23 everyone hears me well.
- I'm a native Californian living and working in
- 25 Israel and since 2013 I've been working with Zero

1	Motorcvcles	and that	relationship	ended most	recently	, after

- 2 a number of concerns were expressed or had been expressed
- 3 over the past several years, regarding their actions. In
- 4 particular a boycott of the general market (indiscernible)
- 5 coming from this market both for consumers, but more
- 6 specifically for these redundant (phonetic) and related
- 7 entities.
- 8 And in reviewing this and also speaking with
- 9 dealers and distributors throughout the United States and
- 10 Europe we found that Zero Motorcycles is in breach of a
- 11 number of California laws, corporation and California
- 12 Franchise Investment Law and Relations Act, a number of
- 13 Vehicle Code Section 3000, 117000, 11726, 11703, 23
- 14 (indiscernible) California Anti-VDS (phonetic) legislation
- 15 enacted in 2016 and AB 2844.
- We want to urge the staff to further investigate
- 17 (indiscernible) Zero Motorcycles (indiscernible) actions
- 18 and most particularly their compliance with California law
- 19 before providing such a generous grant. We think that any
- 20 company receiving this level of funding from the state
- 21 should be in full compliance with the laws in the State of
- 22 California.
- Thank you for your time.
- 24 VICE CHAIR SCOTT: Okay. Thank you.
- 25 Let me turn back to staff to ask if we've done

- 1 the due diligence in that space, please.
- 2 MR. RILLERA: Thank you Vice Chair. With this
- 3 particular solicitation, we did ramp up due diligence
- 4 conduct for the applicants. In previous years there's been
- 5 a self-certification, some basic business presence
- 6 verification and certification, but this year we invoked a
- 7 third-party analysis on some financials and their business
- 8 presence.
- 9 And with respect to the specific discussion right
- 10 now, there was no discovery of anything outstanding. But
- 11 know that all the applicants were treated equally with
- 12 respect to increased due diligence on their business and
- 13 their financial and their market performance.
- 14 VICE CHAIR SCOTT: Thank you. Do we have any
- other public comment on the phone?
- 16 (No audible response.)
- 17 VICE CHAIR SCOTT: Seeing none let me turn to
- 18 Commissioner discussion please.
- 19 COMMISSIONER MONAHAN: Sure. I'll start. Well,
- 20 I know I sound like a broken record, but I just want to say
- 21 that the focus on making sure that California is a leader
- 22 on advancing zero emission technologies, and ensuring that
- 23 these technologies then diffuse into the marketplace and
- 24 Californians directly benefit from the cleaner air. And I
- 25 would say the improvement in actual mobility that these

- 1 technologies can provide.
- The first one in terms of refuse haulers or I
- 3 should say refuse haulers, transit buses and school buses
- 4 are all vehicles that are used within urban areas, stop-
- 5 and-go cycle where community residents are exposed to
- 6 harmful pollutants from these vehicles. So investing in
- 7 technologies that help California advance cleaner vehicles
- 8 and fuels and benefit all Californians is just really where
- 9 we should be putting our money with the Clean
- 10 Transportation Program.
- On the motorcycle side I can say I'm a bicycler
- 12 and anybody that's a bicycler and has biked on roads where
- 13 there's tons of motorcycles realizes that those pollutants
- 14 are bad. I actually have to cover my nose every time a
- 15 motorcycle passes because of all the pollutants that come
- 16 out. So I think it's a great vehicle to electrify and it
- 17 could make a big difference for Californians, including
- 18 bikers.
- 19 So I just want to congratulate Larry and the
- 20 staff for pulling these together. I think that we should
- 21 be moving forward in making sure that California is a
- 22 leader on both the technology development and the
- 23 technology diffusion of zero emission vehicles and fuels.
- VICE CHAIR SCOTT: Do you have comments?
- 25 COMMISSIONER DOUGLAS: I do. I'll just add

- 1 briefly that I'm also very supportive of this. I like
- 2 seeing that for some of these technologies that California
- 3 has really helped to incubate that we're seeing obviously a
- 4 lot of California deployment of the technologies, but some
- 5 California manufacturing of the technologies as well. And
- 6 I think we've got a really thriving ecosystem here in terms
- 7 of people who really understand how to develop very
- 8 advanced technologies and pull them together. It's great
- 9 that we can pull that into production as well.
- 10 VICE CHAIR SCOTT: Yeah I'd just like to add.
- 11 Thanks for having done the due diligence on these projects.
- 12 That's really important. Again, I'm excited about these as
- 13 well.
- 14 The first round of these types of grants that the
- 15 Commission did a few years ago helped really establish the
- 16 industry here in California and helped really get it going.
- 17 And now it's exciting to have kind of the second round of
- 18 grants as we're working to expand those industries and
- 19 build on them and make them even stronger and more
- 20 successful.
- 21 So I am in support of these grants as well. So
- 22 let me ask for a motion please.
- 23 COMMISSIONER MONAHAN: I move to approve Items
- 24 7a, b and c.
- 25 COMMISSIONER DOUGLAS: That's like an A plus

- 1 mode. (Laughter.)
- VICE CHAIR SCOTT: All right, all those in favor?
- 3 (Ayes.)
- 4 VICE CHAIR SCOTT: This motion carries 3-0.
- 5 Thank you.
- 6 Okay. We will now move on to Item Number 8, the
- 7 Rialto Bioenergy Facility, LLC, please.
- 8 MR. NGUYEN: Good Morning Vice Chair and
- 9 Commissioners.
- 10 My name is Hieu Nguyen with the Fuels and
- 11 Transportation Division. Today staff is seeking approval
- 12 of one project, Rialto Bioenergy Facility LLC.
- 13 The project was proposed for funding under the
- 14 Community-Scale and Commercial-Scale Biofuels Production
- 15 Solicitation released by the Clean Transportation Program
- 16 also known as the Alternative and Renewable Fuel and
- 17 Vehicle Technology Program. This solicitation provided
- 18 over \$19 million in funding for projects that increase the
- 19 instate production of low carbon biofuels at new or
- 20 existing production facilities.
- 21 The agreement with Rialto Bioenergy is for about
- 22 \$3 million to design, build, and commission phase two of
- 23 its biomethane facility in Rialto, California. When fully
- 24 operational, the upgraded facility will convert food waste
- 25 and bio-solids diverted from landfills into 2.5 million

- 1 diesel gallon equivalents of renewable natural gas with a
- 2 carbon intensity of -187gCO2e/MJ. The fuel will be used in
- 3 waste collection and transport vehicles operated by Waste
- 4 Management across the greater Los Angeles metropolitan
- 5 area.
- 6 Staff is also recommending approval of the CEQA
- 7 findings and a statement of overriding
- 8 considerations. Staff has reviewed and considered the lead
- 9 agency's CEQA documents and determined that the proposed
- 10 project would not result in any new environmental impacts
- 11 than those already considered by their lead agency.
- 12 Staff has also determined that the mitigation
- 13 measures identified will eliminate or mitigate any
- 14 significant impacts associated with the project to less
- 15 than significant levels except for air quality
- 16 impacts. For air quality impacts, staff has determined
- 17 that the economic, legal, social, and technological
- 18 benefits of the project outweigh the significant
- 19 unavoidable and un-mitigatable environmental
- 20 impacts. These benefits include revitalizing an existing
- 21 non-operational industrial site, creating economic
- 22 opportunities, and reducing regional greenhouse gas
- 23 emissions in a high disadvantaged community.
- 24 For this agreement, staff is seeking your
- 25 adoption of the CEQA findings and approval of the grant

- 1 award in Item 8.
- 2 Thank you for your consideration. Dr. Andrew
- 3 Dale for Rialto Bioenergy Facility, LLC is on the phone to
- 4 answer any questions you may have.
- 5 VICE CHAIR SCOTT: Okay. Great. Thank you.
- I don't have any blue cards. Do we have any
- 7 public comment in the room? Okay, let's now turn to a
- 8 public comment on the phone with Dr. Dale, please.
- 9 DR. DALE: Thank you. We want to thank you
- 10 Commissioners. We just want to appreciate and say the CEC
- 11 has funded several other grants for our facility in Rialto.
- 12 And with this additional grant, we'll be able to expand our
- 13 RNG capacity about 40 percent, so up to 120,000 cubic feet
- 14 a day from 80,000 cubic feet a day, which we are designed
- 15 at right now. And we really appreciate the funding and
- 16 staff's input in developing this work and reviewing our
- 17 project and providing the support for this RNG in the LA
- 18 Basin South Coast Air District. Thank you.
- 19 VICE CHAIR SCOTT: Thank you.
- 20 Any other public comments on the phone? Okay,
- 21 seeing none let's turn to Commissioner, discussion please.
- 22 COMMISSIONER MONAHAN: So this is -- I think with
- 23 this facility, and in using waste as a form of fuel in a
- 24 sustainable way and ensuring that the vehicles and the
- 25 fuels are paired, so we have waste management ready to take

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- 1 the renewable natural gas and use it immediately. It's
- 2 really, I think, a great project in terms of helping reduce
- 3 emissions right now from the diesel fleet. You know, a
- 4 conversion from -- we have the vehicles today for natural
- 5 gas on the electric side, we don't have the vehicles yet.
- 6 And so this is a way in the near-term to make
- 7 sure that California is continuing to make progress in
- 8 reducing harmful pollution and reducing greenhouse gases
- 9 and setting the stage over the longer term for transition
- 10 to zero emission. So these near zero emission vehicles
- 11 really are great solutions to help communities today that
- 12 are bearing the disproportionate impacts of air pollution.
- 13 VICE CHAIR SCOTT: Is there a comment?
- 14 COMMISSIONER DOUGLAS: I'll just say I'm strongly
- 15 in support of this as well.
- VICE CHAIR SCOTT: Okay. May I get a motion?
- 17 COMMISSIONER MONAHAN: I move to approve Item 8.
- 18 COMMISSIONER DOUGLAS: Second.
- 19 VICE CHAIR SCOTT: All those in favor?
- 20 (Ayes.)
- MR. NGUYEN: Thank you.
- VICE CHAIR SCOTT: The motion carries 3-0. Thank
- 23 you.
- 24 VICE CHAIR SCOTT: Okay. We will now go on to
- 25 Item Number 9, which is Demonstration-Scale Biofuels

- 1 Production Facilities, GFO-18-602, please.
- MR. NGUYEN: Hello again, Commissioners. Hieu
- 3 Nguyen with the Fuels and Transportation Division. Items
- 4 9a and 9b are for two projects proposed for funding through
- 5 our most recent Demonstration-Scale Biofuels Production
- 6 Solicitation.
- 7 This solicitation provided a little over \$12
- 8 million in funding for projects that would prove an
- 9 innovative technology or process in biofuels production at
- 10 a demonstration-scale level. The following two projects
- 11 represent the last two out of the five total projects
- 12 awarded under this solicitation.
- 13 The first item is an agreement with Oberon Fuels
- 14 for nearly \$3 million dollars to expand their pilot
- 15 production plant for dimethyl ether or DME in Brawley,
- 16 California. The project proposes to achieve production of
- 17 830,000 diesel gallon equivalents of fuel per year and will
- 18 utilize renewable methanol converted from wood waste pulp
- 19 to be processed into DME fuel with an approximate carbon
- 20 intensity of 21.6 gCO2e/MJ. The fuel will also be used to
- 21 further support vehicle testing of DME in heavy-duty
- 22 trucks. The project will create 11 jobs, in an area of
- 23 high unemployment. In comparison to California's 4 percent
- 24 unemployment rate, the Imperial Valley currently has an
- 25 unemployment rate of 16 percent.

1	Oberon's	S	dimethvl	ether	plant	was	evaluated	b,	v

- 2 the lead agency, the Imperial County Planning and
- 3 Development Services Department, which adopted an Initial
- 4 Study and Mitigated Negative Declaration and conducted
- 5 additional review for the plant modifications.
- 6 Commission staff determined that this project
- 7 causes no new significant or substantially more severe
- 8 environmental impacts beyond those already considered and
- 9 mitigated by the lead agency.
- 10 The second item is for an agreement with
- 11 Technikon LLC for about \$1 million to demonstrate their
- 12 Hyper-Philic anaerobic digestion technology, which is an
- 13 innovative technology that will convert green waste at the
- 14 South Area Transfer Station, located in Sacramento,
- 15 California, into renewable natural gas. The traditional
- 16 anaerobic digestion process typically converts waste in a
- 17 28-to-30 day cycle period. This process is innovative as
- 18 it can convert the waste in a 3-to-5 day cycle period,
- 19 greatly increasing the amount of fuel produced per
- 20 year. At full demonstration-scale, this facility will
- 21 produce about a 17,000 diesel gallon equivalent of RNG
- 22 annually with a carbon intensity of -120 gCO2e/MJ.
- 23 The project will create two jobs dedicated to the
- 24 facility's operations. The project will include the
- 25 addition of an RNG refueling station onsite.

Staff is seeking adoption of the CEQA findi	Stall	\perp \sim	SEEVIIIA	adoption	O_{\perp}	CIIC	CEQA	TTHUTH	10 2
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- 2 and approval of both grant awards for Items 9a and 9b.
- 3 Thank you for your consideration.
- 4 Dr. Rebecca Boudreaux, President of Oberon Fuels
- 5 is here and would like to provide a comment. And George
- 6 Crandell with Technikon is here and is available to answer
- 7 any questions that you may have.
- 8 VICE CHAIR SCOTT: Thank you. Please come on up.
- 9 DR. BOUDREAUX: Good morning. I'm Rebecca
- 10 Boudreaux, President of Oberon Fuels. And I just want to
- 11 take this opportunity to thank the California Energy
- 12 Commission for including us in the Notice of Proposed
- 13 Awards in January. We appreciate the hard work of the CEC
- 14 staff as we move through the CEQA analysis. And we thank
- 15 Commissioner Monahan for taking time during a very busy
- 16 transition period to meet with our team last month. And
- 17 talk about not only this project of renewable DME that
- 18 scaling up of our pilot (indiscernible) demo phase, but
- 19 also talking about how DME fits in this pathway to zero
- 20 emission mobility as the state moves to zero emission
- 21 vehicles.
- 22 So I'm here to answer any questions you may have
- 23 and thank you again for the opportunity.
- 24 VICE CHAIR SCOTT: Thank you.
- 25 And Dr. Crandell, did you want to say something

- 1 or just here for questions?
- 2 DR. CRANDELL: No. I'm just here and available
- 3 for questions.
- 4 VICE CHAIR SCOTT: Okay. Terrific.
- 5 Do we have any other public comment here in the
- 6 room? Okay. How about public comment on the phone?
- 7 Seeing none, let's turn to the Commissioner discussion.
- 8 COMMISSIONER MONAHAN: Yes, let me start. First
- 9 off, let me talk a little bit about Oberon. Last month,
- 10 when I had I think a week under my belt, and this proposal
- 11 came up for discussion, I needed to time to think about it.
- 12 I didn't have any education around DME and so I wanted to
- 13 just express my gratefulness to Dr. Boudreaux and her team
- 14 for coming and meeting with us. We met on May 22nd and
- 15 walked through a series of questions. Dr. Boudreaux
- 16 provided this excellent briefing paper on renewable DME.
- 17 And this is a case again where I think California
- 18 and Oberon Fuels are taking a risk and really looking for
- 19 creative, out-of-the-box solutions for our greenhouse gas
- 20 and air quality problems. And I think that for me it was
- 21 really heartening to see how Oberon Fuels is taking a very
- 22 visionary and ambitious approach in looking for solutions
- 23 that are again available today to deal with the problems
- 24 that we have today.
- 25 So it was a real education for me. And I look

- 1 forward to visiting the facility. I've learned that if you
- 2 visit the facility in the dead of summer you get extra
- 3 points for ambitiousness. (Laughter.) So I just want to
- 4 tell my fellow Commissioners that this is something that I
- 5 really heartily endorse. And I just want to say that I
- 6 appreciate that my holding off on this item was unusual and
- 7 did give me a chance to -- but it really was helpful to me.
- 8 And I needed that extra time.
- 9 So let me talk for a second about Rialto. Again,
- 10 this is another example where we have an opportunity
- 11 immediately to -- well not immediately -- but to improve
- 12 our biofuel processing timeline, which could be really
- 13 critical if we're able to reduce the amount of time needed
- 14 to produce a low-carbon biofuel.
- So again, we need to invest in solutions that
- 16 really help us over the long-term scale up and help
- 17 California be a leader in clean energy production.
- 18 VICE CHAIR SCOTT: Yeah, I will just. I think
- 19 that this is really important. I'm glad you had the time
- 20 to take time to take a look at. I really wanted to support
- 21 you in getting the information that you need.
- I think, as we transition to cleaner
- 23 transportation, which we all know is incredibly important
- 24 in California to meet our greenhouse gas goals and to meet
- 25 our clean air standards as well we've got a low-carbon fuel

- 1 standard here in California. And having some instate
- 2 production of these low-carbon fuels I think makes a lot of
- 3 sense. We have a lot of vehicles that despite having great
- 4 zero emission options out there it's going to take some
- 5 time to transition the fleet. So putting in cleaner fuels
- 6 right now I think matters, especially to people on the air
- 7 quality side who are breathing air that's unhealthy right
- 8 now. So I am supportive of these projects as well. I
- 9 don't know if Commissioner Douglas? Okay. May I have a
- 10 motion?
- 11 COMMISSIONER MONAHAN: I move to approve Item 8.
- 12 VICE CHAIR SCOTT: No, 9
- 13 COMMISSIONER MONAHAN: 9, I (indiscernible) I'm
- 14 going to have it all day. (Laughter.)
- 15 COMMISSIONER DOUGLAS: Second.
- 16 VICE CHAIR SCOTT: All those in favor?
- 17 (Ayes.)
- 18 VICE CHAIR SCOTT: The motion carries 3-0. Thank
- 19 you.
- MR. NGUYEN: Thank you.
- 21 VICE CHAIR SCOTT: Okay, we will now move on to
- 22 Item Number 10, which is Renewable Energy for Agriculture
- 23 Program, GFO-18-401.
- 24 MR. DODSON: All right. Good Morning Vice-Chair
- 25 and Commissioners. My name is Geoffrey Dodson, and I'm

- 1 representing the Renewable Energy Division. I work in our
- 2 Incentive Office where we administer incentive programs
- 3 that support renewable energy projects, including the
- 4 Renewable Energy for Agriculture Grant Program, known by
- 5 the acronym REAP. So we are here to ask for your support
- 6 to approve 41 proposed grant agreements resulting from our
- 7 program's first grant funding opportunity, which was
- 8 released in January 2019.
- 9 While you're considering this decision, we wanted
- 10 to take the opportunity briefly to share a little bit about
- 11 the program and to recognize some of the key players both
- 12 in and outside of the Energy Commission that were
- 13 instrumental and that contributed to the success of our
- 14 program.
- Not long ago, a \$6 million line item in the
- 16 budget for fiscal year 2017-2018 trickled down to our
- 17 office with a simple mandate: create a grant program that
- 18 would support the installation of renewable energy
- 19 development projects in the agriculture sector. Followed by
- 20 an additional \$4 million in the following years' budget,
- 21 the program had \$10 million or \$9.5 million in available
- 22 award funding.
- 23 The funding came from the Greenhouse Gas
- 24 Reduction Fund, and the program would be part of California
- 25 Climate Investments, a statewide effort that invests

- 1 billions across the State of California with a focus on
- 2 reducing greenhouse gas emissions, strengthening the
- 3 economy, and protecting public health and the environment,
- 4 especially in disadvantaged communities and low-income
- 5 communities.
- 6 (Brief pause to fix slide presentation.)
- 7 So anyways, this presented a unique opportunity
- 8 for us. We wanted to stretch our relatively small amount
- 9 in program funding as far as we could, and aim to reach
- 10 agriculture operations of all sizes. So this caused us to
- 11 design a streamlined grant application and funding program
- 12 that was tailored to the agriculture community.
- 13 The first step involved learning more about the
- 14 needs of the agricultural community. With the help of our
- 15 colleagues in the Public Advisers Office, our partners at
- 16 other state departments and Karen Mills at the Farm Bureau,
- 17 we engaged in outreach efforts and workshops in
- 18 agricultural hotbeds to gather feedback and develop a
- 19 program that would serve both the needs of the agricultural
- 20 communities and state goals. We also participated in the
- 21 Tribal Energy Summit to engage with tribal communities.
- During this time, we also brainstormed with our
- 23 internal offices: the Contracts, Grants and Loans Office,
- 24 our Legal Office, and the Accounting Office, to identify
- 25 efficiencies that could be made to the traditional grant

- 1 application process, which would be necessary to encourage
- 2 a busy farmer from a small family-owned operation in San
- 3 Joaquin County to apply for a small \$25,000 grant to
- 4 install a small solar PV system that would power their
- 5 agricultural pump, to highlight the example of one of our
- 6 awardees presented today.
- 7 So what came out of this process was a set of
- 8 program guidelines that was adopted by the Commission in
- 9 late 2018, which set the stage for our first grant funding
- 10 opportunity, which was released earlier this year in
- 11 January.
- 12 The program offered the ability to fund
- 13 additional equipment that would be powered by this newly
- 14 installed renewable energy generation technology. This
- 15 includes EV charging, battery storage and a new electric
- 16 pump as long as it replaces a diesel pump.
- 17 After the release of our grant funding
- 18 opportunity in January, we hosted multiple application
- 19 workshops throughout the state providing direct assistance
- 20 to grantees in the grant application process.
- 21 Following the application deadline, we received
- 22 98 applications, collectively requesting nearly \$20 million
- 23 in grant awards and offering over \$11 million in optional
- 24 match funding. We were significantly over-subscribed and
- 25 scored the applications to identify the most competitive

- 1 project proposals to award funding to.
- 2 Our Notice of Proposed Award, which was released
- 3 in April, awarded all of the available \$9.5 million in
- 4 funding across 45 project proposals. Of the 45 proposed
- 5 awardees, 30 of them included optional match funding for a
- 6 combined total of nearly \$5.9 million, which represents a
- 7 total project investment across all projects of over \$15
- 8 million.
- 9 Our proposed awardees are spread across 18
- 10 counties throughout the state. As you can see on the slide
- 11 here, awarded grants were strongest in agriculture-rich
- 12 communities with awards distributed to 8 out of the top 10
- 13 biggest agriculture-producing counties.
- 14 The majority of our project proposals are solar
- 15 PV systems installed onsite on land that grows a wide
- 16 variety of produce and feed crops, with a few that serve
- 17 educational purposes and one that supports livestock
- 18 operations. The average grant award amount is \$211,000,
- 19 with many other grant awards on both ends of the allowable
- 20 range.
- 21 These projects will go a long way in serving many
- 22 purposes. All of these projects include the installation of
- 23 onsite solar PV, and two-thirds of them include additional
- 24 equipment such as electric vehicle charging, battery
- 25 storage, or diesel pump replacement with the new electric

- 1 pumps. Projects that replace a diesel pump for an electric
- 2 pump to reduce local criteria air pollutants in
- 3 disadvantaged communities, and our projects serving
- 4 educational institutions in low-income areas, make up a mix
- 5 of some of the projects that are recognized for providing
- 6 direct benefits to residents of a disadvantaged or low-
- 7 income community -- one of the focuses of California
- 8 Climate Investments.
- 9 Many projects are installing solar PV to serve an
- 10 existing electric pump, some of which were obtained through
- 11 the SWEEP program at the California Department of Food and
- 12 Agriculture. All of these top projects help reduce
- 13 greenhouse gas emissions in the agricultural sector, which
- 14 currently represent 8 percent of all statewide greenhouse
- 15 gas reduction emissions.
- 16 Also important is the fact that we were able to
- 17 spread our awards across a diverse group of applicants.
- 18 Our highest-scoring applicant is a female and minority-
- 19 owned organic vegetable farm requesting a modest grant of
- 20 \$76,000. We also received tremendous help from our staff
- 21 in the Siting and Legal offices in preparing CEQA
- 22 determinations. Next slide, please?
- 23 Anyways, staff recommends approval of all 41
- 24 grant application packages on today's agenda, offering the
- 25 opportunity to proceed with agreement execution and project

- 1 development consistent with the program solicitation
- 2 requirements.
- 3 Thank you for your time and consideration. I am
- 4 available for your questions.
- 5 VICE CHAIR SCOTT: Great. Thank you.
- 6 I have one blue card here which is Marc
- 7 Gottschalk. Please come on up.
- 8 MR. GOTTSCHALK: Thank you very much
- 9 Commissioners. My name is Marc Gottschalk. I'm Chief
- 10 Strategy Officer of DD DANNAR, LLC. I wanted to thank the
- 11 Energy Commission for granting this award to Joseph Gallo
- 12 Farms.
- 13 For the benefit of those in the room and on the
- 14 phone, the award for this project is called off-grid solar
- 15 energy project, accelerating Ag EV adoption is the first-
- 16 of-a-kind use of ground mount PV solar generated
- 17 electricity to power an EV performing farm operations; in
- 18 this case, the mowing and spraying of the almond groves at
- 19 Joseph Gallo Farms.
- 20 One of the unique features of the project is the
- 21 use one DANNAR mobile power station with 279 kilowatt hours
- 22 of onboard energy storage as the unit to be storing the PV
- 23 electricity generated by the ground mount solar system
- 24 during the day and then using that energy to power another
- 25 DANNAR mobile power station that will have 259 kilowatt

- 1 hours of energy on board that will also have mowing and
- 2 spraying attachments that will go out in the fields daily
- 3 to do the mowing and spraying operations.
- 4 The mobile power station is the world's first
- 5 heavy-duty EV platform performing any kind of off-road
- 6 maintenance using commonly available attachments from
- 7 Deere, Caterpillar and Bobcat, while also having up to 500
- 8 kilowatt hours of energy storage on board to support
- 9 disaster response scenarios and provide backup power.
- 10 We look forward to collaborating with the
- 11 California Energy Commission on this very exciting project.
- 12 Thank you very much.
- 13 VICE CHAIR SCOTT: Thank you. Do we have any
- 14 other public comment in the room? All right, any public
- 15 comment on the phone? Okay. Seeing none, let us turn to
- 16 Commissioner discussion.
- 17 COMMISSIONER DOUGLAS: All right, well thank you
- 18 very much and I appreciate the speaker from Gallo Farms.
- 19 And I've worked with staff over time as they developed and
- 20 go about this program, because I think it's a fantastic
- 21 program. If it gets a really tremendous way of supporting
- 22 adoption of clean energy technologies that will also help
- 23 farmers save money and will also clean the air throughout
- 24 mainly rural areas and agricultural areas of the state.
- 25 There's a tremendous amount of growth potential

- 1 here as farmers see their neighbors install this equipment
- 2 and see them using EV farm equipment and having storage and
- 3 the electric water pumps just the ability of getting some
- 4 additional deployment out. Because of course there already
- 5 is today a significant amount in many areas. But getting
- 6 additional deployment out and just having more and more
- 7 adoption of these technologies. We really want to see the
- 8 different and varied and diverse sectors of the state move
- 9 forward and use this technology in ways that make the most
- 10 sense to them. And so I'm really excited about this
- 11 program.
- I also want to thank the staff, because you know
- 13 this was a new area for us. We, as was mentioned in the
- 14 presentation, had to come up with an approach that would
- 15 allow for a competitive process, because we would be
- 16 oversubscribed. But they would not be so onerous that a
- 17 family farmer who was busy doing farming would just
- 18 potentially find it too overwhelming or too many to apply
- 19 or maybe be concerned that it wasn't -- it was just not for
- 20 them. And we really wanted to have a program that could be
- 21 very accessible. And so I'm pleased with the results.
- I also do want to thank the staff in the STEP
- 23 Division for the support that they provided on the CEQA
- 24 aide, because in terms of being able to get these awards to
- 25 this meeting it was essential that they step up and do

- 1 that. And they did, so those are my comments.
- 2 I'll go ahead and move this item.
- VICE CHAIR SCOTT: Oh, I want -- can I make a
- 4 comment first?
- 5 COMMISSIONER DOUGLAS: Oh, of course.
- 6 VICE CHAIR SCOTT: I also wanted to just comment
- 7 on this item. I was really excited to get the briefing,
- 8 because this is the first one we have 41 -- I think maybe
- 9 the first one -- we have 41 items all grouped together and
- 10 just to get a deeper flavor of the different items.
- 11 And it really is impressive I think what you and
- 12 your team have done in this space, because the level of
- 13 outreach that we needed to do again to folks, like you're
- 14 saying, are very busy who probably aren't used to engaging
- 15 with the Energy Commission or applying for our grants and
- 16 that kind of thing. And the work that we did with Karen
- 17 Mills and her team as well to just reach out to the people
- 18 that will be interested in applying. And we can see what
- 19 98 grants and being over -- or 98 applicants and being
- 20 oversubscribed it's just really great.
- 21 I think it's an exciting set of projects that
- 22 we've put together and in hearing a little bit more about
- 23 the project at Gallo where we're going to combine solar
- 24 charging with electric vehicle, I mean that really is the
- 25 zero emission cycle that we're all looking for. And a lot

- 1 of these projects are innovative and creative and
- 2 groundbreaking in that way.
- I think these also kind of pick up on our theme,
- 4 it kind of seems to be the theme of the day here, making
- 5 sure all communities across California are engaged and
- 6 involved as we make this transition towards cleaner energy.
- 7 And of course we're doing that again, because of climate
- 8 change and clean air and other very important reasons.
- 9 So we have a motion. May I get a second?
- 10 COMMISSIONER MONAHAN: I second.
- 11 VICE CHAIR SCOTT: All those in favor?
- 12 (Ayes.)
- VICE CHAIR SCOTT: The motion carries 3-0. Thank
- 14 you very much.
- MR. DODSON: Thank you.
- 16 VICE CHAIR SCOTT: Okay. Next we have Item
- 17 Number 11, which is the Food Production Investment Program.
- 18 MR. UY: Good morning Vice Chair and
- 19 Commissioners. My name is Kevin Uy with the Energy
- 20 Research and Development Division. Staff is seeking
- 21 approval for five out of eight projects from the latest
- 22 Food Production Investment Program Competitive Grant
- 23 Solicitation. The remaining three projects will be
- 24 presented at a later Business Meeting.
- The purpose of the Food Production Investment

- 1 Program is to fund drop-in and emerging energy technologies
- 2 at California food processing facilities, which reduce
- 3 energy use and greenhouse gas emissions.
- 4 Funding for this program is provided through the
- 5 Greenhouse Gas Reduction Fund and administered through
- 6 California Climate Investments, a statewide initiative
- 7 which puts Cap-and-Trade dollars to work.
- 8 The first project is with Rich Products
- 9 Corporation who operate an industrial bakery in Torrance.
- 10 Conventional refrigeration systems use hydrofluorocarbon
- 11 refrigerants, which have a global warming potential of
- 12 approximately 4,000 times the potency of carbon dioxide.
- 13 This project will replace the existing conventional
- 14 refrigeration system with a high efficiency, low-global
- 15 warming potential alternative. The system will use trans-
- 16 critical carbon dioxide refrigerant and will significantly
- 17 reduce greenhouse gas emissions.
- 18 The next project is with Yosemite Foods, a meat
- 19 processing facility in Stockton. This project will
- 20 incorporate a heat recovery system into an existing, large-
- 21 scale trans-critical carbon dioxide refrigeration system.
- 22 Waste heat produced by refrigeration will be recycled for
- 23 use in a singer system and will significantly reduce
- 24 natural gas use.
- 25 The third project is with Pacific Coast

- 1 Producers, a tomato processor in Woodland. This project
- 2 will install a high efficiency evaporator system, which
- 3 evaporates water from tomato juice to produce products like
- 4 tomato paste. In addition, steam turbines will replace
- 5 pressure reduction valves to produce electricity from
- 6 otherwise wasted energy as steam pressure is dropped.
- 7 These measures will result in significantly reduced
- 8 greenhouse gas emissions.
- 9 The fourth project is with Initiative Foods, a
- 10 baby food producer in Sanger. The facility will overhaul
- 11 its energy system by installing high efficiency equipment,
- 12 such as boilers, chillers, and refrigeration systems, which
- 13 are used to process fruits and vegetables into final
- 14 products. These efficiency measures will result in
- 15 significantly reduced greenhouse gas emissions.
- 16 And finally, the last project is with E. & J.
- 17 Gallo Winery, a wine producer in Livingston. This project
- 18 will integrate high efficiency, variable frequency drive
- 19 compressors into an existing refrigeration system and will
- 20 significantly reduce electric use.
- 21 Staff recommends approval of these five awards
- 22 and are available if you have any questions. Also Michael
- 23 Glassgower (phonetic) from E. & J. Gallo Winery is present
- 24 if you have questions for him.
- VICE CHAIR SCOTT: Thank you.

- 1 Mr. Glassgower, did you want to make any remarks?
- 2 MR. GLASSGOWER: No comment.
- 3 VICE CHAIR SCOTT: No comments, okay.
- 4 Are there any -- I don't have any blue cards here
- 5 with me. Are there any public comments in the room? Any
- 6 public comments on the phone? Okay, seeing none, we will
- 7 turn to our Commissioner discussion.
- 8 I'm very excited about our Food Production
- 9 Investment Program. I think there's a lot of excitement
- 10 today, but this is -- again, we have done I think really
- 11 good outreach in this space. This is another set of folks
- 12 that are not necessarily used to engaging with the Energy
- 13 Commission on energy-related topics. So I appreciate the
- 14 great work that was done in this space.
- I want to make sure the WebEx is still up. Do we
- 16 just not have the screen, but the WebEx is still going?
- 17 Hold on just a second. If you are listening, we're pausing
- 18 just to make sure we're still connected. We're good? All
- 19 right we're good.
- 20 So again, I think that the outreach that we did
- 21 in this space to bring in a set of folks that are maybe not
- 22 necessarily used to working with the Energy Commission to
- 23 put in place technologies that will help reduce energy use
- 24 and reduce greenhouse gases is really exciting. I'm always
- 25 for these kinds of I really just want to go see them when

- 1 they're installed and see how they're working. So I'm so
- 2 excited for them to get going. They're interesting and
- 3 they're innovative.
- 4 And the other thing that was important in this
- 5 space, similar to the last set of projects, is doing the
- 6 outreach and the solicitations in a timeframe that works
- 7 for folks that are on an agricultural cycle. And then
- 8 being able to get these technologies in, not in the midst
- 9 of the height of food processing, but when those times slow
- 10 down and then they have some time to put this in. So kind
- 11 of matching up what we do with the cycles I think is also
- 12 something the team did well here.
- 13 Any other Commissioner comments?
- 14 COMMISSIONER DOUGLAS: Well, just briefly because
- 15 California is such an agricultural state and because of the
- 16 energy intensive nature of most food processing it's a
- 17 really clear opportunity area. And we have this built on
- 18 and we have had some good solicitations aimed at food
- 19 processing. And it's in fact we have a few plaques and so
- 20 on upstairs, some of which have some age to them around was
- 21 it Sunkist or there were a couple of programs that were
- 22 projects like this.
- 23 But I think it's exciting. I think we need to
- 24 keep doing this, because it's a way of fostering and
- 25 supporting a lot of the real important economic activities

- 1 that occur in the state and helping them be more
- 2 sustainable and helping them meet and helping California's
- 3 climate goals.
- 4 VICE CHAIR SCOTT: Can I get a motion?
- 5 COMMISSIONER MONAHAN: May I? I move to approve
- 6 this item.
- 7 COMMISSIONER DOUGLAS: Second.
- 8 VICE CHAIR SCOTT: All those in favor?
- 9 (Ayes.)
- 10 VICE CHAIR SCOTT: The motion carries 3-0. Thank
- 11 you.
- 12 We will now go on to Item Number 12, which is the
- 13 Production Scale-Up for Clean Energy Technologies, GFO-18-
- 14 302, Addendum 1.
- MR. GILBERT: Good morning.
- VICE CHAIR SCOTT: Good morning.
- MR. GILBERT: Good Morning Vice Chair and
- 18 Commissioners. My name is Benson Gilbert and I'm from the
- 19 Energy Research and Development Division. Today, I am
- 20 requesting approval for 10 grant agreements that will help
- 21 clean energy entrepreneurs successfully advance their
- 22 technology to the pilot production stage at California
- 23 manufacturing facilities.
- Over the past five years the Market Facilitation
- 25 Office has been systematically putting programs into place

1	to	create	an	innovation	pipeline	for	clean	enerav

- 2 entrepreneurs. The programs started with small grants,
- 3 linking entrepreneurs with testing facilities then added
- 4 follow-on funding for successful early stage technologies
- 5 and now introduces RAMP.
- 6 Startup companies typically lack the practical
- 7 manufacturing experience to successfully move their
- 8 technology into production. Moving a technology into
- 9 production requires a different set of considerations than
- 10 in initial technology development. The intent of RAMP is
- 11 to help entrepreneurs overcome these challenges.
- 12 The first group of RAMP projects involve energy
- 13 efficiency technologies. Magnet cooling systems operate
- 14 without the use of global warming potential refrigerants
- 15 and can operate with up to 50 percent energy savings,
- 16 compared to traditional vapor compression systems.
- 17 Unfortunately, market adoption has been limited due to low
- 18 performance and high cost of commercially available
- 19 magneto-caloric (MCE) materials. The General Engineering &
- 20 Research project will lead to providing a selection of high
- 21 performance and low cost commercially available magneto-
- 22 caloric materials.
- The Glint Photonics project features a high-
- 24 efficiency directional lighting system that improves the
- 25 effectiveness of lighting a given area with potential

- 1 energy savings up to 50 percent that is gained by improved
- 2 light beam profiles, the ability to easily and precisely
- 3 move light where it needs to be, and potential reduction
- 4 for the number of lights in a given area.
- 5 The Treau project features a window-mounted
- 6 heating and cooling system that boasts performance greater
- 7 than most mini-split heating and cooling systems at a much
- 8 lower cost and without having to be installed through a
- 9 wall. The low noise, high efficiency and performance of
- 10 Treau's system is due to a unique polymer heat exchanger
- 11 that allows the use of low global warming potential
- 12 refrigerants. Customers will be able to place Treau's
- 13 system onto a windowsill, plug it in, and enjoy their view
- 14 through the closed window, without professional
- 15 installation costs.
- 16 The second group of RAMP projects involves
- 17 renewable energy generation. The current cost of solar
- 18 silicon wafers accounts for up to about 40 percent of the
- 19 cost of a fully assembled solar panel.
- 20 The Halo Industries project uses lasers to produce high
- 21 quality silicon solar wafers in a way that is more energy
- 22 efficient and produces less waste than current
- 23 manufacturing methods at half the cost. This leads to a 20
- 24 percent or greater reduction in the utility solar levelized
- 25 cost of electricity.

1	The Spark Thermionics project features a very
2	efficient thermionic energy converter that generates
3	electricity directly from heat. When added to a
4	concentrated solar power plant, the thermionic energy
5	converter would increase the plant's total power output by
6	up to about 90 percent, by converting the unused heat into
7	electricity, which in turn could reduce the levelized cost
8	of electricity to as low as 5.6 cents per kilowatt hour.
9	The third group of RAMP projects involves energy
10	storage technologies.
11	The Primus Power project features a zinc bromide
12	flow battery that uses a non-flammable electrolyte, does
13	not require an ion exchange membrane, and has a large
14	capacity that can provide a output of 25 kilowatts for 5
15	hours. This high capacity, combined with a life span of
16	over 20 years, makes this battery well suited to utility
17	scale energy storage applications such as solar and wind
18	integration.
19	The Caban Systems project features a fire-
20	resistant ruggedized energy storage system that has a
21	remote access capable power management and control system

resistant ruggedized energy storage system that has a
remote access capable power management and control system
and is plug-n-play capable and can operate with batteries
from different manufacturers. Caban's system can keep or
bring critical infrastructure and telecommunication systems
under environmental distress back online and can also be

- 1 used as a pop-up energy source to be quickly deployed to
- 2 disaster areas to restore electricity for lights, heating,
- 3 cooling and water.
- 4 The remaining three energy storage technology
- 5 projects support two specific battery components that will
- 6 allow the next generation of lithium batteries to be
- 7 developed and commercialized.
- 8 The South 8 Technologies project features a
- 9 liquefied gas electrolyte and electrolyte injection process
- 10 that provides about 60 percent higher energy densities than
- 11 conventional lithium-ion batteries and allows for the use
- 12 of less expensive materials than cobalt. South 8's
- 13 innovative design allows a battery to fail safely and
- 14 without the potential of catastrophic failures that lead to
- 15 fire.
- 16 The Cuberg project features a non-flammable
- 17 liquid electrolyte that enables batteries to operate with
- 18 about 50 percent higher energy densities than conventional
- 19 lithium-ion batteries.
- The Sepion Technologies project features a
- 21 separator that only allows lithium-ions to pass through,
- 22 while preventing metals from the cathode that dissolve over
- 23 time into the electrolyte to pass through the separator,
- 24 which compromises the health of the battery and can lead to
- 25 catastrophic failures and fire. The separator also

- 1 increases the energy density and useful life of batteries,
- 2 and allows batteries to use materials less expensive than
- 3 cobalt.
- 4 That concludes my presentation today. Thank you
- 5 for your consideration and I am available to answer
- 6 questions you may have.
- 7 VICE CHAIR SCOTT: Great. Thank you.
- I do have some blue cards on this one. We'll
- 9 start with Eion Lys followed by Vince Romanin.
- 10 MR. LYS: All right, thank you Mr. Gilbert for
- 11 your presentation, and good morning members of the
- 12 Commission. And thanks for the opportunity to comment. My
- 13 name is Eion Lys. And I'm the designated Administrator and
- 14 Project Manager for the Cuberg Award, 12C Group 3. And
- 15 Cuberg is pleased to be able to continue to partner with
- 16 the California Energy Commission in furtherance of our
- 17 state's energy future.
- 18 Production scale up of our battery cell
- 19 technology can play a key role in meeting and exceeding
- 20 California's clean energy goals, specifically through
- 21 greater safety and much more energy by weight and volume
- 22 over existing lithium ion cells, our lithium metal battery
- 23 cells can lead to faster and broader adoption of electric
- 24 vehicle technology to more Californians helping our state
- 25 realize our goal of 5 million zero emission vehicles by

- 1 2030. So thank you for your consideration. And I'm
- 2 available for any questions.
- 3 VICE CHAIR SCOTT: Great. Thank you. I have
- 4 Vince Romanin, followed by Alexandra Rasch.
- 5 MR. ROMANIN: Good morning. Thank you Vice Chair
- 6 and Commissioners and thanks for your consideration on this
- 7 grant. Treau's mission is to enable people to have access
- 8 to comfortable homes and comfortable buildings without the
- 9 harmful implications on the environment.
- We're doing this, because we recognize building
- 11 heating, cooling and air quality as a public health issue.
- 12 But climate change is also a public health issue. And
- 13 today, these two things are at odds, because building
- 14 heating and cooling emits about 20 percent of all of our
- 15 global greenhouse gases. Our goal is to increase access to
- 16 these important energy services, increase user comfort
- 17 while providing a path to complete decarbonization of our
- 18 buildings.
- 19 This industry is really resistant to innovation.
- 20 And so it's critical to have supportive groups like CEC,
- 21 and we're really excited to continue working with you. And
- 22 so on behalf of the entire Treau team, I just want to say
- 23 again thank you again for your consideration.
- 24 VICE CHAIR SCOTT: Thank you.
- I have Alexandra Rasch, followed by Paul Kreiner.

1	MS.	RASCH:	Good	mornino	r Vice	Chair	Scott	and

- 2 Commissioners. My name is Alexandra Rasch. I am the CEO
- 3 and founder of Caban Systems. And as an early member of
- 4 the Proterra engineering team I'm always very excited and
- 5 proud to see the Proterra team here.
- 6 On behalf of the entire Caban team, we would like
- 7 to thank the California Energy Commission and its staff for
- 8 the most recent Notice of Proposed Award for the prototype
- 9 into production modular battery for platform projects for
- 10 California critical infrastructure.
- 11 The proposed project will scale up our emerging
- 12 best-in-class energy storage prototype and accelerate the
- 13 production of the needed energy storage solutions to
- 14 provide reliable, distributed energy sources that will add
- 15 a new dimension of safety, savings and emission reductions
- 16 for the investor owned utility repairs.
- 17 Californians are increasingly vulnerable to power
- 18 outages, due to the electrical equipment and infrastructure
- 19 failures, brownouts, earthquakes, wildfires and severe wind
- 20 storms and landslides. Wildfire-related power outages and
- 21 communication failures have taken dozens of lives,
- 22 emphasizing the immediate need to accelerate the production
- 23 and deployment of commercially scalable and reliable
- 24 platforms for life saving, fossil fuel-free power for
- 25 critical infrastructure.

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- 2 manufacturing of a dedicated battery design for resiliency
- 3 and withstand extreme conditions in combination with onsite
- 4 power generation the equipment can bring a cell power under
- 5 environmental distress back online.
- In the case of public safety via power shut-offs,
- 7 the platform can provide telecommunication systems in
- 8 critical infrastructure for hours or days, restoring
- 9 communications immediately.
- 10 We greatly appreciate the partnership with the
- 11 California Energy Commission to grow energy storage
- 12 manufacturing in California that will provide direct
- 13 benefits to ratepayers, including greater reliability,
- 14 increasing safety, economic development and jobs,
- 15 environmental benefits and lower costs.
- We look forward to working together to
- 17 successfully implement the proposed projects. Thank you
- 18 for your time.
- 19 VICE CHAIR SCOTT: Thank you.
- I have Paul Kreiner.
- 21 MR. KREINER: All right. Thank you, Benson, for
- 22 the introduction, and thank you Vice Chair and
- 23 Commissioners for your time this morning. My name is Paul
- 24 Kreiner. I'm the VP of Products at Primus Power where I've
- 25 lead mechanical engineering efforts for almost nine years

- 1 now.
- 2 I just wanted to take a moment to thank the
- 3 California Energy Commission for supporting clean energy
- 4 technology like ours, and with the production scale-up
- 5 grant in particular, helping companies like Primus Power
- 6 overcome what is often the most challenging hurdle in the
- 7 commercialization of a promising technology, namely the
- 8 transition from prototype manufacturing to initial
- 9 production. This transition requires significant
- 10 investment to overcome new design and supply challenges and
- 11 is often the point at which promising companies have
- 12 stumbled.
- 13 As you heard, at Primus we've developed a zinc
- 14 bromate flow battery unlike any other battery technology in
- 15 the market. Zinc and bromate are two of the lowest cost
- 16 and most abundant battery chemical elements on the planet.
- 17 And on this extremely low cost platform, we've invented a
- 18 radically simplified flow battery system that we believe
- 19 will be best in class in longevity, safety, recyclability
- 20 and cost, specifically for large-scale solar and wind plus
- 21 storage applications.
- And now, after 10 years of R&D and product
- 23 development, we've proven this technology at full scale
- 24 both in house and in the field. And we're proud to have
- 25 done that right here in California.

1	However,	the	systems	we've	built	SO	far	are
1	IIOWC V CL /	CIIC	D y D C CILLD	W C V C	DUITUE	\sim	_L u _L	$\alpha \perp c$

- 2 prototypes built in relatively small quantities. So to
- 3 scale up and realize our vision of low cost, safe and long-
- 4 lasting energy storage and thereby accelerate the
- 5 transition to a 100 percent renewable grid here in
- 6 California and beyond, Primus needs the support of agencies
- 7 like the California Energy Commission, who are committed to
- 8 a sustainable future. And for that we are extremely
- 9 grateful. So thank you.
- 10 VICE CHAIR SCOTT: Thank you.
- I don't have any other blue cards. Any other
- 12 public comment in the room? All right, any public comment
- 13 on the phone? Okay. So we'll transition to Commissioner
- 14 discussion.
- 15 You know, I've been working on research now for
- 16 about two months and just digging in and learning all the
- 17 details in a much more robust way than previously. And I
- 18 have to say that the careful deliberation that I think has
- 19 gone into to tailoring solicitations, so that we're meeting
- 20 specific needs along the innovation pipeline is really
- 21 quite excellent to see. And so I appreciate kind of the
- 22 RAMP getting from people have put one or two together
- 23 trying to figure out how do you get into that production
- 24 scale space.
- 25 And I think we have a really nice and intriguing

- 1 set of projects here before us. So if there are no other
- 2 comments, I might ask for a motion or comments.
- 3 COMMISSIONER DOUGLAS: No, I'll just move this
- 4 item.
- 5 COMMISSIONER MONAHAN: I second.
- 6 VICE CHAIR SCOTT: All those in favor?
- $7 mtext{(Ayes.)}$
- 8 VICE CHAIR SCOTT: The motion carries 12-0. I'm
- 9 sorry, 3-0. That was Item 12. (Laughter.)
- 10 VICE CHAIR SCOTT: All right, so moving on to
- 11 Item -- wait a second, so that was 12, okay. So moving on
- 12 to Item Number 13, which is the Regents of the University
- 13 of California on behalf of the Berkeley Campus, please.
- MR. FRIEDRICH: Good Morning Vice Chair Scott and
- 15 Commissioners. My name is James Friedrich with the Energy
- 16 Research and Development Division. Seated beside me is Dr.
- 17 Sascha von Meier of UC Berkeley and Alex McBride from the
- 18 City of Oakland is on the phone.
- I am here requesting approval of a \$5 million
- 20 grant agreement with the University of California,
- 21 Berkeley, for the demonstration of an Advanced Energy
- 22 Community in the City of Oakland herein referred to as the
- 23 Oakland EcoBlock.
- 24 In 2016 the Energy Commission issued a
- 25 solicitation titled "The EPIC Challenge: Accelerating the

- 1 Deployment of Advanced Energy Communities." This was a
- 2 two-phased solicitation that challenged multi-disciplinary
- 3 project teams to partner with local governments and develop
- 4 innovative and replicable approaches for accelerating the
- 5 deployment of Advanced Energy Communities. Phase I of the
- 6 competition focused on the planning and design, while this
- 7 Phase II grant focuses on the build-out and deployment.
- 8 The Oakland EcoBlock is led by a team headed by
- 9 UC Berkeley's Institute for Energy and Environment with key
- 10 support from the City of Oakland and Lawrence Berkeley Lab.
- 11 This project is a first-of-its-kind deployment of an
- 12 Advanced Energy Community that retrofits an existing
- 13 residential city block consisting of 22 buildings with 44
- 14 units. It is innovative in several key ways. It combines
- 15 deep energy efficiency retrofits at the block-scale with a
- 16 DC microgrid that integrates rooftop solar PV, flywheel
- 17 energy storage and EV charging stations. DC microgrids
- 18 have the potential for higher reliability and lower capital
- 19 costs due to fewer, simpler power electronic components,
- 20 higher power system efficiency due to fewer power
- 21 conversions and avoidance of costly and complicated
- 22 transfer switch and protection equipment necessary in AC-
- 23 coupled microgrids.
- 24 A smart microgrid control and management software
- 25 system will optimize supply and demand at the block-scale

- 1 while encouraging behavioral demand response. The EcoBlock
- 2 also includes shared EVs for local trips and water
- 3 efficiency and reuse opportunities.
- 4 Advanced Energy Communities enable local
- 5 governments like the City of Oakland to take a leadership
- 6 role in supporting our state's energy transition and
- 7 decarbonization goals. Staff believes the Oakland EcoBlock
- 8 will demonstrate an integrated, community-scale approach to
- 9 energy retrofitting can be more efficient and cost-
- 10 effective than the individual house scale to achieve
- 11 emissions reductions in existing buildings.
- 12 Staff would also like to acknowledge two letters
- 13 submitted this morning in the business meeting docket,
- 14 signed by several members of the proposed EcoBlock
- 15 community site. Community members voiced concern about the
- 16 nature of communication and outreach around the project and
- 17 voiced uncertainty about the risks and responsibilities
- 18 that participating in the project would entail. Staff
- 19 respect these concerns and want to emphasize how important
- 20 it is that the voice of community members is heard.
- 21 Staff also wants to emphasize that participation
- 22 in this project is purely voluntary. The project is not
- 23 intended to be, nor dependent on 100 percent participation.
- 24 The project can still be technically and financially
- 25 feasible with less than 100 percent participation and

- 1 that's by design. Staff believe that perhaps the lag in
- 2 timing between the Phase 1 and Phase 2 grants perhaps
- 3 allowed misperceptions to grow about the project. And
- 4 Phase 2, with now a concrete proposal and design will give
- 5 us the opportunity to have a fresh start in the community.
- 6 There have been changes to the Phase 2
- 7 project team focused on stronger community
- 8 engagement, including a new communications facilitator
- 9 who's in a stronger position to conduct outreach. This is
- 10 something that staff will pay close attention to.
- 11 Staff thanks you for your consideration of this
- 12 agreement. Myself as well as Dr. von Meier are available
- 13 to answer any questions you may have. And Dr. von Meier
- 14 and Ms. McBride from the city of Oakland would like to say
- 15 a few words in support of the project.
- 16 VICE CHAIR SCOTT: Thank you.
- 17 Dr. von Meier, please.
- 18 DR. VON MEIER: Thank you very much. I'm Sascha
- 19 von Meier from UC Berkley. And it's my pleasure to speak
- 20 here on behalf of this exciting project. This project
- 21 involves real innovation at the technical level in terms of
- 22 scaling technologies, making them cost effective at the
- 23 level of a city block in bringing what are presently
- 24 considered luxury items such as rooftop solar with energy
- 25 storage that allows you to ride through utility power

- 1 outages, bringing those technologies within economic reach
- 2 of all citizens.
- 3 This Oakland EcoBlock pilot project is really
- 4 intended to demonstrate something that is scalable and that
- 5 is robust and that can be rolled out in many different
- 6 places. What's most unique about it is that it's a
- 7 retrofit, not a green field construction. And that is also
- 8 exactly what makes it hard.
- 9 I'm going to focus on the greatest difficulties,
- 10 which are in the realm of social science, not the
- 11 technology. The technical parts of it are easier to figure
- 12 out and to optimize with, because we can be algorithmic
- 13 about it. The social challenges are there because we're
- 14 not starting like many microgrids with a single entity that
- 15 owns and operates a microgrid. That's been done. We've
- 16 seen it.
- We're not starting with an intentional community
- 18 that gets together and says "how can we build the most
- 19 effective microgrid together?" We're starting with a
- 20 typical block that like any block has its history and its
- 21 tensions. Just like any block that we live on, there are
- 22 long-standing issues between and among neighbors that we
- 23 couldn't possibly know before we walked into it. But it's
- 24 addressing those challenges very directly and transparently
- 25 that I think will make this project scalable.

1	So	we	are	aware	that	there's	great	diversity	y on
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- 2 this block, diversity of opinion. Also as everyone who's
- 3 been to Oakland knows there's been a lot of development
- 4 going on. And people are sensitive to the fact that money
- 5 is coming in. New money is coming in. And development is
- 6 changing the flavor of many corners of the city
- 7 neighborhood. So that's a context.
- 8 As it was stated, it's very important that for
- 9 this project to be scalable it's not required to have 100
- 10 percent buy-in. In fact, with the funding we have we can't
- 11 afford right now to do 100 percent of the block. But to
- 12 demonstrate the technological advantages, we believe that
- 13 can be done with about one-third of the block of roughly 30
- 14 homes. And in fact we're aiming for one half, more than
- 15 that number of the neighborhood residents and property
- 16 owners are in support.
- 17 What is also important to me personally is that
- 18 we preserve an option for people to opt in later once they
- 19 see what this is really about. It's been four years since
- 20 these owners and residents were first contacted. And we
- 21 were really developing this idea with them during Phase 1,
- 22 as we went. And there's been a lot of time particularly
- 23 lagging between Phase 1 and Phase 2 of people basically
- 24 filling in the gaps of what they weren't sure about how
- 25 this was going to work.

- 1 We haven't been able to present them yet with a
- 2 contract to opt in. So there's been I think a bit of
- 3 speculation. The key piece of it is that it's absolutely
- 4 voluntary that property owners do not lose any autonomy
- 5 over their home. And that hopefully when we start with the
- 6 actual physical construction, there will be real evidence
- 7 and we now have a concrete basis for a proposal for an
- 8 offering that homeowners and residents can then see and
- 9 make their decision on.
- 10 As was also mentioned, we have Ms. Cathy Leonard
- 11 onboard, who's the Founder of the Oakland Neighborhoods for
- 12 Equity, a Board Member of the Golden Gate Community
- 13 Association. And she's a professional who will now be
- 14 leading the outreach and communications. And one
- 15 of the first steps in Phase 2 really will be a very open
- 16 and public meeting with the community, so that we're
- 17 completely transparent and everybody knows what to expect.
- 18 Thank you.
- 19 VICE CHAIR SCOTT: Thank you.
- I don't have any blue cards here in the room. Is
- 21 there any other public comment in the room? Okay. I do
- 22 have a series of folks on the phone. The first is
- 23 Alexandria McBride from the City of Oakland.
- 24 MS. MCBRIDE: Chief Resilience Officer from the
- 25 City of Oakland and I appreciate the opportunity to present

- 1 today. We're really excited for Oakland to be the home of
- 2 the nation's first EcoBlock and are in support of the items
- 3 being presented.
- 4 The EcoBlock has been a cornerstone of our
- 5 Resilient Oakland Strategy (indiscernible) like our Council
- 6 recently declaring a climate emergency back in October. We
- 7 most certainly understand the importance and the urgency of
- 8 climate change and these comprehensive solutions like
- 9 EcoBlock move the dial.
- Our goal, as you heard from Dr. James, our goal
- 11 is to have a successful EcoBlock model back in scale to
- 12 other parts of the city. And we also want to maintain our
- 13 values of transparency, impact and equity.
- One of the early lessons we've learned is as also
- 15 you heard just now is that this model is not only about
- 16 technical innovations, but also even more importantly about
- 17 the social community building component that has to take
- 18 place to make the project be successful.
- 19 I'm seeing this, and we as a city are seeing this
- 20 as an opportunity to be more thoughtful and more
- 21 intentional and engaging in inclusive community engagement
- 22 for this block. And we've already been having
- 23 conversations with the EcoBlock project team about how the
- 24 city can better support that community engagement work.
- 25 But I'm really confident that UC Berkeley's Institute for

- 1 Energy and Environment with Sascha's leadership will be a
- 2 strong partner.
- 3 And then so again just thank you for your time
- 4 and consideration. I'm also happy to answer any other
- 5 questions.
- 6 VICE CHAIR SCOTT: Okay. Thank you.
- 7 I have next Cathy Leonard.
- 8 MS. LEONARD: Hello, can people hear me?
- 9 VICE CHAIR SCOTT: Hi. Yes we can. Please go
- 10 ahead.
- MS. LEONARD: Oh great, okay. Thank you. My
- 12 name is Cathy Leonard. I'm an Oakland native. And I live
- 13 in the Santa Fe neighborhood, which is just west of -- I'm
- 14 sorry, just east of the Golden Gate neighborhood. I'm on
- 15 the Board of Directors of the Golden Gate Community
- 16 Association, which has been in Oakland and been a non-
- 17 profit for the last 30 years. We've been fighting for
- 18 change in and around the Golden Gate neighborhood.
- Most recently in November, after four years of
- 20 lurking in the Golden Gate to Santa Fe neighborhood where I
- 21 live, Longfellow, we just got a dedicated city planner
- 22 who's going to help us prepare a blue print for other
- 23 Oakland neighborhoods who want to be involved in change in
- 24 their neighborhood. So right now we've got repaving
- 25 schedules going on, on a block that wasn't even on the

- 1 paving scale at all. We've just done a lot of things in
- 2 the neighborhood.
- 3 Also we were instrumental in helping to reopen
- 4 our neighborhood schools, so we're still in the process of
- 5 doing that. There's a lot of things going on in the
- 6 community.
- 7 I'm particularly exciting about this project.
- 8 And I wish it was in my neighborhood. If the changes that
- 9 I see in our city, there's a lot of seniors with asthma,
- 10 because of climate change being located next to industry
- 11 and the fact that these -- Alexandria would like to talk
- 12 about this a little bit more, but the City of Oakland
- 13 actually has a contract with a group in Upland. And
- 14 they're going around to the different seven districts and
- 15 actually getting neighborhoods involved in climate change.
- 16 One is happening in my neighborhood and a couple of weeks,
- 17 so this sort of ties all in with the EcoBlock.
- 18 So my experience with community outreach is
- 19 extensive. I've been doing community outreach for the last
- 20 20-30 years. I've been able to successfully bring change
- 21 about in our neighborhoods.
- Just to give you an example, there's a Transbay
- 23 bus that comes to our neighborhood, which predated or came
- 24 after the train, which ran through North Oakland and
- 25 Berkley. And AC Transit had decided that they were going

- 1 to move that bus from our neighborhood. And so I was able
- 2 to rally people from the three affected North Oakland
- 3 neighborhoods, South Berkley and get 700 signatures on a
- 4 petition which we presented to AC Transit, our Council
- 5 Member and we were able to successfully block that removal
- 6 of that bus. This was (indecipherable) we need it to get
- 7 to San Francisco. It was a quick way to get there. The
- 8 alternative would have been to take three buses to get to
- 9 San Francisco. So those are just one example of some of
- 10 the outreach that I've done. I'm looking forward to
- 11 working on this project.
- I know a couple of people on the block already
- 13 who have expressed a verbal commitment to be involved in
- 14 the EcoBlock. I agree that people do need more
- 15 information. And now that I'm on board I will be walking
- 16 that block doing door-to-door outreach, having community
- 17 meetings. And I look forward to being a partner in this
- 18 endeavor. Thank you so much.
- 19 VICE CHAIR SCOTT: Thank you.
- Next we have Mary Shisler. Are you there? Your
- 21 line is open.
- MS. SHISLER: Yeah, I'm trying to talk. Am I
- 23 getting through?
- VICE CHAIR SCOTT: Yes. We can hear you.
- MS. SHISLER: Okay. Thank you so much. All

- 1 right. I have a number of things running through my mind.
- 2 I live on Fremont Street and my home is one of the homes
- 3 that will be affected by this EcoBlock. I have been
- 4 absolutely shocked and appalled at the lack of transparency
- 5 of this project. When Dr. von Meier spoke today, that is
- 6 the most comprehensive and complete and intelligent and
- 7 clear description of what is going to happen in my block
- 8 that I have heard in all the years that this has been going
- 9 on.
- I am glad to hear that there's awareness that
- 11 there is a social problem here. There is. And I really
- 12 don't know now what my feelings are about it, because I
- don't feel I have been given enough information to even
- 14 tell you, as a homeowner, what I really want done about
- 15 this. On one hand it sounds very positive. On the other
- 16 hand there has been absolutely no information about the
- 17 impact upon the value of my home and of the quality of my
- 18 life.
- 19 And I think these are important issues. And my
- 20 first thought was that I was going to beg you to vote this
- 21 down, absolutely totally beg you. That my husband and I
- 22 are close to retirement and can't afford to lose the value
- 23 of our home due to the manner in which this was handled.
- 24 But I have gained some confidence in the project listening
- 25 to Dr. von Meier speak. She sounds like she's

- 1 professional. She sounds competent. It sounds like she's
- 2 aware of the issues.
- And right now, what I would like to have happen
- 4 is to have the vote kicked down the block until there has
- 5 been a full, complete, transparent meeting with the entire
- 6 community. Because we have had so much misinformation and
- 7 we have been left so far out of the loop that I don't feel
- 8 we can possibly give you a well-informed answer on how we
- 9 would like to participate in this project.
- 10 And I want to be as fair as I can to those who
- 11 have made all the effort to make this to go through. I
- 12 can't remember name of the people who just spoke, but I
- 13 felt they came across to me as passionate and caring. And
- 14 I would like to talk to them. And I would like to talk
- 15 them before I'm asked to make up my mind. And I just plead
- 16 with you to kind of give the neighborhood a little bit more
- 17 time when we actually get detailed information about what
- 18 this would mean to us.
- 19 You might be able to get a better sense of social
- 20 cohesion were you to correct the mistakes of the past. And
- 21 I think it would make those of us who have been so excluded
- 22 and are so scared and so worried feel better. Do you
- 23 really want to go into this block having sizeable block of
- 24 us terrified about what's going to happen to us and our
- 25 home values? I don't think you want (indiscernible) --

- 1 VICE CHAIR SCOTT: Thank you, Ms. Shisler. I'm
- 2 going to have to ask you to please wrap up.
- 3 MS. SHISLER: All right. I'm done. I'm just
- 4 asking you, could you kick this down the block a little bit
- 5 and have them give us a really full-scale transparent
- 6 discussion about what's happening, open to the whole
- 7 public. Thank you.
- 8 VICE CHAIR SCOTT: Thank you.
- 9 Next I have Robin Freeman.
- 10 MS. FREEMAN: Hi. This is Robin Freeman. Am I
- 11 coming through?
- 12 VICE CHAIR SCOTT: Yes, you are.
- MS. FREEMAN: Okay. Thank you. I'm the Emeritus
- 14 Chair of the Merritt College Environmental Management
- 15 Program. And I am a resident of the block for 40 years; my
- 16 wife and I and our family. I think the concept is a great
- 17 addition to the wonderful array of greenhouse gas reduction
- 18 projects that you're looking at. And I agree that this is
- 19 in a very large part, a social experiment.
- 20 And that is what I want to address. So as has
- 21 been said, that that part has not been addressed at all.
- 22 And the only addressing of the social experiment that's
- 23 been very time consuming for the residents, so all the
- 24 people on my side of the block, there's six or eight
- 25 homeowners have signed a petition that they do not want to

- 1 be involved at this point.
- 2 So (indiscernible) homeowner's association,
- 3 they're called EcoBlock Block Collective, (phonetic) and I
- 4 would suggest finding a block that is less divided and
- 5 interested and wishes to be involved. And begin with the
- 6 low-hanging fruit and test it out that way. Then perhaps
- 7 that Santa Fe neighborhood block would work.
- 8 And I would also suggest that the neighbors need
- 9 be compensated for their time as guinea pigs. And not just
- 10 for the initial meetings, but they need to be compensated
- 11 for all the meetings. And my low-income neighbors won't
- 12 have the time to be involved otherwise. It's too expensive
- 13 and as it is for obviously me.
- 14 And that also what happens in five to ten years
- 15 following implementation, they need to be compensated for
- 16 having -- you know, dealing with the maintenance issues and
- 17 all the things that will come up with a micro-utility.
- 18 And those are comments (indiscernible) and thanks
- 19 so much.
- VICE CHAIR SCOTT: Thank you.
- I have Tim Lilly.
- MR. LILLY: Hello, can you hear me?
- 23 VICE CHAIR SCOTT: Yes. Yes we can, please go
- 24 ahead.
- MR. LILLY: Okay. Thanks. Thanks for the

- 1 opportunity. I am a resident on the block for about 15
- 2 years and a homeowner and very interested in the project.
- 3 I think it's very exciting and I think we can be a model
- 4 for potential environmental co-awareness and what could be
- 5 a great model for cities.
- And I think yes, just to address the concerns
- 7 thank you Mary and thank you Robin for your input. And
- 8 thank you Mary, for being open-minded and potentially open
- 9 to considering the project. I know you said you felt like
- 10 there was a lack of information and I agree. I think more
- 11 information would be great.
- I just wanted to let Robin know I am on his side
- 13 of the block. I am a homeowner and I am in favor of at
- 14 least going forward with the project to the next phase. So
- 15 it's not completely true that all of the homeowners on his
- 16 side of the block are against it. I think just people
- 17 don't have the information and unfortunately some people
- 18 have refused the outreach. You know, there has been
- 19 multiple attempted outreach to folks who are claiming
- 20 there's been no information, no information, but they've
- 21 been sort of aggressive in their not wanting to be
- 22 approached.
- 23 So we've respected that, but there has to be
- 24 maybe a little more information coming out, so folks know
- 25 about. But either way we don't want (indiscernible) and we

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- 1 just want to go through the next phase and take it from
- 2 there. And let everyone know exactly what's happening, but
- 3 if folks on the block do not want to participate then of
- 4 course that's their right. And I think that's been very
- 5 clear from the start that nothing will ever happen against
- 6 anyone's will at any stage.
- 7 And I think it's easy to be a kind of pro-
- 8 environment and pro-green on paper ideologically. And then
- 9 have a not in my backyard kind of feel about it, but I
- 10 think we're not going to know if we can do anything about
- 11 what are the environmental challenges, if we don't get
- 12 innovative and environmental and try some stuff out. And
- 13 this seems like something that would be beneficial to
- 14 better the environment, which is where huge amounts of
- 15 greenhouse gases and environmental issues are created.
- So yeah, I just want to express my appreciation
- 17 for the ideas of the project and I would like to take it to
- 18 the next level in appreciation of the California Energy
- 19 Commission's grant. And I think we should definitely move
- 20 on. And if anything we should maybe speed the process up
- 21 rather than slow it down, because it's taken a long time to
- 22 get to this point. And we want everyone's input and
- 23 everyone to participate willingly and so (indiscernible) --
- VICE CHAIR SCOTT: Mr. Lilly I'm going to have to
- 25 ask you to wrap up please.

l MR. LILLY: Sure. And I just want everyone	MR. LILLY: Sure. And I just want everyone to
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- 2 feel good about the project and like I say I don't want to
- 3 be delaying it, but willing participation should be on the
- 4 table. If people don't want to participate that's fine,
- 5 but then the willing participants should be able to move
- 6 forward quickly. Thank you so much.
- 7 VICE CHAIR SCOTT: Thank you.
- 8 I have David Rose, please.
- 9 MR. ROSE: David Rose. I own a property in the
- 10 EcoBlock. I'm 100 percent in favor of it. I have a MBA
- 11 with a focus on sustainability and I feel that -- I'm aware
- 12 of all the statistics about energy consumption and the
- 13 effects of greenhouse gases that homes have, that our
- 14 (indiscernible) environment has. And I think having this
- 15 little block in Oakland being an advantage to the whole
- 16 world is really a amazing, amazing opportunity. That not
- 17 withstanding people's fears and concerns, which I think can
- 18 all be addressed this is going to put us on the forefront
- 19 of the map of sustainability and how places do things.
- 20 And I think it will be a boon to the environment,
- 21 to the State of California, to the City of Oakland. And
- 22 for all of us as property owners have a tremendous positive
- 23 impact on the value of our homes. So I'm just 100 percent
- 24 in support of it. I know that there's going to be some
- 25 things that don't work for everybody 100 percent of the

- 1 time. But I think the positive nature of this project and
- 2 the ambitious nature of this project far and away outweigh
- 3 the concerns that people have.
- 4 And particularly they are concerns that can be
- 5 sorted out through communication and discussion and getting
- 6 to know our neighbors. And I think that's also one of the
- 7 things that's lacking in the world today is that sense of
- 8 community and I think this is a way that will create a
- 9 stronger and more resilient community.
- 10 That's the end of my comments. Thank you.
- 11 VICE CHAIR SCOTT: Thank you.
- I don't have any other indication of additional
- 13 comments on the phone. Are there any other comments on the
- 14 phone? Okay. So seeing no additional comments on the
- 15 phone, we will turn to Commissioner comments.
- I do just want to say a couple of things. One is
- 17 that this is part of the EPIC Challenge, which I know that
- 18 James mentioned in his presentation where the first round
- 19 was planning grants that went out to about 13 different
- 20 groups around the state. And then the second round of this
- 21 is implementing -- people had a chance to -- the folks who
- 22 won the planning grants had a chance to compete for
- 23 implementation dollars. And so that is why there has been
- 24 kind of a lag between planning and implementation.
- 25 But I also want to -- I think that's a good note

- 1 to ourselves here at the Energy Commission for the other
- 2 projects that are going to be coming down to make sure we
- 3 have a closer tie between kind of part one where we were
- 4 planning and part two, the implementation of this.
- As you all know, I'm the Public Member on the
- 6 Energy Commission and transparency, good communication,
- 7 making sure the community really understands what is
- 8 happening here is paramount. That has to get done. This
- 9 project will -- it doesn't need participation from
- 10 everybody to be a successful project, but people do need to
- 11 understand what's taking place and why it's taking place.
- 12 The point is to bring communities along. And as one of the
- 13 commenters said, have these communities out in the
- 14 forefront, and be I think kind of be excited and pleased.
- 15 And proud to be out on the forefront even if they didn't
- 16 want to participate in the project.
- 17 So really making sure that the neighbors
- 18 understand what's happening, why it's happening, they do or
- 19 don't have to participate, having an opt-in or an opt-out,
- 20 all of those components are really important.
- 21 And maybe, James, you can address how that is
- 22 going to take place within this proposed project?
- 23 MR. FRIEDRICH: Sure. This is James Friedrich,
- 24 again with the Energy Commission. First I'd like to
- 25 acknowledge that again staff here, the concerns of the

- 1 community, and want people to know that their voices are
- 2 heard.
- 3 We think it's a good idea to let folks know that
- 4 the approval of this grant doesn't mean the trucks are out
- 5 tomorrow in front of their homes. There's a lot of
- 6 planning still to be done and community engagement still to
- 7 be done. And we support bringing the community together
- 8 for full transparency for everybody to understand what's
- 9 going to be happening here. And for people to know again
- 10 that this a voluntary commitment and we will make sure to
- 11 work with UC Berkeley to ensure that we maintain that for
- 12 the life of the project, both the ability to voluntarily
- 13 commit and voluntarily opt out.
- And so if Dr. von Meier has anything to add, I'll
- 15 leave it at that.
- VICE CHAIR SCOTT: Okay. Other -- yes, please go
- 17 ahead and then go back to other persons.
- 18 MS. MCBRIDE: Thank you so much. And I also
- 19 would like to thank the folks who've called in for their
- 20 candid comments. I want to say first of all personally
- 21 that I really empathize with the situation of being a
- 22 homeowner and having a group of people come and say, "Hey,
- 23 we've got this idea for what we're going to do in your
- 24 block." But then not have the specific details ready of
- 25 what's the proposal. And I personally would feel anxious

- 1 as well. So I want to acknowledge that.
- 2 And I want to reemphasize that the transparency
- 3 to everyone is absolutely the key here. In terms of the
- 4 communication, the project team has been walking a bit of a
- 5 tightrope between trying to keep everyone on the block up
- 6 to date, but also respecting the express wishes from
- 7 several residents and owners not be contacted. And this
- 8 was mentioned. So it's a tricky thing when you're trying
- 9 to kind of have information out there but you want to
- 10 respect people's wishes who say, "Hey, don't call me."
- 11 So I would say the project team has done the best
- 12 that we were able to do based on what we knew then. We
- 13 might do it differently if we start up fresh. And I think
- 14 that we have a great basis really to move forward with the
- 15 enthusiasm that's been shown from so many different people
- 16 on different sides.
- 17 And I really, again want to thank the folks
- 18 who've called in. I think we have a great basis for moving
- 19 forward.
- 20 VICE CHAIR SCOTT: Other Commissioner comments or
- 21 questions?
- 22 COMMISSIONER MONAHAN: I had a question. Could
- 23 you just walk us through what the community engagement
- 24 looks like and what a community meeting or how you're doing
- 25 the outreach to the community members?

1	(Colloquy off-mic on the phone.)
2	VICE CHAIR SCOTT: We need a if you're on the
3	phone line, we can hear some of you. So maybe if you could
4	please mute yourself on your end and we'll also try to mute
5	you on our end.
6	Okay, to Commissioner Monahan's question, please?
7	DR. VON MEIER: Right. So from here on out with
8	the Phase 2 actually funded and in progress, we would start
9	with a comprehensive meeting with all the stakeholders
10	involved and present the greatest detail that we're able
11	to. In terms of the proposed type of contract that they
12	would be signing, it would be a draft. They have still
13	opportunity to help shape that language and the specifics,
14	but we now have an actual proposal for them to consider and
15	help us edit.
16	And we will also specify the different pieces
17	that they can opt into. For example, being a member of
18	this EcoBlock Cooperative doesn't mean you automatically

16 And we will also specify the different pieces
17 that they can opt into. For example, being a member of
18 this EcoBlock Cooperative doesn't mean you automatically
19 have to agree that you're going to change out your gas cook
20 stove for an electric induction cook stove. We're going to
21 present you with what we believe are the benefits of these
22 different pieces of technology, but no individual component
23 of this would be mandatory. It would be recommended and so
24 part of that community outreach is to make a lot more

detailed information available.

25

1	One of our first action items with the project
2	being funded to go ahead is to develop a website. One with
3	one part of it being kind of public facing and another
4	would be a forum for the residents and owners on the block
5	to actually exchange and access information, so that they
6	can really have all the technical details at their
7	fingertips. And then we will refine with their input, in
8	fact we've already solicited the inputs from the subset of
9	owners that had asked to stay in touch with the team. We
10	solicited their input on how we should move forward with
11	public announcements. And out of respect for the block
12	residents and owners, the University has refrained from
13	making any announcement as to the Notice of Proposed Award.
14	You know, part of it we're also sensitive to the
15	privacy issue here. It's not obvious that one would want
16	to be suddenly in the public spotlight.
17	So we will continue to solicit their input and
18	have the property owners help us with the drafting of the
19	contract language that will be favorable, that will end up
20	being a compromise in some sense, but we will start with
21	specific recommendations. And then move forward with the
22	explicit opt in to different pieces. And there will be
23	contractors ready to speak to the homeowners individually
24	about the specifics that they want done in their house and

to make that as low impact as possible.

25

1 C	OMMISSIONER	DOUGLAS:	So,	just	as	а	follow	on
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- 2 question, I've heard the concern expressed about could this
- 3 impact the value of houses in the neighborhood. And I'm
- 4 trying to get my head around what kind of physical changes
- 5 that would be visible to somebody in the street, for
- 6 example, that were just looking at the neighborhood. They
- 7 certainly wouldn't notice that someone had an induction
- 8 stove instead of a gas stove, for example. I imagine there
- 9 might be solar panels would be involved. But could you let
- 10 us know, just in terms of physical changes in the
- 11 neighborhood what might look different?
- DR. VON MEIER: That's a really good question.
- 13 Yeah, I think the solar panels are visible but not
- 14 attention grabbing. I think the most noticeable change
- 15 would be a row of electric vehicles parked on one side of
- 16 the block with EV charging that are intended as shared
- 17 vehicles that would be charged from the block DC microgrid,
- 18 which means -- and this is important as we look toward the
- 19 possibility of many more frequent power outages on PG&E's
- 20 system. We'll be able to charge even during a grid outage.
- 21 So a big part of this is emergency preparedness.
- 22 And it's having an island of resilience in the city where
- 23 people can go to and get the central resources. So the
- 24 EVs, which I will add are not entirely uncontroversial,
- 25 because parking is a scarce resource. So there's a balance

1	to	be	found	between	well	how	manv	parking	spaces	do	vou

- 2 want to take up with these EVs? So that number hasn't been
- 3 defined, but I think that would be the most visible part.
- 4 The microgrid interconnection would not be obvious to
- 5 anyone.
- 6 COMMISSIONER DOUGLAS: And you're not talking
- 7 about signage, like welcome to the most sustainable block?
- 8 DR. VON MEIER: That would have to be something
- 9 that the block owners, residents, would have to all be
- 10 enthused about. I would not in a million years put that
- 11 upon them. (Laughter.)
- 12 VICE CHAIR SCOTT: I do recognize the Catch 22
- 13 that you've mentioned in terms of wanting to be -- from
- 14 what I heard is lots of people or maybe not, but lots of
- 15 people are looking for additional information. But then
- 16 there are also folks who have said, "Please don't contact
- 17 me about this anymore." So that's a fine line to walk.
- 18 And also without the funding that we're
- 19 contemplating right now you don't have the dollars to
- 20 actually go and do the outreach that we're talking about.
- 21 But I do want to stress how important it is to get that
- 22 done and to outreach to the community.
- I like the plans that you have laid out for
- 24 Commissioner Monahan and viewing additional details about
- 25 what that's going to look like, being really mindful of

- 1 that as you go into this project. I can't stress how
- 2 important I think that is. I do think this is a good
- 3 project. I think it's an important project.
- And so if there aren't any other questions, but
- 5 if there are please ask, I will ask for a motion.
- 6 COMMISSIONER DOUGLAS: I will move this item. I
- 7 do want to request that you keep the Energy Commission
- 8 staff very much in the loop on your outreach. And my hope
- 9 is that you're able to build a strong level of buy-in and
- 10 consensus. And you're able to reassure homeowners who
- 11 really don't want involvement in this project that it is
- 12 going to be at the very least potentially somewhat
- 13 beneficial or neutral to them and make that a reality for
- 14 them. I do recognize the challenges of working in
- 15 established neighborhoods.
- And so I'll move approval of this item.
- 17 COMMISSIONER MONAHAN: I second.
- 18 VICE CHAIR SCOTT: All those in favor?
- 19 (Ayes.)
- VICE CHAIR SCOTT: The motion carries 3-0. Thank
- 21 you.
- All right, we will move on. We're just going to
- 23 power through, because we've go about four or five more
- 24 items here. So we're going to move on now to Item 14, the
- 25 Spatial Informatics Group, LLC please.

1 MR. HORA	NGIC: Good	afternoon. My	name	is	Alex
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- 2 Horangic of the Energy Research and Development Division.
- 3 Today staff is requesting your approval of the grant
- 4 resulting from the Wildfire: Assessing and Preparing for
- 5 Risks Under Climate Change Solicitation. Recent experience
- 6 has shown first responders and grid managers that wildfire
- 7 behavior is changing in ways that current fire risk models
- 8 do not adequately handle.
- 9 The solicitation is intended to develop next-
- 10 generation wildfire risk models at both local and statewide
- 11 scales to help ensure resiliency of the electric grid in
- 12 the near and long terms in the face of the growing wildfire
- 13 risk under climate change. And to seek specific advances
- 14 in wildfire modeling regarding extreme weather and wind
- 15 events, the effects of widespread tree mortality, the
- 16 dynamics of vegetation and fuel with climate change, and
- 17 fire behavior in the wildland-urban interface.
- 18 Specifically the recommended awardee, Spatial
- 19 Informatics Group, will implement a two-phased project,
- 20 which will develop methods to optimize the location of
- 21 future weather stations, improve understanding of the
- 22 relationships between extreme weather conditions and
- 23 wildfire through analysis of major historical fire events,
- 24 advance the science of fire behavior in areas of elevated
- 25 tree mortality through laboratory experiments to develop

- 1 new fuel models. And to develop computationally efficient
- 2 wildfire scenario models at differing temporal and spatial
- 3 scales to improve decision-support about electricity
- 4 assets.
- 5 If successful this agreement will inform energy
- 6 policy and decisions by providing actionable information
- 7 for grid management for investor owned utilities and
- 8 support California's Fifth Climate Change Assessment.
- 9 Staff recommends approval of this agreement, and I will be
- 10 happy to answer your questions.
- I would also like to introduce Dave Sapsis from
- 12 CAL FIRE. He's graciously come to make comments in support
- 13 of this recommended agreement.
- 14 VICE CHAIR SCOTT: Great. Thank you.
- 15 Dave?
- 16 MR. SAPSIS: Good afternoon. Thanks for the
- 17 opportunity, Dave Sapsis from CAL FIRE's Fire and Resource
- 18 Assessment Program.
- 19 By way of context, our program has been involved
- 20 with fire safety rulemaking in the Utility Commission for
- 21 over a decade now. Following some utility-ignited fires
- 22 that were catastrophic in 2007, we got involved to provide
- 23 technical and scientific support to the Commission for
- 24 enhanced regulatory actions to promote fire safety. That
- 25 culminated in the decision for enhanced regulations in a

- 1 high fire threat district map associated with high-risk
- 2 areas from utility wildfires that was adopted in late 2017
- 3 or early 2018.
- 4 Over the course of that work, we highlighted a
- 5 number of the unique complex vulnerabilities associated
- 6 with the utility grid, highlighted some issues of data gaps
- 7 and modeling shortcomings, as well as to be frank with you
- 8 some of the fundamental uncertainties associated with
- 9 environmental conditions that impact wildfire risk. So
- 10 when we were asked to provide some technical comment to the
- 11 proposals in this solicitation we were very, very welcome
- 12 and felt we were pretty well served.
- So really just to cut to the chase really, I
- 14 think without boring you with some gory and geeky kind of
- 15 details about extreme value statistics and atmospheric
- 16 wildfire coupling, the Department is really wholesale in
- 17 support of this solicitation going to Spatial Informatics
- 18 Group. They've compiled a very comprehensive work plan and
- 19 a really all-star team to conduct this really dynamic and
- 20 needful cutting edge research.
- 21 And just to finish up, the Department would
- 22 really welcome an advisory capacity as the program of work
- 23 is carried out. With that, I'm available for any
- 24 questions.
- 25 VICE CHAIR SCOTT: Great. Thank you.

- 1 Do I have any other public comment in the room.
- 2 I don't have any blue cards. Okay. Any comment on the
- 3 phone?
- 4 (No audible response.)
- 5 VICE CHAIR SCOTT: Let's turn then, and thank you
- 6 for being here, to Commissioner discussion.
- 7 I think that this is an incredibly important
- 8 piece of research. I probably don't need to tell that to
- 9 either of you. Just after the horrific and catastrophic
- 10 wildfires that we have had in the state recently getting
- 11 these updated wildfire models, advancing our understanding
- 12 of fire science, it's just I can't even express how
- 13 important that is. And so if you do not have questions, I
- 14 will ask for a motion on Item 14.
- 15 COMMISSIONER MONAHAN: I move approval.
- 16 COMMISSIONER DOUGLAS: I second.
- 17 VICE CHAIR SCOTT: All those in favor?
- 18 (Ayes.)
- 19 VICE CHAIR SCOTT: The item passes 3-0.
- 20 All right, next is Item 15, which is Bringing
- 21 Rapid Innovation Development to Green Energy BRIDGE, Energy
- 22 Storage GFO-18-304.
- 23 MR. TIAN: Good afternoon Vice Chair and the
- 24 Commissioners. My name is Qing Tian. I am with the Energy
- 25 Research & Development Division. Today, we would like to

- 1 ask for your approval for three new agreements. These new
- 2 agreements are the outcome from a solicitation for
- 3 technology demonstration and deployment of energy storage
- 4 projects. To be qualified for funding, the proposed
- 5 technology must be from the previously funded Energy
- 6 Commission or federal agency projects.
- 7 The goal is to allow researchers to continue
- 8 their development work without losing momentum to
- 9 fundraise. Another requirement for this solicitation is
- 10 that the project must demonstrate alternative energy
- 11 storage technologies to lithium ion batteries. And well
- 12 represent a scale up of 25 percent or higher in power or
- 13 energy from the previously awarded project.
- 14 This solicitation will help support state energy
- 15 goals, our energy storage system and will also help
- 16 diversify our research portfolio by promoting alternative
- 17 energy storage technologies such as float battery, summer
- 18 storage and fly wells.
- 19 So in the first agreement with Natron Energy, the
- 20 recipient will demonstrate the sodium-ion battery system at
- 21 an electric vehicle fast charging station at UC San Diego.
- 22 This project will help size the battery system and will
- 23 also develop business cases to enable the economic
- 24 deployment of high-power EV fast charging infrastructure
- 25 and increase electric vehicle adoption.

- 1 The proposed technology is nonflammable and safe.
- 2 This will allow technology to be deployed at the sites
- 3 prone to fire risk. This same technology can also be
- 4 further scaled to support other grid applications as a
- 5 stationary energy storage system.
- 6 The second agreement is with EOS Energy Storage.
- 7 The recipient will demonstrate a plug-and-play zinc hybrid
- 8 battery technology at SDG&E's demonstration facility
- 9 located in Pala, California. This project will achieve
- 10 improved power and energy density and enable full
- 11 characterization of performance in high-value applications
- 12 including peak shaving, load following, and frequency
- 13 regulation.
- 14 This project will also model economic benefits
- 15 for energy storage systems including demonstrating
- 16 cost/benefit analysis for IOU ratepayers. EOS is working
- 17 to achieve a battery system with less than \$100 per
- 18 kilowatt hour in manufacturing cost, which if successful,
- 19 would make it one of the most cost-effective battery
- 20 technologies on the market.
- 21 The third agreement is with Element 16
- 22 Technologies. In this project, the recipient will
- 23 demonstrate a sulfur thermal battery technology for
- 24 stationary energy storage and power generation. The
- 25 demonstration will expand on previous applications of the

- 1 thermal storage device by converting the stored thermal
- 2 energy to electricity through a real-time field-testing and
- 3 demonstration.
- 4 If successful, these new agreements will lead to
- 5 greater reliability, a reduction of greenhouse gas
- 6 emissions, better system resiliency and will also improve
- 7 the public safety by promoting alternative energy storage
- 8 technologies that are now label (phonetic) and safe.
- 9 With that, staff like to recommend approval of
- 10 these three new agreements and thank you very much for your
- 11 time and attention.
- 12 VICE CHAIR SCOTT: Thank you. I don't have any
- 13 blue cards. Do we have any public comment in the room?
- 14 Public comment on the phone? Okay, seeing none, let's turn
- 15 to Commissioner discussion.
- 16 This is another I think great and interesting set
- 17 of projects. If you remember the innovation pipeline,
- 18 there was the first part and then BRIDGE is in the middle
- 19 and then RAMP is on the other end. So this is kind of the
- 20 set of projects in the middle again kind of smartly and
- 21 deliberately designed to hit different parts of that
- 22 innovation pipeline.
- 23 The other thing that I think is intriguing about
- 24 these projects is we're trying to diversify the types of
- 25 battery storage that we have within the state and these all

- 1 kind of hit on that area. So I highly recommend those to
- 2 you. Do you have a questions or comments?
- 3 COMMISSIONER DOUGLAS: Move approval of this
- 4 item.
- 5 COMMISSIONER MONAHAN: Can I make a quick
- 6 comment?
- 7 VICE CHAIR SCOTT: Yes.
- 8 COMMISSIONER MONAHAN: Really fast, I know people
- 9 are hungry. I also think it's really interesting how we're
- 10 bridging storage and transportation electrification with
- 11 some of these investments. And this idea that Vice Chair
- 12 Scott talked about this full cycle of clean energy where we
- 13 want to have our electricity system together with our
- 14 transportation system moving towards a complete zero
- 15 emission mobility and electricity for the future. So these
- 16 are just really a great set of investments to move us along
- 17 that direction.
- 18 VICE CHAIR SCOTT: Great. Would you like to
- 19 second?
- 20 COMMISSIONER MONAHAN: I do second, heartily.
- 21 VICE CHAIR SCOTT: All right, all those in favor?
- 22 (Ayes.)
- 23 VICE CHAIR SCOTT: All right, this passes 3-0.
- 24 VICE CHAIR SCOTT: Let us now move on to Item
- 25 Number 16 and the National Renewable Energy Laboratory.

MR. CHEN: Okay, so good morning Vice Chair Scott
and Commissioners. My name is Peter Chen and I'm with the
Energy Research and Development Division. Today, I am
requesting your approval for an agreement with the U.S.
Department of Energy to be undertaken at its National
Renewable Energy Laboratory to conduct research that
advances the state of medium and heavy-duty natural gas
vehicle technology.
The transportation sector is the largest source
of greenhouse gas emissions in the state. And heavy-duty
diesel trucks are the largest source of NOx emissions, or
nitrogen oxide emissions, in California's air districts in
non-attainment for ozone and particulate matter.
Low NOx emission natural gas engines are
commercially available today and are regularly combined
with renewable gas to reduce both greenhouse gas emissions
and NOx emissions. However, there are still technology
gaps that limit widespread adoption. For example, the
largest low NOx natural gas engine currently available

21 trucking. Current natural gas engine, vehicle and

20

22 infrastructure technologies also have room for efficiency

today is not sized to meet the needs of most long-haul

23 and cost improvements to better compete with diesel.

This agreement supports four competitively

25 selected subcontractors as part of a larger research

1	consortium	with	co-funding	from	the	U.S.	Department	of

- 2 Energy and the South Coast Air Quality Management District
- 3 to develop technologies that can help address these gaps.
- 4 The first subcontractor is Cummins, Inc. They
- 5 will develop a next generation natural gas engine with
- 6 improved efficiency, low NOx emissions and lower system
- 7 costs compared to current commercially available engines.
- 8 The engine will be sized to meet the needs of long-haul
- 9 trucks.
- 10 The second subcontractor is US Hybrid. They will
- 11 demonstrate plug-in hybrid electric drayage trucks using
- 12 downsized natural gas engines at the San Pedro Bay Ports.
- 13 The project involves iterative design optimization using
- 14 chassis dynamometer testing to balance emissions and
- 15 efficiency benefits of the hybrid powertrain for a typical
- 16 drayage operation.
- 17 The third subcontractor is Transient Plasma
- 18 Systems. They will develop a production-ready prototype of
- 19 an advanced ignition system that can improve durability and
- 20 enable natural gas engines to operate at higher pressures
- 21 and dilution to achieve higher efficiencies as well as
- 22 lower emissions.
- The fourth subcontractor is Gas Technology
- 24 Institute. They will demonstrate a smart compressed
- 25 natural gas fueling station that uses a low-cost pre-cooler

- 1 combined with sensors and vehicle-dispenser communications
- 2 to help achieve consistent full fills of compressed natural
- 3 gas vehicles. This can lead to expanded vehicle operating
- 4 ranges or lower fuel system costs related to oversizing
- 5 tank capacity to compensate for under fills.
- If successful, this agreement will lead to
- 7 reductions in greenhouse gas and NOx emissions from medium
- 8 and heavy-duty vehicles as well as reductions in total cost
- 9 of ownership of natural gas vehicles. I recommend approval
- 10 of this agreement and I'm happy to answer any questions at
- 11 this time.
- 12 VICE CHAIR SCOTT: Thank you. I don't have any
- 13 blue cards, any public comment in the room? All right, any
- 14 public comment on the phone?
- 15 (No audible response.)
- VICE CHAIR SCOTT: Okay. I will just on this one
- 17 note how much I appreciate the good work of the staff here
- 18 and the partnership that we have with the US Department of
- 19 Energy, the South Coast Air Quality Management District and
- 20 NREL on this.
- 21 This is another one where the sum of the parts
- 22 will be greater than the whole, because there's a series of
- 23 more than these four products that will also be able to get
- 24 information. And they'll also be able to learn from our
- 25 projects as well.

1 Are there other questions or com	ments?
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- 2 COMMISSIONER DOUGLAS: No, I think this looks
- 3 great and I'll move approval.
- 4 COMMISSIONER MONAHAN: Second.
- 5 VICE CHAIR SCOTT: All those in favor?
- 6 (Ayes.)
- 7 VICE CHAIR SCOTT: All right, the motion carries
- $8 \quad 3-0.$
- 9 Let us now go onto Item Number 17, Advancing
- 10 Natural Gas Energy Efficiency Research in Existing
- 11 Buildings and Baking Industry, GFO-18-503. But before you
- 12 start the presentation, we have a disclosure.
- 13 COMMISSIONER DOUGLAS: Right, so I have actually
- 14 just concluded a renewable energy law class that I've been
- 15 teaching at UC Davis King Hall. And so I wanted to
- 16 disclose that. King Hall was not the entity involved in
- 17 this contract, but in Item 17c UC Davis is the prime for
- 18 the contract. Thank you.
- 19 VICE CHAIR SCOTT: Please, go ahead.
- 20 MR. EHYAI: Very good. Good afternoon Vice Chair
- 21 Scott and Commissioners. My name is Amir Ehyai with the
- 22 Energy Efficiency Research Office. GFO-18-503 sought
- 23 projects to advance natural gas energy efficiency research
- 24 in existing buildings and bakeries. The funding
- 25 opportunity focused on four areas of research covering

- 1 bakeries, room heaters, hot water distribution systems and
- 2 advanced building insulation.
- 3 Staff requests approval of three projects aimed
- 4 at reducing natural gas use in heating existing homes.
- 5 Applications for a bakery project and a hot water
- 6 distribution project were evaluated, but are not
- 7 recommended for funding.
- 8 The first project for your consideration is with
- 9 the Institute of Gas Technology to improve the performance
- 10 of atmospherically vented wall furnaces. This project
- 11 develops and demonstrates two retrofit solutions for
- 12 existing multifamily and single-family homes. The first
- 13 solution is a self-powered drop-in replacement for gravity
- 14 wall furnaces, offering improved efficiency up to 80
- 15 percent versus the existing 63 percent. This retrofit
- 16 eliminates the standing pilot light without the need to run
- 17 electrical service to the heater. The estimated payback on
- 18 the incremental cost is two years.
- 19 The other retrofit is a direct-vent solution that
- 20 draws combustion air from the outside instead of the
- 21 conditioned space. Efficiencies greater than 90 percent may
- 22 be possible. This project overcomes barriers to
- 23 implementing direct-vent technologies by developing
- 24 training and installation packages to reduce install costs
- 25 and promote this higher efficiency option.

1 Th	ne second	l project	with	Lawrence	Berkelev

- 2 National Laboratory will conduct a comprehensive market
- 3 assessment of direct gas heating equipment in California.
- 4 A large fraction of room heaters in California are
- 5 installed in low-income, priority population communities.
- 6 This project will provide information on the existing stock
- 7 and the households where they are installed; perform lab
- 8 and field evaluations; and inform policies and programs
- 9 regarding the energy, economic, environmental and health
- 10 implications of these heaters.
- 11 And the last project with UC Davis will develop
- 12 and test a novel insulation solution for existing homes
- 13 with little or no wall insulation. The retrofit solution
- 14 uses an aerosol-based sealant to seal wall cavities to
- 15 reduce air leakage; and then adds blown-in insulation with
- 16 phase change material enhancements to reduce heat transfer
- 17 through the wall assembly.
- 18 Phase change materials increase a building's
- 19 thermal capacity by storing and releasing thermal energy at
- 20 specific temperatures. The research will develop and test
- 21 phase change material-enhanced insulation optimized for
- 22 various California climate zones. The project goal is to
- 23 show sufficient natural gas and electricity savings to
- 24 recover the costs within 10 years.
- 25 Staff requests your approval of these projects.

	1	But	first,	Theresa	Pistochini	from	UC	Davis	i
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- 2 here and would like to say a few words on her project. And
- 3 as well, Rob Kamiski (phonetic) of Gas Technology Institute
- 4 is here and available to answer any questions.
- 5 VICE CHAIR SCOTT: Great.
- 6 MR. EHYAI: Thank you.
- 7 VICE CHAIR SCOTT: Thank you.
- 8 Please come up.
- 9 MS. PISTOCHINI: Hi. I'm Theresa Pistochini from
- 10 UC Davis, the PI of the Retrofit Insulation Solution Grant.
- 11 I just want to say thank you for considering the award.
- 12 The research team is led by UC Davis and also TRC is our
- 13 research partner.
- 14 And we have tremendous support from the industry
- 15 in developing this package including inflation
- 16 manufacturer, Owens Corning; phase change manufacturer,
- 17 Insolcorp; aerosol ceiling manufacturer AirSeal; and
- 18 thermostat manufacture ecobee, which is going to provide
- 19 data on user set points in 50,000 California homes and also
- 20 the support of SoCal Gas.
- 21 So we're really excited about the team and what
- 22 we plan to accomplish. Thank you.
- VICE CHAIR SCOTT: Thank you.
- 24 Any other public comment in the room? Any public
- 25 comment on the phone? All right, Commissioner discussion.

- 1 I'll just note this is another nice set of
- 2 projects, figuring out how to stay on the cutting edge of
- 3 efficiency in existing buildings I think is important as we
- 4 go on. I wish I could channel Commissioner McAllister here
- 5 for this, but that's all I'll add to Amir's presentation.
- 6 Any questions or comments?
- 7 COMMISSIONER DOUGLAS: No. I think you captured
- 8 it. And I move approval of this item.
- 9 COMMISSIONER MONAHAN: I second.
- 10 VICE CHAIR SCOTT: All those in favor?
- 11 (Ayes.)
- 12 VICE CHAIR SCOTT: So Item 17 passes 3-0. Thank
- 13 you.
- 14 We will now move on to Item Number 18. Let me
- 15 just check. I don't think Mr. Uhler is here in the room.
- 16 Is he on the phone, do you know? Okay.
- 17 So for Agenda Number 18, Item Number 18, which is
- 18 a Petition to Request Rulemaking Hearings. The Commission
- 19 will now consider an act to approve or deny the petition
- 20 submitted by Steve Uhler requesting that the Commission
- 21 initiate rulemaking hearings implementing Public Utilities
- 22 Code Section 399.30(c)(4).
- 23 So now I will ask the Public Adviser whether Mr.
- 24 Uhler has asked her to relate any of his points to the
- 25 Commissioners in his absence.

- 1 MS. MARTIN-GALLARDO: Good afternoon. This is
- 2 Jennifer Martin-Gallardo and I have not received any
- 3 comments from Mr. Uhler.
- 4 VICE CHAIR SCOTT: Okay. All right.
- 5 So because Mr. Uhler's petition and related
- 6 documents were submitted to the docket and made available
- 7 to the Commissioners in advance of today's meeting, we will
- 8 deem his arguments as submitted on the papers, but not read
- 9 them aloud.
- 10 So now let's hear from staff in response to Mr.
- 11 Uhler's petition. Would you please introduce yourselves
- 12 for the record?
- MS. LEE: Good morning Vice Chair and
- 14 Commissioners. I'm Natalie Lee, the Deputy Director of the
- 15 Renewable Energy Division, here to discuss staff's
- 16 recommendation regarding the petition and also joined by
- 17 Jared Babula from the Chief Counsel's office.
- 18 MR. BABULA: Thank you. Yes, this is Jared
- 19 Babula from the Chief Counsel's Office. And we'll have a
- 20 short response and then we can respond to any questions you
- 21 may have.
- MS. LEE: So again, Natalie Lee. The Petitioner
- 23 has requested that the Energy Commission initiate a
- 24 rulemaking hearing to implement a specific statutory
- 25 provision, Public Utilities Code section 399.30(c)(4).

- 1 Staff recommends that the Commission deny the petition,
- 2 because staff have already initiated pre-rulemaking
- 3 activities to update the enforcement procedures for the
- 4 Renewables Portfolio Standard for local publicly owned
- 5 utilities, more commonly known as the RPS/POU Regulations.
- 6 This update will address a broad range of
- 7 statutory provisions including the one specifically
- 8 referenced in the petitioner's request. Staff have posted
- 9 a public notice of the first public workshop regarding
- 10 these amendments that will be held July 17th, 2019. During
- 11 this workshop the public will have opportunity to comment
- 12 on staff's proposal for amendments. We intend to open
- 13 formal rulemaking later this year and anticipate bringing a
- 14 set of regulations to this Commission for consideration of
- 15 adoption by late 2020.
- 16 Based on the fact that staff activities have
- 17 already started for a broad range of updates, including the
- 18 one specifically referenced, again we do recommend denial
- 19 of this petition.
- MR. BABULA: And I would just like to add we
- 21 attached a proposed order to the memo that staff had filed
- 22 in response to the petition. And so the motion that you
- 23 could be voting on really is to deny the petition for a
- 24 rulemaking and adopt staff's proposed order. Thank you.
- VICE CHAIR SCOTT: Okay. Do we have any members

- 1 of the public in the room who have comments? Okay. Do we
- 2 have any members of the public on the phone? Seeing none,
- 3 we will now turn to Commissioner discussion.
- 4 COMMISSIONER DOUGLAS: Well, as the new Lead for
- 5 Renewables, I am very well aware of the upcoming RPS
- 6 proceeding rulemaking. And I think that it's correct that
- 7 the issues raised by Mr. Uhler can be addressed and should
- 8 be addressed there. So just I'm checking in to see if
- 9 there are any other comments and I'll go ahead and move to
- 10 deny the petition and adopt the draft order.
- 11 COMMISSIONER MONAHAN: I second.
- 12 VICE CHAIR SCOTT: All those in favor?
- 13 (Ayes.)
- 14 VICE CHAIR SCOTT: The motion carries 3-0. Thank
- 15 you.
- Next let's go on to the minutes. May I get a
- 17 motion?
- 18 COMMISSIONER DOUGLAS: I move the minutes.
- 19 COMMISSIONER MONAHAN: I second.
- VICE CHAIR SCOTT: All those in favor?
- 21 (Ayes.)
- VICE CHAIR SCOTT: The minutes passed 3-0.
- Let us now go onto Lead Commissioner Reports. Do
- 24 you want to start?
- 25 COMMISSIONER DOUGLAS: Sure, I have one thing to

1	report	and	I'11	keep	it	brief,	but	the	Chair	would	probabl	У
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- 2 wonder if I didn't report on this one. We had a very nice
- 3 meeting in Imperial County back in May 22nd pulling
- 4 together a lithium recovery initiative. With a number of
- 5 people involved from Imperial County and local stakeholders
- 6 and developers who are looking for -- end researchers, who
- 7 are looking for opportunities to better -- to find a way of
- 8 economically extracting lithium from salt and sea brines
- 9 and doing that as part of the process at geothermal plants.
- 10 And this is an area where the Energy Commission
- 11 has made some grants and where we are seeing results.
- 12 There's no question that our pre-energy policies and clean
- 13 transportation policies are driving at this moment, with
- 14 the market where it is, a need for lithium. And lithium is
- 15 a major component of batteries today. And you know both
- 16 certainly on the transportation side, and also right now
- 17 one of the technologies being used for other kinds of
- 18 energy storage as well. So it's a really interesting
- 19 opportunity to capitalize on this resource right here in
- 20 California, in an area that really needs the potential
- 21 economic activity and jobs and development that could come
- 22 with this.
- 23 And I will just add, as somebody who has spent a
- 24 lot of time on environmental and natural resource issues,
- 25 this is an exceptional sustainable approach, because really

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- 1 the footprint of these facilities is really just like a
- 2 geothermal power plant. And then there's an additional
- 3 facility that's about that size that would be involved in
- 4 processing the brine before the minerals could be extracted
- 5 and it could be reinjected back into the geothermal field.
- 6 So it's a very, very interesting technology. I'm
- 7 very interested, as is the Chair, in looking for ways to
- 8 move it forward. And I think that that meeting was a
- 9 really nice check-in with some people who will, I hope be
- 10 some of the movers and shakers in order to make some of
- 11 this happen.
- 12 So to be continued on that one, but I did want to
- 13 report while I'm at it. I think that's my only report
- 14 today.
- 15 VICE CHAIR SCOTT: Okay. Thank you, Commissioner
- 16 Douglas.
- 17 Commissioner Monahan?
- 18 COMMISSIONER MONAHAN: Yeah. I wanted to talk
- 19 about the Clean Transportation Program and the Investment
- 20 Plan. And just get you guys up to speed on what we've been
- 21 thinking about and with the team and get your input.
- 22 So as Vice Chair Scott well knows there is a
- 23 draft plan, and for the formally ARFVTP, now Clean
- 24 Transportation Program and we have been really
- 25 conscientious of the fact, as I'm sure you all agree, that

- 1 we need to be very attentive to equity as we move forward
- 2 with our investments. And we need to make sure that we're
- 3 getting input from interest in California that can help
- 4 broaden our perspective on what it means to make
- 5 investments attentive to equity.
- 6 So we reached out to the Disadvantaged
- 7 Communities Advisory Committee and asked them whether they
- 8 would help us. And they are. This was not part of their
- 9 normal cycle. They're informing us. They've been very
- 10 helpful, I think at the CPUC.
- And so a subgroup of members from the DACAC are
- 12 going to be coming here tomorrow, or over the phone
- 13 tomorrow, and talking with us. We just like starting the
- 14 conversation on this and I feel like we are -- the team at
- 15 the Fuels and Transportation Division are really wanting to
- 16 be open to this new process. And we're going through a
- 17 little bit of uncharted territory. And we all realize that
- 18 this is something we must do. And it's a learning process
- 19 for all of us.
- 20 So I just wanted to let you guys know and get any
- 21 thoughts that you have about how we should be thinking
- 22 about this. And your suggestions are welcome.
- COMMISSIONER DOUGLAS: Well, just at a high level
- 24 I'll say that that's a great way of tapping into the
- 25 willingness of the Committee members to help us think

- 1 through equity issues and with regard to many different
- 2 programs. It was really nice to see the item with the
- 3 Black Chamber Of Commerce earlier today, because that was a
- 4 nice example of the kind of project that can really help us
- 5 come up with new and effective strategies for engaging a
- 6 much broader section of communities in the Central Valley,
- 7 for example. So that kind of creative thinking is great.
- 8 VICE CHAIR SCOTT: Yeah, I would add, I think
- 9 getting some additional outreach on the Draft Investment
- 10 Plan would be great. It has gone through its usual open
- 11 and transparent cycle where lots of people have had the
- 12 opportunity to weigh in and comment and let us know what
- 13 they think.
- 14 It has -- there are several members from the
- 15 environmental justice community or representative of it on
- 16 the Advisory Committee for the ARFVTP Investment Plan or
- 17 the Clean Transportation Program. So I think that you will
- 18 see that voice reflected in there. And also in the types
- 19 of grants that we give out, the way we're targeting
- 20 different communities with the program to make sure that
- 21 they are included.
- But I think additional outreach and information
- 23 and data from people who want to help inform how the
- 24 Commission does its work is really great. So I'm glad that
- 25 you will be having that meeting and I look forward to

- 1 hearing what the input is that you receive. So thanks for
- 2 doing that, yeah.
- 3 COMMISSIONER MONAHAN: We're looking to it.
- 4 VICE CHAIR SCOTT: That'll be awesome. It will
- 5 be great to have them together for that.
- I must admit I was so excited to get to Chair a
- 7 Business Meeting. I didn't go through my calendar to put
- 8 together the list of things that I have been up to. And so
- 9 I will not -- I won't -- that's all I'll say on that item.
- 10 (Laughter.)
- 11 Let me see if now the Executive Director has a
- 12 report for us?
- MR. BOHAN: A really quick report, I just wanted
- 14 to say last week we had our annual staff awards ceremony.
- 15 And it was really a great opportunity to acknowledge all
- 16 the great work that the 600 plus folks in the building and
- 17 our citywide (phonetic) office down the street do. And to
- 18 highlight the really great achievements last calendar year
- 19 and a slight number of them, so thank you.
- 20 VICE CHAIR SCOTT: And I'll echo your
- 21 congratulations and warm acknowledgement of all of our
- 22 terrific staff and the great work that they carry out on
- 23 behalf of the people of California every day. It's
- 24 awesome.
- 25 Public Adviser's Report, please?

- 3 VICE CHAIR SCOTT: Okay.
- 4 We will now turn to Public comment. Is there any
- 5 public comment in the room on anything that we didn't talk
- 6 about today? Any public comment on the phone?
- 7 (No audible response.)
- 8 VICE CHAIR SCOTT: Okay, with that what I'd like
- 9 to do is we wanted to -- we're not adjourning yet. We did
- 10 want to adjourn in memoriam for Ron Nichols. I'd like to
- 11 say what we were going to say. And then we'll turn to the
- 12 Chief Counsel's Report and go into closed session. And
- 13 then when we come back we'll just adjourn. That way people
- 14 don't have to sit.
- 15 And what I really wanted to read to you all was
- 16 the message that we received from Pedro and Kevin at SCE.
- 17 I tried to think of other wonderful words to say about Ron,
- 18 but they really captured it quite well and so I'm going to
- 19 read to you from that letter. It went to the Edison team.
- "It is with profound sadness that we report the
- 21 death of Southern California Edison President Ron Nichols
- 22 on Thursday, June 6th.
- "As you know Ron raged a courageous battle with
- 24 gastric cancer for the past few months. Ron was a
- 25 passionate leader of the organization, a valued member of

- 1 the senior management team and a trusted friend, confidante
- 2 and counselor. As evidenced by the countless well wishes
- 3 you've sent his way since his cancer diagnosis.
- 4 "He is a role model for all of us in when we say
- 5 how we do our jobs is as important as what we do. He
- 6 brought his best self every day.
- 7 "Ron was a tireless campaign for the development
- 8 of clean energy, particularly for programs that benefitted
- 9 customers in environmentally-impacted communities. He
- 10 firmly believed that the transition to a clean energy
- 11 economy should be a just transition in which all customers
- 12 could benefit.
- "Ron had more than 35 years of experience in the
- 14 electric and water utility industry. He was a strategic
- 15 and operational advisor to utilities, state and local
- 16 government, power suppliers and the financial community on
- 17 complex energy and utility matters throughout the United
- 18 States and particularly in the west. We have lost a true
- 19 leader."
- 20 And our heartfelt sympathy as well as the team
- 21 there goes out to our colleagues at SCE, to Ron's wife, to
- 22 Cheryl and their entire family. He will truly be missed.
- 23 He was so warm and wonderful and also just very thoughtful
- 24 and a tireless leader in this space. So we wanted to
- 25 acknowledge him and to say something in memory of him.

- 1 Okay. Let us turn now to the Chief Counsel's
- 2 Report.
- MS. VACCARO: So thank you. In just a minute
- 4 you'll be announcing that we're going to go into closed
- 5 session. But before then I'd just like your indulgence to
- 6 continue with the Chief Counsel's Office tradition, which
- 7 is to put names with faces when we have the privilege of
- 8 having law school interns in our office. And I do have two
- 9 to introduce to you today, just very briefly. I have
- 10 Claire Christensen. She attends the UC Berkeley law
- 11 school. And we have Alex McInturf who attends UC Hastings.
- 12 They have been in some of the meetings I think
- 13 with some of you already. You might not have known who
- 14 they are. They will be with us for the remainder of the
- 15 summer and we're just very pleased to have them in our
- 16 office.
- 17 VICE CHAIR SCOTT: Welcome to both of you. Glad
- 18 to have you.
- 19 Okay. So the Commission will now go into closed
- 20 session as specified in Agenda Item 24(a)(ix) which
- 21 provides notice that the Commission will adjourn to closed
- 22 session with its Legal Counsel pursuant to Government Code
- 23 Section 11126(e) to discuss the following litigation to
- 24 which the Energy Commission is a party: State Energy
- 25 Resources Conservation and Development Commission versus

1	Hygen Industries, Inc.
2	We anticipate returning to open session at 1:30,
3	so we'll see you then.
4	(Off the record at 12:58 p.m.)
5	(On the record at 1:49 p.m.)
6	VICE CHAIR SCOTT: Okay, everyone we are back on
7	the record and the meeting is now adjourned.
8	(Adjourned the Business Meeting at 1:49 p.m.)
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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 20th day of June, 2019.

PETER PETTY CER**D-493 Notary Public

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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 20th day of June, 2019.

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