

Commissioners Present

Karen Douglas, Chair
Jeffrey D. Byron
Anthony Eggert
Robert B. Weisenmiller

Staff Present:

Melissa Jones, Executive Director
Michael Levy, Chief Counsel
Kristin Driscoll, Chief Counsel's Office
Harriet Kallemeyn, Secretariat

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P R O C E E D I N G S

OCTOBER 6, 2010 10:08 a.m.

CHAIRPERSON DOUGLAS: Good morning. Welcome to the California Energy Commission Business Meeting of October 6th, 2010.

Please join me in the Pledge.
(Whereupon, the Pledge of Allegiance was received in unison.)

CHAIRPERSON DOUGLAS: Good morning, everybody. We will begin with the Consent Calendar, Item 1.

COMMISSIONER BYRON: Madam Chair, I move approval of Consent Calendar.

CHAIRMAN DOUGLAS: Is there a second?

COMMISSIONER EGGERT: Second.

CHAIRMAN DOUGLAS: All in favor?

(Ayes.)

The Consent Calendar is approved.

Item 2. First Carbon Solutions. Possible approval of Amendment 1, adding \$401,804 to Contract 400-09-020 with First Carbon Solutions to provide rebate processing and customer services to the Energy Commission for the Cash for Appliance Program. Ms. White.

MS. WHITE: Good morning, Commissioners. My name is Lorraine White. I am the Program Manager for the California Cash for Appliances Program, an American

1 Recovery and Reinvestment Act Program. This program has
2 evolved over the last several months, expanded, and
3 increased in complexity; as a result, it has increased
4 our costs to implement, but, at the same time, provided
5 more choices, and more options, and more services to
6 consumers. To accommodate the expansion in scope and
7 services, we are required to increase the administrative
8 implementation of this program, which has resulted in
9 increased costs to our contractor. These are costs that
10 we have diligently been trying to keep under control,
11 have been successful in doing so, but none the less, have
12 resulted. I ask that the Commissioners approve this
13 amendment so that we may successfully complete this
14 program.

15 CHAIRMAN DOUGLAS: Thank you, Ms. White.
16 Commissioners, questions or comments?

17 COMMISSIONER BYRON: Ms. White, could you just
18 take a moment and give us a brief update on the progress
19 of the program and when you expect it to be completed?

20 MS. WHITE: Yes, sir. In July, I was before
21 the Commission asking for an expansion of the program to
22 add five new categories of appliances. We, in the
23 process of doing that, also added some additional
24 services to expedite our processing and improved those
25 processing services, and customer services. As a result,

1 we have seen a significant increase in not only claims,
2 but the ability to pay out those claims. We have gone
3 from only a few million dollars in draw-down of the
4 accounts, to over \$10 million at this point. We have
5 many more applications that have yet to be completed by
6 consumers that represent a significantly higher amount of
7 actually claimed rebate funds. We expect that, with the
8 addition and the recent receipt of a lot of the A-track
9 applications that will actually significantly increase
10 the rate of dispensing rebate funds and drawing down
11 those Stimulus dollars. As a result, the goal is to
12 complete the program by the middle to end of November,
13 i.e., expend all of the rebate funds, or have them all
14 claimed, and then work with the remaining applicants to
15 complete their applications so they can receive those
16 rebate funds. This augmentation to the contract will
17 allow us to cover the costs associated with that extended
18 timeline.

19 COMMISSIONER BYRON: Are you going to make that
20 deadline?

21 MS. WHITE: I certainly hope so. I would like
22 to be able to come back before the Commissioners and say,
23 "Merry Christmas, this program has been concluded."

24 COMMISSIONER BYRON: Well, it has been very
25 successful. One last quick question. Do you have a

1 total - I am looking for a percentage of the overhead
2 costs associated with implementation of the program, if
3 you have that.

4 MS. WHITE: We are still very much below the 10
5 percent goal that we originally set in this program. The
6 amount of funds that the ARRA dollars represent will be
7 and are currently below 5 percent. The State, of course,
8 has to provide a match to whatever we spend in terms of
9 the stimulus dollars, and that is what is so important to
10 us to keep the overall administrative costs below 10
11 percent, and I think at this point in time, we are
12 between 7 and 8 percent, so we are meeting that goal
13 pretty nicely.

14 COMMISSIONER BYRON: Including these funds?

15 MS. WHITE: Including these funds, yes. We had
16 before this augmentation been down closer to like 5-6
17 percent, this is just a modest increase in those
18 administrative costs.

19 COMMISSIONER EGGERT: Just, if I might, a
20 couple quick questions. So, in terms of other states'
21 programs, how do we compare?

22 MS. WHITE: We are significantly larger than
23 most other states. Only a few have actually completed
24 all the draw-down of their funds, although many states
25 claim that they had ended their programs, most of those

1 had reservation systems, so it appeared as though the
2 program was closed, but the actual implementation and
3 dispensing of those rebates is still occurring. And, in
4 some cases, some of those states have had to actually re-
5 open their programs, such as Texas and some of the
6 Eastern states.

7 COMMISSIONER EGGERT: And then, in terms of our
8 success in targeting those appliances that meet the
9 California efficiency standards, specifically?

10 MS. WHITE: We have actually seen, and
11 hopefully by the beginning of next year, can actually
12 provide you better data on this, a significant uptick in
13 the penetration in the market of the higher efficiency
14 appliances, as a result of this program. One of the
15 earlier reports from SMUD was that we also saw a
16 significant increase in participation in utility programs
17 that also targeted the high efficiency appliances, so our
18 goals and efforts to only incent those more efficient
19 appliances to see a greater penetration in the market is
20 actually being achieved.

21 COMMISSIONER EGGERT: And then, just a quick
22 comment, I was at a conference last week, West Coast
23 Green, and I noticed a lot of the whole-house retrofit
24 providers were advertising the appliance program as part
25 of the package of incentives that they could access for

1 whole-house retrofit, so it was featured prominently in
2 their literature. So, I guess, unless there are no
3 further questions, I would like to move the item.

4 COMMISSIONER BYRON: Second.

5 CHAIRMAN DOUGLAS: All in favor?

6 (Ayes.)

7 Item 2 is approved. Thank you, Ms. White.

8 MS. WHITE: Thank you very much.

9 CHAIRMAN DOUGLAS: Item 3. City of Morro Bay.
10 Possible approval of Agreement 004-10-ECE-ARRA for a loan
11 of \$80,000 to the City of Morro Bay to upgrade interior
12 and exterior lights, replace HVAC systems, install
13 programmable thermostats and replace reach-in
14 refrigerators. Ms. Castillo.

15 MS. CASTILLO: Good morning. My name is Joji
16 Castillo and I am with the Fuels and Transportation
17 Division. This is a loan request from the City of Morro
18 Bay for \$80,000, and this loan will be funded using ARRA
19 funds, with an interest rate of 3 percent. This loan
20 will allow the City to perform several energy efficiency
21 measures to several of their buildings and parks. They
22 are the following: First of all, the City plans to
23 retrofit 32 Watt T-8 lighting to 28 Watt T-8s. They will
24 retrofit fluorescent exit signs with LED exit signs, they
25 will also upgrade exterior lights with LED lights. They

1 plan to replace old HVAC package units with higher
2 efficiency units, and install programmable thermostats in
3 some of the buildings with existing manual thermostats.
4 Finally, they would like to replace old refrigerators
5 with energy efficiency refrigerators. As a side note, on
6 April 28th of this year, the City of Morro Bay has already
7 been approved by the Commission to receive up to \$55,983
8 in Block Grant funds. This loan, if approved, will
9 supplement these Block Grant funds and fully fund these
10 projects. At this time, I am seeking your approval for
11 the loan request.

12 This project is estimated to save the City
13 almost 95,000 kwh and almost 700 therms, or an estimated
14 total of \$16,886 per year. The total project cost is
15 estimated to be almost \$136,000, and, as I mentioned, the
16 Block Grant will fund \$55,983 of the total project cost,
17 and \$80,000 will be funded from the loan. The City
18 potentially will be receiving utility rebates of about
19 \$1,800. Based on this loan amount of \$80,000, payback is
20 estimated at just under five years. Annual greenhouse
21 gases reduced per year are estimated to be 73,000 pounds
22 of carbon dioxide. The City of Morro Bay has completed
23 with all program requirements and I am seeking your
24 approval for this loan request. Thank you.

25 CHAIRMAN DOUGLAS: Thank you, Ms. Castillo.

1 Questions or comments, Commissioners?

2 COMMISSIONER BYRON: Madam Chair, it looks like
3 another clever leveraging of Block Grant funds and CEC
4 loans. I have no comment, except to say I recommend
5 approval. I move the item.

6 COMMISSIONER EGGERT: Second.

7 CHAIRMAN DOUGLAS: All in favor?

8 (Ayes.)

9 The item is approved. Item 4. County Of Del
10 Norte. Possible approval of Agreement 001-10-ECE-ARRA
11 for a loan of \$216,462 to the County of Del Norte for
12 mechanical systems upgrades at the county sheriff's
13 office and jail facility in Crescent City. Mr. Ehyai.

14 MR. EHYAI: Ehyai. Thank you, Chairman
15 Douglas. Good morning, Commissioners. My name is Amir
16 Ehyai, I am with the Fuels and Transportation Division,
17 Special Projects Office. The County of Del Norte has
18 requested this loan so they may replace the aging heating
19 and ventilating equipment at the sheriff's office and
20 county jail facility located in Crescent City. The
21 county jail was built in 1964 and has operated 24/7 ever
22 since. Much of the mechanical equipment is original to
23 the building and has outlived its expected service life.
24 Dampers, economizers, and other exterior components have
25 rusted in place and have become inoperable because of the

1 corrosive effects of the coastal environment. The
2 building's automated control system is also outdated and
3 replacement parts are no longer available.

4 With this loan, the County will replace a large
5 diesel-fired hot water boiler and multi-zone air handling
6 units, 15 new highly efficient single-zone condensing
7 furnaces will be installed in place of the boiler and
8 three air handlers. A new energy management system with
9 direct digital controls will replace the pneumatic
10 controls to better control the new equipment. All new
11 rooftop equipment will be coated with a rust inhibitor.
12 Three domestic hot water heaters will also be replaced
13 with new condensing hot water heaters. These projects
14 will completely eliminate the use of number 2 diesel fuel
15 oil at this facility, which is approximately 6,913
16 gallons annually, and it will also reduce annual propane
17 use by over 3,000 gallons. This represents a 17 percent
18 reduction in energy use at this facility and will save
19 the County over \$20,000 annually in utility costs. If
20 approved for funding, the County will use this loan award
21 to supplement their Energy Efficiency and Conservation
22 Block Grant award of \$122,157 to fully fund the project
23 cost, which is estimated to be \$338,619. Staff has
24 determined that this loan request is technically
25 justified and meets the requirements for an Energy

1 Commission loan. Funding for this loan will come from
2 the American Recovery and Reinvestment Act, and will be
3 made available at an interest rate of 3 percent. The
4 item has been previously approved by the Stimulus
5 Committee, and I am here to seek your approval today.

6 CHAIRMAN DOUGLAS: Thank you. Are there
7 questions or comments. It sounds like a really strong
8 project. Is there a motion?

9 COMMISSIONER EGGERT: Yeah, I was just going to
10 say hopefully this looks like it has the potential to
11 reduce the air pollution emissions, as well. Was that
12 evaluated at all as part of the project?

13 MR. EHYAI: No.

14 COMMISSIONER EGGERT: Okay, I will move the
15 item.

16 COMMISSIONER BYRON: On behalf of the inmates
17 and the sheriff of Del Norte County, I second the item.

18 CHAIRMAN DOUGLAS: All in favor?

19 (Ayes.)

20 That item is approved. Thank you very much.

21 Item 5. City of Suisun City. Possible
22 approval of Agreement 005-10-ECA for a loan of \$578,898
23 to the City of Suisun City for energy efficiency
24 upgrades. Mr. Ehyai.

25 MR. EHYAI: Thank you. Suisun City has

1 requested this loan so they may make energy efficiency
2 improvements at their City Hall building, police
3 department, fire station, corporation yard, and senior
4 center. The efficiency projects include retrofitting
5 nearly 600 interior and exterior lighting fixtures, and
6 installing LED street lights in place of high pressure
7 sodium lamps. Additionally, the City will use the loan
8 funds to install an energy management system to better
9 control the heating, ventilating, and air-conditioning
10 equipment at the same five facilities that are undergoing
11 a lighting retrofit upgrade. And at last, they will
12 install computer power management software to help reduce
13 plug wall use. In addition to the efficiency projects,
14 the City will install a 75 kw photovoltaic system atop a
15 new carport structure to be built at the City Hall
16 parking lot. This PV system will generate approximately
17 135,000 kwh annually and offset over 40 percent of the
18 electricity use at the City Hall meter. In total, the
19 efficiency and generation projects will reduce the City's
20 annual energy use by over 375,000 kwh, and save them over
21 \$52,000 a year annually in utility costs. The total
22 project installation cost is estimated to be \$979,063, of
23 which \$578,898 will be funded with this loan request.
24 The balance will be funded using the City's Energy
25 Efficiency and Conservation Block Grant award of

1 \$150,250, utility rebates, and the City's own cash
2 reserves. Again, staff as determined that this loan is
3 technically justified and meets the requirements for an
4 Energy Commission loan. This item has been previously
5 approved by the Efficiency Committee. The loan will be
6 funded at an interest rate of 3 percent.

7 COMMISSIONER BYRON: Madam Chair, of course, I
8 am going to recommend approval of this project, but I
9 think it is interesting to note - I should put it this
10 way - I am so glad this Commission requires energy
11 efficiency before we spend these funds on the
12 installation of photovoltaics. Looking at the payback
13 period, all of the energy efficiency payback periods on
14 this particular project, are much less than the 42-year
15 payback period for the photovoltaics, so I think it is
16 very good this Commission has that requirement in its use
17 of these funds and others. Nevertheless, I will still
18 recommend approval of the project.

19 COMMISSIONER EGGERT: Commissioner, I had a
20 very similar thought on that exact point, and agree that
21 it is important in that it also reduces the capital
22 outlay necessary for solar to meet their energy needs.
23 But one question, are these facilities undergoing an
24 energy audit to really look for all of the cost-effective
25 efficiency opportunities?

1 MR. EHYAI: Yes, in this case, the Energy
2 Service Company has come in and screened the facilities
3 and made these determinations and recommendations, and it
4 is based on that they have requested the loan.

5 COMMISSIONER EGGERT: Okay, was there a motion?

6 COMMISSIONER BYRON: I move approval.

7 COMMISSIONER EGGERT: I will second.

8 CHAIRMAN DOUGLAS: Commissioner, do you have a
9 question? Very well, we have a motion and a second. All
10 in favor?

11 (Ayes.)

12 The project is approved. Thank you.

13 Item 6. City Of Lancaster. Possible approval
14 of Agreement 006-10-ECD for a loan of \$1,469,146 to the
15 City of Lancaster for energy efficiency improvements.
16 Ms. Fisher.

17 MS. FISHER: Good morning, Commissioners. My
18 name is Anne Fisher with the Special Projects Office.
19 The City of Lancaster has requested a \$1,469,146 loan to
20 install energy efficiency upgrades at its City Hall,
21 public parks, public pools, and minor league baseball
22 stadium. The City is planning to upgrade athletic field
23 lighting wattages at Clear Channel Stadium, retrofit
24 their old HVAC system with a new energy efficient HVAC
25 system at City Hall, install weather stations to reduce

1 water pump run times at city parks, and install solar hot
2 water heating at City Hall, Clear Channel Stadium, and
3 two public pools. The upgrades will reduce the City's
4 energy use by an estimated 621,000 kw hours, and 13,500
5 therms of natural gas, annually. This will save the City
6 approximately \$138,000 in annual energy costs. The total
7 project cost is \$3,367,000, of which \$1,469,146 will be
8 funded by a 3 percent loan. The project will also be
9 funded by the City's \$1,358,800 DOE ARRA funds and a
10 \$172,421 Municipal Lease. The simple payback on the
11 loan, based on the annual savings, is 10.65 years.

12 Thanks.

13 CHAIRMAN DOUGLAS: Thank you. Questions or
14 comments, Commissioners?

15 COMMISSIONER WEISENMILLER: I have one question
16 for clarification. In the agenda, it indicates the
17 funding is bond funding, while the detailed write-up
18 indicates that it is Energy Conservation Assistance
19 Account. Which is it?

20 MS. FISHER: The bond funding is one of the
21 pots of money within the ECAA funds. There are some
22 additional requirements in the terms and conditions for
23 the loan.

24 COMMISSIONER WEISENMILLER: Okay, thank you.

25 CHAIRMAN DOUGLAS: Any other questions,

1 Commissioners. Is there a motion?

2 COMMISSIONER BYRON: Ms. Fisher, just a quick
3 question. Do you know how their minor league baseball
4 team has been doing recently?

5 MS. FISHER: You know, I don't know that off-
6 hand. I was thinking about looking up their stats before
7 I came here.

8 COMMISSIONER BYRON: Of course, I move approval
9 of the item --

10 MS. FISHER: I should have prepared better.

11 COMMISSIONER BYRON: I do not know how the
12 Barnstormers finished up this year either.

13 CHAIRMAN DOUGLAS: Is there a second?

14 COMMISSIONER EGGERT: I will second.

15 CHAIRMAN DOUGLAS: All in favor?

16 (Ayes.)

17 Item 6 is approved. Thank you, Ms. Fisher.

18 Item 7. RTC Fuels, LLC. Possible approval of
19 Agreement ARV-10-008, for a grant of \$1,790,000 to RTC
20 Fuels, LLC to install two new in-line biodiesel blending
21 facilities at existing petroleum distribution facilities.
22 Mr. Yowell.

23 MR. YOWELL: Good morning, Chairman Douglas and
24 Commissioners. I am Gary Yowell from the Emerging Fuels
25 Office. This prospective grant recipient is from the

1 Renewable Fuel and Vehicle Transportation Program's
2 Biofuel Infrastructure Program Opportunity Notice No. 09-
3 006. RTC Fuels will develop two new biodiesel blending
4 facilities, one in Sacramento, where RTC is partnering
5 with the Interstate Oil Company at the former McClellan
6 Air Force Base Terminal. The second site is in El Cajon,
7 which is in San Diego County, where RTC is partnering
8 with SoCo Group. Collectively, these terminals would
9 expend up to 1.8 million gallons of biodiesel fuel.
10 California's weakest link for biodiesel is its lack of
11 bulk terminal and terminal blending facilities. The lack
12 of these terminals raises the cost to transport and
13 ultimately retail biodiesel fuel in California. This
14 project will leverage the existing diesel distribution
15 infrastructure and expertise of the petroleum
16 distributors to increase biodiesel blends used throughout
17 California. This project will lower some of biodiesel's
18 current price premium due to the lower storage and
19 distribution costs. The Applicants are providing
20 \$1,143,000 match, and staff requests approval.

21 MS. DRISCOLL: Madam Chair, if I may?

22 CHAIRMAN DOUGLAS: Please, go ahead.

23 MS. DRISCOLL: My name is Kristin Driscoll from
24 the Chief Counsel's Office. The Energy Commission's
25 Chief Counsel's Office reviews all proposed awards under

1 AB 118 to identify whether a review and analysis is
2 necessary under the California Environmental Quality Act.
3 Based on my review of this project and further due
4 diligence, I recommend that the Commission, if it
5 approves this award, include a finding that this project
6 is categorically exempt from further environmental review
7 under CEQA Guidelines Section 15301 for existing
8 facilities. Thank you.

9 CHAIRMAN DOUGLAS: Thank you. Commissioner
10 Byron.

11 COMMISSIONER BYRON: We should learn that,
12 whenever an attorney joins one of our members there, it
13 is always going to be the CEQA review.

14 CHAIRMAN DOUGLAS: We should immediately turn
15 to the attorney after the presentation, exactly.

16 COMMISSIONER BYRON: Commissioners, this
17 question may be to you, having served on the
18 Transportation Committee, or maybe to Mr. Yowell, or Mr.
19 McKinney, or Mr. Perez, I am not sure. I think it would
20 be helpful to just give us a brief explanation of the
21 process and selection that we went through for this and
22 many of the projects that are to follow. So, obviously,
23 my question or comment is not with regard to this
24 specific project, and if now is a good time, I would like
25 to hear that, just so we understand the context of all of

1 these ARFVTF funding projects that we are about to
2 evaluate.

3 CHAIRMAN DOUGLAS: I agree, Commissioner Byron.
4 I think now is a great time.

5 COMMISSIONER BYRON: So who wants it?

6 MR. MCKINNEY: I think I will take the ball on
7 this one, Commissioner. Good morning, I am Jim McKinney,
8 Office Manager for the Emerging Fuels and Technologies
9 Office. So, there are several quite public phases to the
10 way we end up with the ultimate staff recommendations on
11 which project to fund. The first main phase is the
12 development of the Investment Plan, where we work with
13 our Advisory Committee, industry groups, and other
14 stakeholders, to identify what we call needs and
15 opportunities in the Emerging Fuels and Technologies
16 Marketplace, so where are there promising technologies
17 that may be ripe for commercialization funding, ergo
18 triggering AB 118 qualifications, and where there are
19 demonstrated market demands where, similarly, the market
20 is not supplying something we think is needed or viable,
21 and that is the other side of the process. So we
22 culminate with a Committee adopted Investment Plan,
23 highlighting funding recommendations and a series of
24 technology categories for fuels, infrastructure, and
25 alternative vehicles. We then develop a solicitation to

1 implement each of those funding categories identified in
2 the Investment Plan, we specify the criteria, the
3 technology types, any other technical standards, say, for
4 a biofuel, for example, release our solicitation. We
5 then receive the proposals and we go through a fairly
6 extensive staff review process internally. Sometimes we
7 invite external experts from other agencies such as Cal
8 Recycle or the Air Resources Board to participate with
9 technology reviews, sometimes we include PIER staff on
10 that if they have particular expertise. Staff then
11 compiles a list, forwards it to the Transportation
12 Committee for funding approval. Subject to their
13 approval, we then bring those items forward to the
14 Business Committee.

15 COMMISSIONER BYRON: And then is there
16 continued oversight or an Advisory Committee structure
17 associated with these projects?

18 MR. McKINNEY: Commissioner, when you say
19 "Advisory Committee," do you mean our kind of formal
20 Advisory Committee for the Investment Plan?

21 COMMISSIONER BYRON: Please consider it as an
22 open question, I am just curious as to who it is. It is
23 an open question as to who that might be. I am curious
24 about these projects, once they are underway, how do we
25 keep track of them?

1 MR. McKINNEY: Keeping track is primarily our
2 office's responsibility, so we assign a technical project
3 manager, so the Emerging Fuels staff such as Gary and the
4 other folks you will meet later this morning, they are
5 the Technical Manager, or the Division of Contracts
6 Administration Unit assigns a Contract Manager, and part
7 of my duties as the new Office Manager is to make sure we
8 have robust procedures to track the implementation of
9 each of these grant agreements with the Awardees.

10 COMMISSIONER BYRON: Thank you.

11 CHAIRMAN DOUGLAS: Commissioner Eggert.

12 COMMISSIONER EGGERT: Sure, if I might. The
13 Advisory Committee that you touched on is a standing
14 committee that includes participation from industry, from
15 organizations like environmental groups, it includes
16 associations that are involved in the deployment of fuels
17 and vehicle technology, and it is going to be sort of
18 reconstituted in this next round, to also include
19 potentially representation from the Legislature. And
20 their role is to provide sort of ongoing input and advice
21 into the development of the Investment Plan, and then,
22 once these projects are up and underway, we are actually
23 going through a number of things, the lessons learned
24 from the previous solicitation, to try to have that
25 feedback into the process to make all aspects of this

1 process more efficient and sort of rigorous, including
2 the selection process. And then I would expect that, as
3 we manage these projects and we sort of learn what is
4 working and what is not, that also feeds back into the
5 future solicitations, as well. So I think, in terms of
6 the process, we have a good one. The actual selection
7 criteria established with input from the Advisory
8 Committee includes market viability, team qualifications,
9 benefits in terms of petroleum reduction, greenhouse gas
10 reduction. And actually, that led me to one of my
11 questions which was, I noticed for biodiesel, in
12 particular, as a fuel, there is a wide variation in the
13 potential environmental benefits and I guess my question
14 is, will these facilities be able to accommodate the
15 different types of biodiesel, including the very low
16 carbon versions that will be coming down the pike?

17 MR. YOWELL: Yes, we anticipate they will be
18 using all fuels from all sources, and of all different
19 carbon intensities.

20 COMMISSIONER EGGERT: Okay -

21 MR. MCKINNEY: And if I could add to that, as
22 you know, Commissioner, we are working hard to try to get
23 alternative feedstocks into the biodiesel blends, the
24 same way we are with Ethanol, but right now it is really
25 soy biodiesel that predominates in the market.

1 COMMISSIONER EGGERT: Right. So, unless there
2 are any other questions on this item, I will move the
3 item for approval.

4 COMMISSIONER BYRON: Second.

5 CHAIRMAN DOUGLAS: All in favor?

6 (Ayes.)

7 The item is approved. Thank you very much, Mr.
8 Yowell.

9 Item 8. Green Vehicles Inc. Possible approval
10 of agreement ARV-10-007 for a grant of \$2,052,560 to
11 Green Vehicles, Inc. to demonstrate improved
12 manufacturing methods and processes in a pilot scale
13 production line. Mr. Roberts.

14 MR. ROBERTS: Good morning, Chairman Douglas
15 and Commissioners. My name is Miles Roberts from the
16 Emerging Fuels and Transportation Office. I am
17 presenting for your approval the Green Vehicles Battery
18 Electric Vehicle Pilot Assembly Line Project, which was
19 proposed for award under PON 09605 for manufacturing
20 plants. Green Vehicles is partnering with Leyden Energy,
21 the automotive technology group, and the City of Salinas,
22 to complete this project. Green Vehicle currently
23 produces the Triac, a three-wheeled battery electric
24 freeway commuter car, at their Salinas facility, as part
25 of a commercial trial. They plan to make improvements to

1 the vehicle's components and its production process, then
2 install a 2,000 vehicle per year commercial production
3 line. The project will employ 124 people at the Salinas
4 facility by 2013. The Triac will be available with a 50,
5 75 and 100 mile range, and will go on sale for under
6 \$24,000.

7 Green Vehicles is requesting \$2,052,560 in
8 Alternative and Renewable Fuel and Vehicle Transportation
9 Program funds, and the project team will provide match
10 funding of \$2,878,611. Staff recommends the Commission's
11 approval of funding for this project.

12 CHAIRMAN DOUGLAS: Thank you. Questions or
13 comments, Commissioners?

14 MS. DRISCOLL: Madam Chair, if I may?

15 CHAIRMAN DOUGLAS: Clearly, I was not looking.
16 Please, go ahead.

17 MS. DRISCOLL: Based on my review of this
18 project and further due diligence, I recommend that the
19 Commission, if it approves this award, include a finding
20 that this project is categorically exempt from further
21 environmental review under CEQA Guidelines Section 15301
22 for existing facilities.

23 CHAIRMAN DOUGLAS: Thank you. Commissioners,
24 questions or comments?

25 COMMISSIONER EGGERT: Yeah, this is just again,

1 I guess probably a general comment for this particular
2 item and the future items in the area of electric vehicle
3 and both all vehicle and component manufacturing, I think
4 we are seeing pretty exciting activity in this space, a
5 lot of companies that are coming and siting in
6 California, expanding their operations, taking advance,
7 of course, of the resources that are available from the
8 State, but then also putting a substantial amount of
9 their own funds, as well as other private investment into
10 these activities. And I will not name the name, but a
11 colleague of mine from the automotive industry had
12 suggested that, you know, the center of gravity for
13 vehicle design development, and even manufacturing, is
14 moving west, and particularly in the area of advanced
15 vehicle technologies, I think we are starting to capture
16 a significant fraction of that activity.

17 COMMISSIONER BYRON: who would have thought
18 Salinas, though, Commissioner, that it would be the home
19 of the new electric vehicle?

20 COMMISSIONER EGGERT: A lot of really nice
21 roads out there to do test drives on. So, yeah, in terms
22 of this particular type of technology, it is interesting
23 in that it is a three-wheel, fairly small footprint type
24 product, a two-seater, that has a good sort of
25 aerodynamic drag, fairly low energy consumption, and

1 right now, especially as batteries are still quite
2 expensive, trying to minimize the weight for the vehicle
3 is a real key consideration, to try to reduce the amount
4 of energy required to move it from Point A to B. And so,
5 I think this product, as well as others, are sort of
6 entering into this space with some of these smaller
7 vehicles to be able to accommodate those higher priced
8 batteries. But then, in terms of the actual economics of
9 some of these systems, it is important always to look at
10 the total cost of ownership, which includes the price of
11 fuel. And even in California, with the higher rates that
12 we typically pay, on a comparable basis you are talking
13 about a dollar a gallon on a per mile basis for a full
14 function vehicle, and for something that is lighter and
15 smaller, even less than that. And now, with our
16 utilities offering time of use rates that are
17 substantially lower in cost, the actual operating cost of
18 these vehicles can be extremely low. So, I guess with
19 all that, I will move the item.

20 CHAIRMAN DOUGLAS: Other questions or comments,
21 Commissioners?

22 COMMISSIONER WEISENMILLER: I will second it.

23 CHAIRMAN DOUGLAS: All in favor?

24 (Ayes.)

25 The item is approved. Thank you.

1 Item 9. Quantum Fuel Systems Technologies
2 Worldwide, Inc. Possible approval of Agreement ARV-10-
3 009, for a grant of \$1,371,679 to Quantum Fuel Systems
4 Technologies Worldwide, Inc., to develop a manufacturing
5 facility that will assemble and test electric drive
6 components for use in plug-in hybrid electric, hybrid
7 electric, and electric vehicles. Mr. Roberts.

8 MR. ROBERTS: I am presenting for your approval
9 the project titled Product Launch of Combination Charger
10 Inverter, which is proposed for award under PON 09605.
11 Quantum Fuel Systems Technologies Worldwide will retool
12 one of its facilities in Lake Forest, California, in
13 South Orange County, to manufacture and test a
14 combination charger inverter for plug-in hybrid electric
15 vehicle and electric vehicle applications. Once
16 operational, the facility will be able to produce 36,000
17 units each year. Quantum, who co-founded Fisker
18 Automotive, developed the Q-Drive, a hybrid powertrain
19 that will be used in the Fisker Karma and Sunset, a pair
20 of highly anticipated plug-in hybrid luxury vehicles.
21 While Quantum anticipates applying the Q-Drive to Fisker
22 for up to 15,500 vehicles each year, it is developing a
23 second-generation Q-Drive, designed around a new
24 combination charger-inverter that will be more economical
25 and targeted at a wider audience. In order to produce

1 the new Q-Drive, Quantum requests funding to upgrade an
2 existing facility with testing equipment, a pilot
3 production line, and ultimately a high volume production
4 line. Thirty to 40 jobs will be created directly by this
5 project, and more will follow if the second generation Q-
6 Drive is successful. Each Q-Drive powertrain sold, if it
7 replaces a traditional internal combustion propulsion
8 system, is capable of reducing greenhouse gas emissions
9 by 48 percent, and gasoline use by 270 gallons per year.
10 The Energy Commission is providing \$1,371,679 in
11 Alternative and Renewable Fuel and Vehicle Transportation
12 funds, and the project team will provide a match funding
13 of \$1,760,000. Staff recommends Commission approval of
14 funding for this project.

15 MS. DRISCOLL: Based on my review of this
16 project and further due diligence, I recommend that the
17 Commission, if it approves this award, include a finding
18 that the project is categorically exempt under CEQA
19 Guidelines Section 15301 for existing facilities.

20 CHAIRMAN DOUGLAS: Thank you. Questions or
21 comments on this item?

22 COMMISSIONER BYRON: I note that, in the write-
23 up, they were after some DOE funding for the project, but
24 the award was withdrawn by Department of Energy. Do you
25 know the reason why?

1 MR. ROBERTS: I don't, and maybe Jim can -

2 COMMISSIONER BYRON: So this was a second
3 chance project for these folks, as I take it, they
4 received a DOE award, but then DOE did not fund it. Do
5 you know, Mr. McKinney? It is not essential, I am just
6 curious if this is a unique one in that regard.

7 MR. MCKINNEY: No, Commissioner, I do not know.
8 There were several projects that did receive DOE funding
9 under the original ARRA Joint AB 118 solicitation, and
10 several withdrew for a variety of reasons, and we can get
11 more specific information for you.

12 COMMISSIONER BYRON: Well, it is not essential,
13 really, I am just curious as to what happened there.

14 COMMISSIONER EGGERT: I think if my memory is
15 correct, there was - with respect to the 118 funds, we
16 ended up providing about \$39 million in match and
17 received about \$110 million in Federal funds for projects
18 under the original year, and we also provided match for a
19 number of projects that did not get the Federal match,
20 and I suspect that is probably one of these, at least in
21 the original proposal that can under that PON, and then
22 they subsequently reapplied - is that correct - for this
23 PON, the separate PON, and were successful in the
24 selection.

25 MR. MCKINNEY: Yes, that is correct,

1 Commissioner. So DOE was not overly generous to the
2 State of California on the ARRA Transportation awards, so
3 our agency stepped in to fill the gap, and this is one of
4 the solicitation lines.

5 COMMISSIONER BYRON: One other question, Mr.
6 Roberts, you look relatively new to me here at the
7 Commission. Can you verify? Are you a new employee?

8 MR. ROBERTS: I have been here for just over a
9 year, Commissioner.

10 COMMISSIONER BYRON: Well, I am sorry I have
11 not seen you before. Welcome.

12 MR. ROBERTS: Thank you.

13 MR. MCKINNEY: And we are pleased to have him,
14 as well.

15 MS. JONES: And this is the first time he has
16 presented in front of the business meeting, so...

17 COMMISSIONER BYRON: All right, well done.
18 Madam Chair, I recommend approval of Item 9.

19 COMMISSIONER EGGERT: Second.

20 CHAIRMAN DOUGLAS: All in favor?

21 (Ayes.)

22 Item 9 is approved.

23 Item 10. Zero Motorcycles, Inc. Possible
24 approval of Agreement ARV-10-013, for a grant of \$900,272
25 to Zero Motorcycles, Inc. to develop an advanced electric

1 motorcycle powertrain, establish a pilot scale production
2 line and produce 30 electric motorcycle drive trains.

3 Mr. Roberts.

4 MR. ROBERTS: I am presenting for your approval
5 the project titled Advanced Electric Vehicle Powertrain
6 Development and Pilot Manufacturing in California, which
7 was proposed for award under PON 09605. Zero
8 Motorcycles, an electric vehicle company based in
9 California, will design and bring to pilot production an
10 advanced electric motor and integrated controller for use
11 in next generation electric vehicles, including
12 motorcycles, neighborhood electric vehicles, and all-
13 terrain vehicles. The project team will develop a motor
14 and integrated controller specifically for use in
15 electric vehicles and design cost-effective, scalable
16 manufacturing processes that will allow the powertrains
17 to be produced for less than \$450.00 each. If
18 successful, this project will create jobs in Santa Cruz
19 County, which had an unemployment rate of 15 percent in
20 early 2010. Out of the 12 permanent jobs created, most
21 will be engineering positions, with the rest going to
22 management and administration. Additional hiring is
23 expected if the powertrain performs as expected and
24 manufacturing scales up. Each powertrain sold, if used
25 in place of a traditional gasoline powered motorcycle

1 engine, is capable of reducing greenhouse gas emissions
2 by 72 percent, gasoline use by 70 gallons per year, and
3 tailpipe emissions by 100 percent. The Energy Commission
4 is providing \$900,272 in Alternative and Renewable Fuel
5 and Vehicle Transportation Program funding, and the
6 project team will provide match funding of \$938,000 in
7 cash and in-kind contributions. Staff recommends
8 Commission approval of funding for this project.

9 CHAIRMAN DOUGLAS: Thank you. And our legal
10 advice on this item?

11 MS. DRISCOLL: Based on my review of this
12 project and further due diligence, I recommend that the
13 Commission, if it approves this award, include a finding
14 that the project is categorically exempt from further
15 environmental review under CEQA Guidelines Section 15301
16 for existing facilities and Section 15332 for infill
17 development projects.

18 CHAIRMAN DOUGLAS: Thank you. Now, I
19 understand a representative of Zero Motorcycles, Inc.
20 might be here. If so, would you like to make a comment
21 at this time?

22 MR. FRIEDLAND: I am Jay Friedland and, good
23 morning, Chairman Douglas and Commissioners. I just
24 wanted to make a comment that there were some questions,
25 I think, about electric motorcycles, like why are

1 electric motorcycles an interesting project. And one of
2 the things we really wanted to point out is that this
3 really represents - there is a gamut of electrification
4 of transportation, all the way from two-wheelers, all the
5 way up to very very large trucks. And the great thing
6 about electric motorcycles is they are the most
7 affordable kinds of transportation. In a recent Consumer
8 Reports survey, 26 percent of people said that they would
9 be willing to get out of cars and onto motorcycles based
10 purely on fuel efficiency. And so, what we would love to
11 do is capture at least some percentage of that for, as
12 they make a transportation decision, to move them over to
13 electricity. It also turns out that almost 50 percent of
14 Californians have a commute of less than 20 miles, and
15 so, from a pure vehicle miles traveled, a VMT standpoint,
16 electric motorcycles are very very efficient in terms of
17 a transportation solution. Zero's motorcycles, in
18 particular, meet the California Zero emission motorcycle
19 standard established by ARB, and so that also makes them
20 eligible for a \$1,500 rebate in California, so the total
21 price, the list price of the vehicles right now is about
22 \$10,000, and between Federal tax credits and the state
23 rebate, it means that the vehicle is about \$7,500. So,
24 even though we are approaching electric vehicles, for
25 example, like the *Nissan Leaf*, at around \$20,000, which

1 makes it very affordable, these are much much more
2 affordable as an alternative choice. The other thing,
3 from a project standpoint, this project very much meets
4 AB 118 goals because it reduces both greenhouse gases and
5 petroleum consumption, and of course, electric
6 motorcycles have significant additional environmental
7 benefits in the sense that, if you look at traditional
8 motorcycles, they are much more polluting than
9 traditional cars, so this is, again, sort of a double-win
10 in terms of that. Relative to this project, I also want
11 to state that, what we are designing is an advanced
12 electric powertrain, so it is the motor, the controller,
13 battery interface, and the issue around this has really
14 been that the traditional motors that have been developed
15 for this space, you can either get automotive electric
16 motors, or you can get what we call sort of fixed
17 industrial application motors, which have gotten more and
18 more efficient over time. The problem is there is a
19 sweet spot probably between 10 and 30 kilowatts that is
20 just - there is nothing in the market today. And what we
21 would traditionally do as a manufacturer, is we would
22 most likely - the two leading suppliers are in either
23 Asia or in Europe, and there is really no one building
24 this kind of system today in the United States, and at
25 the right sort of price point. So, our goal is not only

1 to come up with this powertrain, but also to make sure
2 that, as we design it, we design it for manufacturing so
3 that we can be cost-competitive with Asia, and so we see
4 the ramp for this as being far beyond just electric
5 motorcycles, as Miles mentioned, neighborhood electric
6 vehicles, electric city cars, electric farm equipment
7 like tractors, ATVs, so there is a wide application for
8 this. And finally, I just want to say that, in looking
9 at this, this is really the kind of thing that, if we
10 didn't get funding from the Energy Commission, we would
11 indeed go partner with someone in, you know, somewhere
12 else, and basically give them our specifications, devote
13 the engineering that we would match, in essence, with
14 this grant, and do it that way. But we would much prefer
15 to basically bring the manufacturing back to California.

16 CHAIRMAN DOUGLAS: Well, thank you so much for
17 your comments and for being here because we always like
18 hearing from the companies and the innovators who are
19 really bringing us these proposals. Let me ask, did you
20 introduce yourself? Did you tell us your name and -

21 MR. FRIEDLAND: Yeah, I am sorry, I am Jay
22 Friedland from Zero Motorcycles.

23 CHAIRMAN DOUGLAS: Great, great. Very well.
24 Commissioners, any questions while we have him here?

25 COMMISSIONER EGGERT: I guess I have just a

1 quick comment and I think it was well said by Mr.
2 Friedland, and that is, sort of the potential for
3 carrying over some of this activity into these other
4 markets is great, and the flexibility that is allowed
5 from electric powertrains, you know, really has some
6 exciting applications, and I think that was probably one
7 of the reasons this project was scored highly in the
8 application process. So, unless there are other
9 questions, will move the item.

10 COMMISSIONER BYRON: Mr. Friedland, thank you
11 for being here.

12 MR. FRIEDLAND: Thank you very much.

13 COMMISSIONER BYRON: I will second the item.

14 CHAIRMAN DOUGLAS: There is a motion and
15 second. All in favor?

16 (Ayes.)

17 The item is approved.

18 Item 11. Quallion LLC. Possible approval of
19 Agreement ARV-10-010, for a grant of \$1,026,072 to
20 Quallion LLC, to develop a pilot automated manufacturing
21 line capable of producing 10,000 kWh Lithium ion
22 modules. Mr. Margolis.

23 MR. MARGOLIS: Good morning, Commissioners. My
24 name is Jonah Margolis. I am with the Emerging Fuels and
25 Technologies Office. I am proposing for your approval

1 the Quallion project. Quallion currently operates a
2 facility in California where they manufacture custom
3 battery packs for plug-in electric vehicles. They would
4 like to modernize this plant by not only automating a
5 pilot line, but also creating a standard module size that
6 will be able to be pieced into battery packs for many
7 different types of transportation applications. Their
8 plant is not only automating, but also, by creating this
9 module, that they will be able to reach mass production
10 must faster and much easier than if you create a custom
11 battery pack for only one application. Their original
12 pilot line is projected to create 50-100 jobs. If this
13 is successful and they could apply this to their entire
14 plant, they expect the job creation to jump to 100-200
15 jobs. Their original proposal to the AB 118 program is
16 for over \$9 million. Unfortunately, while they received
17 a very high score, we ran out of funding before we can
18 get all the way through their project, so we were only
19 able to offer them \$1,026,072. Their match will be a
20 minimum of dollar for dollar; it is uncertain until we
21 finish up the agreement whether we will be able to do the
22 entire project or have to scale it back. In addition, it
23 is important to note that because the batteries are up to
24 50 percent of the cost of the plug-in electric vehicle,
25 and this is designed to reduce the cost of those

1 batteries, it may have a huge impact.

2 CHAIRMAN DOUGLAS: Thank you.

3 MS. DRISCOLL: Based on my review of this
4 project and further due diligence, I recommend that the
5 Commission, if it approves this award, include a finding
6 that this project is categorically exempt from further
7 environmental review under CEQA Guidelines Section 15301
8 for existing facilities.

9 CHAIRMAN DOUGLAS: Thank you for that.
10 Questions or comments, Commissioners?

11 COMMISSIONER EGGERT: Again, just a very quick
12 comment, I guess. As was mentioned, you know, batteries
13 really are the lynch pin to the success of these
14 technologies and getting the cost down is absolutely one
15 of the key goals, while maintaining, of course, the
16 durability and performance. I will also note that a lot
17 of these you will note the concept of a pilot facility,
18 and I think that is important because what we are
19 effectively doing here is we are allowing these companies
20 to take that first step towards large scale
21 manufacturing, and that first step is a significant one
22 to sort of prove out the manufacturing processes, to
23 allow them to sort of fine tune various aspects of the
24 production process before they go on to the large scale
25 facilities, and large scale facilities involve

1 investments on the order of \$100 million, and oftentimes
2 even much more than \$100 million, and so we are filling
3 that gap, as I think Mr. McKinney had mentioned earlier,
4 you know, where, for a fairly modest investment, we can
5 bring these companies to the point where they can
6 hopefully attract, then, a much more significant
7 investment to scale up to the full capacity of
8 manufacturing that they would need to be able to be
9 viable. And I guess, with that, I will move the item.

10 CHAIRMAN DOUGLAS: Other questions or comments?
11 Or a second?

12 COMMISSIONER BYRON: Second.

13 CHAIRMAN DOUGLAS: All in favor?

14 (Ayes.)

15 The item is approved.

16 Item 12. Electric Vehicles International.
17 Possible approval of Agreement ARV 10 011 for a grant of
18 \$3,881,244 to Electric Vehicles International, to develop
19 and test an automated electric vehicle production process
20 for the manufacture and assembly of battery packs,
21 battery boxes, motors, motor controllers, and more. Mr.
22 Margolis.

23 MR. MARGOLIS: For Electric Vehicle
24 International, while they currently operate - while they
25 currently produce electric vehicles in their plant in

1 California, what this is going to do is create a pilot
2 line within that plant, which is not only going to be
3 automated, but, more importantly, their current facility
4 imports all their components from around the world and
5 around the country; this facility is actually going to
6 manufacture all the components, so they are not just
7 going to be the vehicle assembler, they will become the
8 actual manufacturer of all of the components all within
9 one facility. The purpose of this is they believe they
10 can decrease the cost of the electric vehicle by up to 30
11 percent by having it all under one roof. The initial
12 phase will create 50 jobs for the pilot line; if
13 successful and they could apply this to their entire
14 plant, they believe it can create up to 375 jobs in an
15 economically distressed area. They are requesting
16 \$3,881,224, and will have a match of over \$7 million.

17 MS. DRISCOLL: Based on my review of this
18 project and further due diligence, I recommend that the
19 Commission, if it approves this award, include a finding
20 that this project is categorically exempt from further
21 environmental review under CEQA Guidelines Section 15301
22 for existing facilities.

23 CHAIRMAN DOUGLAS: Thank you. Questions or
24 comments on this item, Commissioners?

25 COMMISSIONER BYRON: Mr. Margolis, this is a

1 big one, total funding of around - it looks like about
2 \$11 million. I don't think the write-up indicates where
3 it is located in California. Do you know?

4 COMMISSIONER EGGERT: I believe it is in
5 Stockton.

6 MR. MARGOLIS: Yes, correct, Stockton.

7 COMMISSIONER EGGERT: And it is actually
8 another company that we attracted to the state that was
9 previously, I believe, in Mexico, and came up to relocate
10 in Stockton.

11 Mr. MARGOLIS: Yes, the exact opposite of what
12 all the other California manufacturers are doing, which
13 are leaving California to go to Mexico.

14 COMMISSIONER BYRON: All these projects are
15 just incredible. I mean, they are manufacturing-based
16 jobs, and this is - it is very good to see California
17 stimulating these kinds of jobs, stimulating the creation
18 of these kinds of jobs.

19 CHAIRMAN DOUGLAS: I agree, and I was really
20 pleased to hear the leverage, and I had known of the EVI
21 facility for some time, and it is great to see we are
22 positioning them to expand the scope of what they do, and
23 do more in California. Is there a motion on this item?

24 COMMISSIONER EGGERT: Actually maybe just one
25 further comment if I might, Madam Chair, and that was I

1 was at a symposium where the head of EVI was speaking,
2 and the question was asked as to why they did choose to
3 come to California, and they gave really sort of two
4 reasons, one was that they said the availability of State
5 funds certainly was a nice perk and did contribute to
6 their decision, but even more importantly, what they said
7 was California's policy environment, specifically
8 relating to our vehicle fuel standards and climate
9 policies, was something that was extremely important to
10 them, where they saw that California was a place that was
11 going to have the right environment for them to be able
12 to expand their operations and sell their product.

13 CHAIRMAN DOUGLAS: Good. Thanks for that
14 addition, Commissioner. I did not notice if you moved
15 the item.

16 COMMISSIONER EGGERT: I will move the item.

17 CHAIRMAN DOUGLAS: Is there a second?

18 COMMISSIONER BYRON: Second.

19 CHAIRMAN DOUGLAS: All in favor?

20 (Ayes.)

21 Item 12 is approved. Thank you, Mr. Margolis.

22 Oh, you have got a couple more, I see.

23 Item 13. Coulomb Technologies. Possible
24 approval of Agreement ARV-10-012 for a grant of
25 \$1,102,985 to Coulomb Technologies to develop and

1 manufacture the hardware and software for the Charge
2 Point Communication Processor. Mr. Margolis.

3 MR. MARGOLIS: Thank you. Coulomb is another
4 California-based company that wants to manufacture and
5 design this within California. Their device, the
6 Communication Processor, is a way for a charger to
7 connect to the Smart Grid. This is not only for their
8 own chargers, but is designed to be kind of a universal
9 communication device, which can be inserted into any
10 manufacturer's charger, and to turn a basic or dumb
11 charger into a smart charger, capable of connecting to
12 the Smart Grid. While with the Smart Grid, we have not
13 worked out all the kinks, or the regulated agencies have
14 not worked out all the kinks of what exactly it will be,
15 they are designing this communication device to be very
16 open to all the different options that may or may not
17 include, that way, it can connect to whichever Smart Grid
18 eventually develops and can be used in any type of
19 charger. They are requesting \$1,102,985, and they will
20 have a match of dollar for dollar.

21 CHAIRMAN DOUGLAS: Thank you. Legal, please.

22 MS. DRISCOLL: Based on my review of this
23 project and further due diligence, I recommend that the
24 Commission, if it approves this award, include a finding
25 that this project is categorically exempt from further

1 environmental review under CEQA Guidelines Section 15301
2 for existing facilities.

3 CHAIRMAN DOUGLAS: Thank you. Questions or
4 comments on Item 13?

5 COMMISSIONER EGGERT: Just a quick question.
6 Mr. Margolis, I believe this particular company is also
7 separately funded to do one of the larger charger
8 deployments, and could you maybe say a brief word about
9 how this relates to that project, if it does?

10 MR. MARGOLIS: They currently have a charger
11 capable of connecting to the Smart Grid, and it has a
12 communication device to connect to this; what this is
13 going to be is a communicate device which, say, is not an
14 all-in-one unit with the charger, but rather is a unit
15 which can be attached to any charger.

16 COMMISSIONER EGGERT: So, this will allow
17 upgrade of other manufacturers to be able to enable -
18 yeah, actually, maybe just a comment on that. I think,
19 in participating in a number of different discussions and
20 symposiums on EV charging, you know, having the ability
21 to have the charging system manage the load in such a way
22 to help facilitate better use of the local grid
23 distribution system, as well as generating capacity, as
24 we integrate more and more intermittent renewables, was
25 one of the sort of key areas that was identified as being

1 an important area to invest in, especially given the fact
2 that these can represent a fairly significant load. And
3 if we can manage that load, we can actually improve the
4 operation of the grid; and if we can't manage it, then it
5 potentially presents sort of additional challenges. So I
6 move the item unless there are questions.

7 COMMISSIONER BYRON: Second.

8 CHAIRMAN DOUGLAS: All in favor?

9 (Ayes.)

10 Item 13 is approved.

11 Item 14. EV Connect, Los Angeles County
12 Metropolitan Transportation Authority. Possible approval
13 of agreement ARV-10-006 for a grant of \$415,185 to EV
14 Connect, to install, upgrade, and expand public plug-in
15 chargers at five transit facilities in the Los Angeles
16 County area. Mr. Margolis.

17 MR. MARGOLIS: Thank you. EV Connect will be
18 working in collaboration with the Los Angeles County
19 Metropolitan Transportation Authority to install these 20
20 stations. Now, the LA Metro has chosen the five unique
21 stations in the sense that these are the five biggest,
22 heaviest traffic stations in all of LA Metro, which is,
23 as you know, the largest Metro Agency in all of
24 California, and the second largest even in the nation, so
25 these are incredibly highly traveled hubs, and they are

1 going to install, as I said, 20 Smart Chargers, they have
2 divided up amongst these hubs. These hubs include the
3 LAX Airport, a major hub in front of Universal Studios,
4 which services the majority of their entertainment
5 industry, and three other major hubs which connect to
6 almost every single type of public transportation options
7 they have, including buses, light rail, Amtrak, etc. It
8 really allows EV users to come drive their car to these
9 stations, plug-in, and then take this public
10 transportation and be connected to the entire public
11 transportation grid of the LA area. If successful, LA
12 Metro is viewing this as a pilot project, and if
13 successful, they can apply these stations throughout
14 their jurisdiction. As you said, they are requesting
15 \$415,185, and their match is going to be \$23,096, because
16 they were not required to do the one for one match since
17 they are a public agency.

18 CHAIRMAN DOUGLAS: Thank you. And what about
19 our CEQA obligations on this project?

20 MS. DRISCOLL: Based on my review of this
21 project and further due diligence, I recommend that the
22 Commission, if it approves this project, include a
23 finding that this project is categorically exempt from
24 further environmental review under CEQA Guidelines
25 Section 15301 for existing facilities.

1 CHAIRMAN DOUGLAS: Thank you. Questions or
2 comments on this item?

3 COMMISSIONER BYRON: Madam Chair, I notice with
4 60 million people passing through these hubs, we are
5 talking about 3 million people per hub per year, and I
6 doubt that we are going to charge that many vehicles.
7 Clearly, this - and the leveraging of the funds alone
8 indicates this is clearly a marketing opportunity, as
9 well, and a public awareness opportunity. I believe it
10 was this morning, reading an article about the number of
11 electric vehicles that are anticipated, that will be
12 charging at home, and not out and about, but it is very
13 important that we make the public aware of the direction
14 that this state is headed, and that electrification of
15 the transportation sector is something that is going to
16 happen in a big way. I see this project as primarily a
17 public awareness issue. Of course, we hoped that the
18 city - or is it the county - will expand these into other
19 locations, but these are exactly the kind of projects we
20 need to increase public awareness.

21 CHAIRMAN DOUGLAS: Thank you, Commissioner.
22 And I have also been reflecting on the potential value of
23 EV charging infrastructure, just visible at a transit
24 station, or at an area with so much throughput, and I
25 guess, now, the people that would use this, are they

1 people who are driving to a park and ride to then take
2 the bus somewhere? Or what is the flow of the people who
3 would use these stations?

4 MR. MARGOLIS: Each one of these stations, many
5 times, due to the heavy traffic in the LA area, many
6 people drive to one of these stations which have their
7 own parking lot, and currently park their gas vehicle
8 while they take the public transportation. This will
9 enable them to come by public transportation with their
10 new electric vehicle, reducing their carbon footprint
11 below almost any other option.

12 COMMISSIONER EGGERT: So, I was going to say,
13 in terms of any local criteria pollutant emissions, you
14 know, the dominant fraction occurs within a couple of
15 minutes of starting your engine, what is called a "cold
16 start" in the early morning, and unfortunately people who
17 take their gasoline vehicles and drive a couple miles to
18 the Amtrak station or the bus station and then head to
19 work actually have not reduced their contribution that
20 much to criteria pollutants within the region because of
21 that cold start, so, to the extent that they can now
22 utilize their electric vehicle, which, again, sometimes
23 have range limitations to provide for that trip, offers
24 another opportunity. I did want to make one mention,
25 Commissioner Byron, to your point. I think, based on

1 what we are seeing through a lot of the dialogues we have
2 had with the stakeholders is that the dominant charging
3 energy will occur at the home for those people who do
4 have the capability of charging at home, that they have
5 access to either a garage or something that they can
6 actually charge up on, and when they charge away from
7 home, it is going to be likely where they are able to
8 leave their vehicle for some extended period of time, so
9 that there is the ability to charge at a reasonable rate,
10 to be able to provide any sort of a meaningful recharge
11 level. And I think some of these places like Universal
12 City, when you take your kids to go to the Amusement
13 Park, might be one of those. Certainly, if you are going
14 on a flight or taking an Amtrak train would be another
15 one. So I guess I would move the item.

16 COMMISSIONER BYRON: Second.

17 CHAIRMAN DOUGLAS: All in favor?

18 (Ayes.)

19 That item is approved. Thank you, Mr.
20 Margolis.

21 MR. MARGOLIS: Thank you.

22 CHAIRMAN DOUGLAS: Item 15. West Yost
23 Associates. Possible approval of Agreement ARV-10-014
24 for a grant of \$50,709 to West Yost Associates to conduct
25 an economic feasibility study of proposed algae

1 production at existing ponds and wetlands at the Stockton
2 Regional Wastewater Control Facility. Ms. Vinton.

3 MS. VINTON: Good morning, Commissioners. I am
4 Joanne Vinton with the Emerging Fuels Office. West Yost
5 Associates submitted this proposal in response to PON
6 09604 Biofuel Production Plants. This is a 10-month
7 feasibility study. They are going to test the algae
8 growing in the ponds to see how high the oil content is,
9 and then to see if they can increase the oil content.
10 The benefit, if this proves to be economically feasible,
11 is that they could earn revenue from selling the oil to
12 Community Fuels, which is also based in Stockton.
13 Community fuels is looking for additional sources of oil.
14 Another benefit is that the water would be cleaned up
15 before it was released to the San Joaquin River. The
16 match is one for one, \$50,709.

17 MS. DRISCOLL: Based on my review of this
18 project and further due diligence, I recommend that the
19 Commission, if it approves this award, include a finding
20 that the project is exempt from further environmental
21 review under CEQA Guidelines Section 15306 for
22 information collection, and Section 15262 for feasibility
23 and planning studies.

24 CHAIRMAN DOUGLAS: Thank you. Now, we have a
25 representative of West Yost Associates who is here and

1 available to speak to the project briefly, if you could
2 come forward, Mr. Pelz.

3 MR. PELZ: Thank you. I will take just a short
4 couple of minutes here. My name is Jeff Pelz. I am with
5 West Yost Associates, and I am a Wastewater Engineer, not
6 an Energy Guru. But we have partnered up with an algae
7 expert company and, actually, are partnered with
8 Community Fuels for some in-kind matching work as part of
9 the project. The study, as you have heard, is to
10 investigate the feasibility of whether algae that is
11 already grown in wastewater treatment ponds actually can
12 be a viable feedstock for biodiesel. And it is not a new
13 concept, and it is not a concept that is unheard of,
14 there is a lot of growing interest in this particular
15 avenue of biofuel feedstock. And if it does come to
16 fruition, there is a lot of mutual benefit, both on the
17 public sector side, by taking what is right now a
18 nuisance, at best, at a wastewater treatment plant, and
19 turning it into potentially even a revenue source for the
20 public agency, and then, as a good source of lipids and
21 energy for biofuel, the algae that is already being
22 produced from the energy and food that comes into the
23 wastewater treatment plant through the sewer system, is a
24 great concept if it can be proven. But right now, there
25 is a disconnect between the wastewater treatment folks

1 and the biofuel folks, and we hope to take one step
2 towards bridging that disconnect and looking at can
3 wastewater ponds be managed to produce what is a viable
4 feedstock from an economic standpoint for the biofuel
5 industry.

6 CHAIRMAN DOUGLAS: Thank you. Any questions
7 for Mr. Pelz?

8 COMMISSIONER EGGERT: Again, this is, I think,
9 a really exciting project, and particularly for all the
10 co-benefits that you had mentioned, the fact that you can
11 take advantage of a nutrient rich stream for the
12 generation of additional algae, and use it as part of the
13 clean-up process, so I think this is pretty exciting if
14 it works. When will we know if it works?

15 MR. PELZ: Well, the project itself, we will be
16 taking the algae from existing ponds and doing laboratory
17 work, and depending on - we have a 10-month schedule, and
18 I do not see any problem meeting that schedule. I think
19 that the laboratory results, you know, it depends upon
20 what happens and where that leads the investigators on
21 coming up with a management scheme, and then we will take
22 a few months to translate that information into, well,
23 what would that mean for the treatment plant in terms of
24 changing what they do now, if at all, to enhance the
25 algae production of the right kinds of algae. So, I

1 think that 10-month window is a pretty reasonable period
2 of time to come up with some answers.

3 COMMISSIONER EGGERT: And then, in terms of the
4 product from a project like this, is it a report at the
5 end of the project? Or how does this translate -

6 MR. PELZ: It would be a technical report that
7 would be a tool, well, information sharing tool for the
8 wastewater industry as a whole, I mean, publicly owned
9 treatment works, you know, throughout the world, will
10 hopefully be interested in the concept and have some
11 information that they could take. And I would see it
12 turning into pilot studies as a next step.

13 COMMISSIONER EGGERT: Mr. McKinney?

14 MR. MCKINNEY: Yeah, I have a question about
15 this project, as well. So you will just be evaluating
16 existing algae species in the ponds? Or may you
17 introduce different varieties for testing? Or would that
18 be a totally separate effort?

19 MR. PELZ: Our investigator actually took some
20 samples when were scoping out this project and found a
21 particular diatom that is lipid-rich, so there is at
22 least one there we really like already, and they are
23 looking at the bench scale and they actually have
24 concepts that they have been developing on how to enhance
25 that and possibly enhance the production of other

1 species, but I think that we are on the open pond, or
2 open environment realm of algae production, as opposed to
3 in-vessel, which is another avenue for producing algae,
4 and I think that we need to work with what is there and
5 the viability is can - because those ponds are already
6 adapted to the environment that they are in, so we do not
7 hope to dramatically manipulate that, but to tweak it.
8 So, I think for the most part we are talking about
9 existing species and the good news is there is some there
10 that look really good right now.

11 COMMISSIONER EGGERT: Thank you very much, Mr.
12 Pelz, and definitely some interest here in the results,
13 so good luck with the project and I guess I will move it,
14 unless there are other questions. I move the item.

15 COMMISSIONER BYRON: Madam Chair, before a
16 second, I would like to comment on this project and,
17 really, all of these alternative renewable fuel vehicle
18 technology fund projects, and really extend some thanks
19 and appreciation to the foresight of the Legislature in
20 providing these funds. I mean, it is not lost on me that
21 here we are, hopefully, in a week where the Governor and
22 the Legislature will come to agreement on a budget, and
23 it has not been easy for the Legislature over the last
24 number of years to protect these funds. They are truly
25 stimulating the economy and creating manufacturing jobs,

1 and I believe, with the approval of this project, we will
2 have approved about \$12 million in grants, highly
3 leveraged co-funding. It takes a lot of time to
4 negotiate the state contracting process and go through
5 the committee structure and oversight that the
6 Legislature wanted us to set up, and I know we are going
7 to do a bunch more of these, but, again, my thanks to the
8 Legislature for preserving these funds and for creating
9 these jobs in California. I will second the item.

10 CHAIRMAN DOUGLAS: We have a motion and a
11 second. All in favor?

12 (Ayes.)

13 The item is approved.

14 COMMISSIONER EGGERT: And if I just might,
15 Commissioner, I really do appreciate those comments. I
16 think you're exactly right, the foresight that they had
17 in actually establishing this program under AB 118, and
18 continuing their support to protect the funds, really, I
19 think, should not be overlooked. I think we definitely
20 have to be quite appreciative of that and I will just
21 sort of also make a mention of a statistic that was
22 mentioned here earlier, that the totality of this program
23 of 118 at \$100 or so million per year is less than a
24 day's worth of expenditure on fuel here in the State.
25 And I think you will see sort of the diversity or the

1 portfolio approach that has been taken here, is
2 reflective of a strategy to not pick any singular
3 winners, but look for the most likely potential suite of
4 winners, and invest in them in a way that hopefully will
5 allow the best ones to progress to a commercial status
6 and really take us on a path to meet our energy and
7 environmental goals.

8 CHAIRMAN DOUGLAS: Thank you, Commissioner
9 Eggert. That is helpful context for all of us as we
10 consider these items.

11 Now, Item 16. University Of California, San
12 Diego. Possible approval of Contract 500-10-025 for \$1.9
13 million with the University of California, San Diego, to
14 assess the benefits, address barriers, and develop tools
15 to design and implement natural ventilation in commercial
16 buildings. Mr. Kibrya.

17 MR. KIBRYA: Good morning, Chairman Douglas and
18 the Commissioners. My name is Golam Kibrya, and I work
19 in the Buildings Energy Efficiency Office of the Research
20 and Development Division. So, I am here to request your
21 approval of this project with University of California,
22 San Diego. This project was selected through a
23 competitive solicitation and it has been approved by the
24 Policy Committee. The goal of this project is to
25 implement natural ventilation in commercial buildings in

1 California. Commercial buildings consume on the order of
2 67,000 gigawatt hours of electricity every year, and 28
3 percent of that is accounted for cooling and ventilation.
4 As we know, in some parts of the state, especially in the
5 coastal areas, the climate is quite mild, and some of
6 this cooling load could be met with natural ventilation.
7 And based on estimates, even if 10 percent of this
8 cooling load was met with natural ventilation, the annual
9 savings in the state will be on the order of \$286
10 million. And the corresponding reduction in greenhouse
11 gas emissions would be about .8 million tons. So, there
12 is tremendous potential for savings if we could implement
13 natural ventilation. However, there are significant
14 barriers against natural ventilation, firstly, the
15 concern about occupants' comfort and indoor air quality,
16 especially the lack of ability to control the
17 temperature, and also the external noise and pollution,
18 pollutants that can come through the openings. The
19 second barrier is the lack of tools to analyze and design
20 buildings with natural ventilation. So that this project
21 is going to address both the barriers to natural
22 ventilation and develop the tools that you need to
23 analyze and design buildings with natural ventilation.
24 The contractor is going to work for technology transfer,
25 they are going to work with the three major investor-

1 owned utilities of the State, as well as SMUD, and
2 American Society of Heating, Refrigeration, and Air-
3 Conditioning Engineering, ASHRE, to disseminate the
4 results of this project. And, as I mentioned, this
5 project has the potential of producing significant
6 benefits for the State, so I would like to request your
7 approval of the project, and if you have any questions, I
8 will be happy to answer them.

9 CHAIRMAN DOUGLAS: Thank you. Are there any
10 questions, Commissioners?

11 COMMISSIONER BYRON: Madam Chair, this item
12 came through the R&D Committee and, of course, it seemed
13 to me - it would seem to most anybody reading under the
14 surface, "Just open the window" would be the answer, but
15 clearly, there is an enormous amount of energy that goes
16 into cooling of buildings, and we see the waste all the
17 time that takes place. So, the potential savings here is
18 enormous, customers always have a choice on how they use
19 electricity, and all we are doing here is trying to
20 provide them a means to save money, and I think it has a
21 compelling benefit to all of California, at about 10
22 percent market penetration, on the order of a quarter of
23 a billion of dollars, so I would certainly recommend
24 approval of this project. That is a motion to approve.

25 CHAIRMAN DOUGLAS: Thank you, Commissioner

1 Byron. Commissioner Eggert.

2 COMMISSONER EGGERT: Yeah, I got briefed on
3 this project and, Commissioner, I agree, you know, it is
4 amazing over 100 years after forced ventilation, we are
5 back to considering the idea of opening the window to
6 gain benefits from natural ventilation, and having been
7 somebody who has, I believe, frozen out the north part of
8 this building from opening my window in my office, and
9 then also being in one of the most advanced buildings in
10 the State, Cal EPA's facility, where their windows don't
11 open, and it's actually one of the main complaints of the
12 facility, developing the tools to properly balance HVAC
13 and provide those benefits, it seems like a very worthy
14 project, so I will second that.

15 CHAIRMAN DOUGLAS: All in favor?

16 (Ayes.)

17 Item 16 is approved.

18 MR. KIBRYA: Thank you.

19 CHAIRMAN DOUGLAS: Thank you, Mr. Kibrya.

20 Item 17. BMP Ecosciences. Possible approval
21 of Agreement PIR-10-047 for \$753,100 grant to BMP
22 Ecosciences to provide information on the population
23 viability and restoration potential of rare plants
24 affected by solar energy development in California's
25 Mojave and Sonoran deserts. Ms. Milliron.

1 MS. MILLIRON: Hello, I am Missa Milliron from
2 the PIER Environmental area, and I am happy to present
3 the next two items on the agenda. The first one is one
4 of two passing proposals from a competitive grant
5 solicitation that was open to all private entities. It
6 was entitled "Reducing the Impact to Solar Energy." The
7 RD&D Committee proposes to award a total of \$1,103,100 to
8 help resolve some of the scientific uncertainties about
9 the biological impacts of solar energy, with the aim of
10 minimizing those impacts, while informing the siting and
11 development process. As you probably recall, we had a
12 parallel effort for public entities and that resulted in
13 other projects that I have brought before you at other
14 business meetings. Like that effort, this private effort
15 was directed at aiding the Siting Division, as well as
16 other agencies involved in the Desert Renewable Energy
17 Conservation Planning. And it was also similar to the
18 other effort, there was scoring by the Technical Advisory
19 Committee that involved staff from not only PIER
20 Environmental, but PIER Renewables, Siting, and the
21 Department of Fish and Game. In this effort, 17
22 proposals were received, six of them passed Phase I, and
23 two passed Phase II. So, moving on to this proposed
24 project, this project involves a match of \$149,885 from
25 BMP Ecosciences. It is a demographic rare plant study

1 that involves population viability analysis modeling of
2 six to eight rare species that would be affected by Solar
3 Energy and, unlike the previous plant modeling project
4 that I have brought before you, this is at a much more
5 detailed level, it is at the population level, rather
6 than the habitat level. It allows an estimation of a
7 measure called "Extinction Threshold Potential," which
8 gives a count of the number of individuals in a
9 population that have a probability of survival over a
10 defined period of time, given a certain level of
11 disturbance to the site, and because these analyses
12 involve tracking of all the significant life periods of
13 these species, the project is very field intensive, it
14 involves surveys over multiple seasons and sites in both
15 the Mojave and the Sonoran Deserts. The project will
16 also evaluate restoration methods by studying seed bank
17 demography and propagation potential. The outcome of
18 this project overall is to provide findings and
19 recommendations for mitigation, management, and
20 restoration, that will be relevant to a broad suite of
21 rare plants that could be affected by solar development.
22 And finally, I would just ask for your approval and note
23 that the project has been approved by the RD&D Committee.
24 Thanks.

25 CHAIRMAN DOUGLAS: Thank you, Ms. Milliron.

1 Questions, Commissioners?

2 COMMISSIONER BYRON: Madam Chair, this is a
3 good example of this Commission's R&D organization being
4 responsive to the needs of the State with regard to the
5 siting of solar power plants. And you know, these
6 results will hopefully be used to make recommendations
7 for mitigation and management restoration of a number of
8 desert plant species in the future; however, as we have
9 told Ms. Milliron before, we want these results today;
10 unfortunately, it takes a little time to get contracting
11 in place and to get these projects in place. I think
12 this will be extremely valuable information and I would
13 certainly recommend approval of the project.

14 CHAIRMAN DOUGLAS: Thank you, Commissioner
15 Byron. Commissioner Weisenmiller.

16 COMMISSIONER WEISENMILLER: I wanted to note
17 that, while today we do not have any pending siting
18 decisions, that we certainly are dealing with the next
19 two - this contractor and the next one certainly have
20 implications for our Siting cases, and to remind everyone
21 that, as we are moving forward on the science-based
22 DRECP, that it is really important to use that to really
23 identify and address some of the knowledge gaps that we
24 have, which I think these contracts do, and that should
25 allow us to help mitigate better, and manage better the

1 impacts of the solar plants in the desert, and also
2 provide better planning, that we can give better
3 direction to future developers on what are good sites vs.
4 bad sites, so, certainly, I think these are two very
5 important projects and I appreciate the R&D Committee
6 moving these forward, though, as Commissioner Byron has
7 indicated, it always would have been nice if this had
8 been done probably a couple years ago, and it is so
9 important to address the knowledge issues now.

10 CHAIRMAN DOUGLAS: I agree with both of your
11 comments and I just wanted to ask, how direct is the
12 length between the work that will be done on this
13 research and the DRECP and the scientific needs of the
14 DRECP?

15 MS. MILLIRON: This project is going to be
16 collaborating with the DRECP Science Panel, so, to the
17 extent that they can, they are going to be providing
18 interim results with them through status reports, and
19 then possibly we are talking about workshops to inform
20 them through that, so it is sort of a long term study.
21 We anticipate that the habitat level project that I have
22 brought previously will probably have some more
23 immediately usable results to inform that, but I do think
24 that the interim results will still be useful,
25 particularly in this methodology that they are using for

1 the population viability analysis. I think they will be
2 exchanged both ways from the science panel to the PI of
3 this project, and then the other way, as well.

4 CHAIRMAN DOUGLAS: Thank you. Commissioner
5 Eggert, do you have any questions?

6 COMMISSIONER EGGERT: No, I think it has all
7 been said. Both this one and the next one look like very
8 very worthy efforts, so I guess I would move the item.

9 COMMISSIONER WEISENMILLER: I will second it.

10 CHAIRMAN DOUGLAS: All in favor?

11 (Ayes.)

12 The item is approved.

13 Item 18. Redlands Institute. Possible
14 approval of Agreement PIR-10-048 for a grant of \$350,000
15 to Redlands Institute, University of Redlands, to enhance
16 a web-based decision support tool for assessing the
17 effects of solar energy development on the desert
18 tortoise. Ms. Milliron.

19 MS. MILLIRON: Thank you. This is a project to
20 expand the existing Desert Tortoise Spatial Decision
21 Support System, which is a Web-based tool. It is a
22 collaborative project that involves the Fish and Wildlife
23 Service, Desert Tortoise Recovery Office, who has been
24 heavily involved with the tool that is existing now.
25 There are \$69,909 dollars of match with this project, and

1 one of its real strengths is that it leverages 10 plus
2 years of data and collaborative research on the Desert
3 Tortoise, and also on the GIS Decision Support Tool
4 development. So, as I mentioned, it expands the tool,
5 and the way that it does that is to - the reason that
6 they are doing that is to incorporate a module to deal
7 with large scale solar energy. Right now, the tool deals
8 with other types of development, but it is not quite set
9 up to deal with the scale of impacts that Solar presents
10 for the Desert Tortoise. The project will involve Desert
11 Tortoise modeling and also expert workshops to discuss
12 what changes to the tool need to be made, and those
13 expert workshops modeling involve Desert Tortoise
14 experts, but also those in the development field, as
15 well, to make sure that the results will be usable. The
16 tool will allow evaluation of solar impacts to the Desert
17 Tortoise throughout its range, as well as the effects of
18 mitigation options that are recommended in the current
19 recovery plan for the Desert Tortoise, and it prioritizes
20 recovery actions by modeling the inter-relationship among
21 threats, population declines, and recovery actions. So,
22 this tool will help agencies and developers evaluate
23 cumulative impacts to the species at the project level,
24 as well as suggest recovery or mitigation actions in the
25 monitoring metrics, that allow them to get a sense of

1 what impact the various mitigation measures that they
2 would apply has in mitigating the effects of their
3 project. So, in summary, it is a Web tool to evaluate
4 the cumulative impacts, and it will go a long way towards
5 enabling better science-based decisions related to the
6 Desert Tortoise and renewable development, and also in
7 conservation decisions. This project was also approved
8 by the RD&D Committee. Thank you.

9 COMMISSIONER BYRON: Commissioners, the
10 California State Reptile is extremely vulnerable and I
11 think we have all learned that in recent months with
12 regard to the renewable projects that we have been
13 considering here at the Commission. And the approach we
14 have been taking to try and mitigate or reduce the impact
15 on the Desert Tortoise really leaves a lot of questions
16 in, I think, a lot of our minds. This certainly does not
17 solve that problem, but it provides some quantification,
18 if you will, and some modeling techniques that I think
19 will be very helpful going forward to resolve some of the
20 differences in opinions that we have all seen in
21 Evidentiary Hearings. So, again, it is one of the tools
22 that we hope to add to the toolbox, in order to help make
23 these evaluations. And I would recommend approval of the
24 project, so I will move the item.

25 CHAIRMAN DOUGLAS: Thank you, Commissioner

1 Byron. Other comments?

2 COMMISSIONER WEISENMILLER: I was just going to
3 comment, again, echoing Commissioner Byron and sort of
4 our earlier discussion, but I think we are all very very
5 aware of the Desert Tortoise issues, and are all very
6 concerned about that, certainly getting better science is
7 very important, and so that, as we move forward, we can
8 deal better with mitigation measures and solar energy
9 development in the deserts, so, again, I certainly
10 appreciate the activity pulling this forward. And I
11 would certainly second it.

12 CHAIRMAN DOUGLAS: We have a motion and a
13 second. All in favor?

14 (Ayes.)

15 CHAIRMAN DOUGLAS: And Commissioner Eggert, a
16 comment?

17 COMMISSIONER EGGERT: So, I definitely approve.
18 Just, I guess, a question. Certainly, the development
19 activities that extend beyond solar projects are also
20 threatening the Desert Tortoise's survival. Is this tool
21 going to be available for other types of development, not
22 just solar?

23 MS. MILLIRON: I believe that the tool is not
24 fully available to the public yet, but my understanding
25 is that it is already set up to evaluate smaller types of

1 development at this point, so, yeah, I think it will be
2 set up to look at not only just the footprint of the
3 solar plant, but all the transmission and other types of
4 development, as well.

5 COMMISSIONER EGGERT: Okay, thank you very
6 much.

7 MS. MILLIRON: Thank you.

8 CHAIRMAN DOUGLAS: Good question, Commissioner
9 Eggert, and I am sorry, I did not notice that you had a
10 question on that item.

11 Item 19. Fiscalini Farms, LP. Possible
12 approval of Agreement PIR-10-046 for a \$399,625 grant to
13 Fiscalini Farms to demonstrate combined anaerobic
14 digestion and power generation technologies. Mr. Lozano.

15 MR. LOZANO: Good morning, Commissioners. My
16 name is Michael Lozano with the R&D Division's Industrial
17 Ag Water Team. The following contract is the result of
18 our \$2.8 million competitive grant solicitation for the
19 dairy and food processing industries. The food
20 processing industry is the third largest electricity
21 energy user in California, consuming some 600 million
22 therms of natural gas and 3.7 billion kwh hours of
23 electricity. Dairies represent a large portion of this
24 energy demand, as well as a potential resource. Dairies
25 produce a vast amount of methane gas a year from the

1 dairy waste in their lagoons. This methane represents a
2 greenhouse gas when allowed to vent freely. Burning this
3 gas as fuel has experienced problems complying with air
4 quality standards. Dairy lagoons also are a source of
5 water quality issues. The proposed project will analyze
6 the efficiency, economics, and regulatory compliance of
7 an improved digester design, capable of producing clean
8 biogas from multiple feedstocks. The system is on-site
9 now researching on-site waste - manure, silage and whey.
10 This project funded by the CEC will analyze the effects
11 of bringing on food, oil and grease from municipal waste.
12 They estimate, by bringing in things such as grease from
13 grease traps from restaurants, they can put up to 10
14 percent by volume into this digester design, and increase
15 their methane output by 25 percent, so a very important
16 project. This project at an existing 1,700 cow dairy is
17 the equivalent of taking 5,000 cars off the road. The
18 digester capture is approximately 50 million cubic feet
19 of methane per year. This project benefits from \$544,000
20 in match, the term is 42 months, and work is to be done
21 at Fiscalini Farms in Modesto, California. We request
22 approval of this project and I welcome your questions.

23 CHAIRMAN DOUGLAS: Thank you. Are there any
24 questions for Mr. Lozano?

25 COMMISSIONER BYRON: Not really a question,

1 but, Mr. Lozano, if I understood this correctly, 1,700
2 milking cows equaling the carbon equivalent of 5,000
3 cars, that is one cow for every three cars. If that
4 correct?

5 MR. LOZANO: Approximately, correct.

6 COMMISSIONER BYRON: I find that astounding,
7 but it never ceases to amaze me how creative our
8 Commission is in coming up with ways to reduce CO₂. This
9 was also vetted by the R&D Committee, and I would
10 certainly recommend approval of this project.

11 COMMISSIONER WEISENMILLER: I was just going to
12 note that, having served on the Renewables Committee with
13 Commissioner Boyd, I will channel him a little bit and
14 say that, we were obviously very concerned about the
15 viability of the dairy industry in California, and also
16 very concerned about ways of converting biomass into
17 useful energy and reducing greenhouse gas impacts. So,
18 again, this is a good project, I think.

19 COMMISSIONER EGGERT: Just a quick question,
20 and this is an existing AD system, and it is being
21 upgraded to accommodate the additional feedstock? Is
22 that -

23 MR. LOZANO: This system has been funded by
24 USDA, as well as Fiscalini Farms, they put a great deal
25 of money into their own system. They have been testing -

1 it has been on site since September of 2008, and they
2 have been running fairly continuously using on-site waste
3 since 2009. So, yes, it is an existing site, they are
4 doing a lot of research, and the measurement verification
5 is being done by UOP. So, this is an add-on project,
6 they are getting good results from on-site waste, but to
7 make it truly cost-effective, understandably, it is a
8 very expensive project. They needed research using food
9 trap waste, so they can have a waste stream all year
10 long.

11 COMMISSIONER EGGERT: So, we are taking
12 advantage of a previous USDA Federal grant in this case
13 and expanding the operations? Is that --

14 MR. LOZANO: Yes.

15 COMMISSIONER EGGERT: Okay, thank you.

16 CHAIRMAN DOUGLAS: Do we have a motion on this
17 item?

18 COMMISSIONER BYRON: Madam Chair, I move
19 approval.

20 COMMISSIONER EGGERT: Second.

21 CHAIRMAN DOUGLAS: All in favor?

22 (Ayes.)

23 The item is approved. Thank you, Mr. Lozano.

24 MR. LOZANO: Thank you.

25 CHAIRMAN DOUGLAS: Item 20. Arizona Geological

1 Survey. Possible approval of Contract 500-10-024 for -
2 and this number has changed by \$100.00 -- \$232,350 with
3 the Arizona Geological Survey to provide a comprehensive
4 evaluation of the potential of potential subsurface
5 carbon dioxide (CO₂) storage sites in Arizona as part of
6 the WESTCARB Phase III regional geologic characterization
7 and CO₂ storage assessment activities. Ms. Keller.

8 MS. KELLER: Good morning, Chairman and
9 Commissioners. I am Elizabeth Keller and I am with the
10 Research and Development Division, working with the
11 WESTCARB Program. This is another governmental agency
12 agreement with the Arizona Geological Survey. This is a
13 WESTCARB project that will be utilizing Federal funds and
14 this is part of a requirement with the Department of
15 Energy for this agreement. Our Agreement with the DOE
16 states that we will conduct a geological characterization
17 to identify and validate potential CO₂ storage sites in
18 the six states in our partnership. This is one of
19 several agreements with the Geological Survey agencies of
20 these states that will be brought before the Energy
21 Commission business meetings. We are in the works with
22 Hawaii and Alaska, and you will see those later on. In
23 WESTCARB Phase I and Phase II, the geological
24 characterization studies for Arizona were limited to
25 within 50 miles of existing power plants. This agreement

1 will extend and complement previous studies by providing
2 comprehensive assessment throughout Arizona. Results of
3 this agreement will contribute to a biannual carbon
4 sequestration atlas of the United States and of Canada.
5 The newest one will actually be released this year and I
6 think several of you have them and you will be provided
7 with the new ones that are coming out. The staff
8 requests approval of this agreement and I am happy to
9 answer any questions.

10 CHAIRMAN DOUGLAS: Thank you. Questions or
11 comments, Commissioners?

12 COMMISSIONER EGGERT: I guess I will just say I
13 was briefed on this item earlier, so we are basically, as
14 I understand the Administrator for WESTCARB, and so this
15 is a Federal fund that we are providing sort of the flow
16 through administration of to Arizona -

17 MS. KELLER: Yes.

18 COMMISSIONER EGGERT: I was also interested to
19 hear during the briefing that California has got one of
20 the largest geological storage capacities in the West,
21 based on the survey of our own system, and I guess that
22 is being updated, as well?

23 MS. KELLER: Yes. We have an agreement with
24 the California Geological Survey also.

25 COMMISSIONER EGGERT: Excellent. And then it

1 sounds like probably one of the remaining challenges is
2 actually doing some real demonstration projects, getting
3 the facilities in California to actually inject the CO₂ in
4 a way to actually test these reservoirs for their
5 capacity and durability, so... Thank you.

6 MS. KELLER: Thank you.

7 CHAIRMAN DOUGLAS: Thank you, Commissioner
8 Eggert. Commissioners Byron or Weisenmiller?
9 Commissioner Byron?

10 COMMISSIONER BYRON: Madam Chair, I move
11 approval of Item 20.

12 COMMISSIONER EGGERT: Second.

13 CHAIRMAN DOUGLAS: All in favor?

14 (Ayes.)

15 The item is approved.

16 Item 21. Trustees of the California State
17 University. Possible approval of two grant applications,
18 totaling \$189,700, from the Public Interest Energy
19 Research (PIER) program's Energy Innovations Small Grants
20 Solicitations. Ms. Mircheva, if you could take up items
21 a and b, or read items a and b into the record.

22 MS. MIRCHEVA: I am Diane Mircheva with the
23 Energy Research and Development Division. I manage the
24 Transportation portion of the Energy Innovations Small
25 Grants. In response to the 1001T Natural Gas

1 Solicitation released in April, we received nine
2 applications. After initial screening, technical review,
3 and appearing before the program and technical review
4 board, staff is recommending for funding two proposals
5 valued at \$189,700. Both projects are located in
6 California. I will proceed with reading the recommended
7 proposals into the record: a) David Onstenk, Napa,
8 Multi-Fuel Super-Compound Engine Efficiency Analysis, for
9 \$95,000. This project will model a compound engine
10 configuration based on a stock engine performance
11 testing. Its goal is to improve light load fuel
12 efficiency by 30 percent, and heavy load fuel efficiency
13 by 15 percent; b) Multispark, LLC, San Diego, Application
14 of Novelty Spark Plug in Compressed Natural Gas Engines,
15 for \$94,700. This project will develop a multi-point
16 sparkplug for natural gas vehicles, which is expected to
17 yield a 10 percent increase in fuel economy, as well as
18 reduce carbon monoxide, carbon dioxide, and NO_x emissions.
19 And with that, I will be happy to answer any questions
20 you might have.

21 CHAIRMAN DOUGLAS: Thank you. Questions or
22 comments?

23 COMMISSIONER EGGERT: Just a quick comment. I
24 also was briefed on this, as well, and this comment
25 applies to this and the next several EISG grants. I

1 think this team does a wonderful job of selecting very
2 innovative proposals, and I know they have got a really
3 great selection process, which is, I think, probably why
4 they have been able to identify and pick out a number of
5 these really good projects. And I want to thank the R&D
6 Committee for bringing these before us. Also, during the
7 briefing, Mr. Gravely had mentioned an effort to try to
8 mine - we have some great stories from our past EISG
9 recipients that have gone on to form successful ventures
10 and are even willing to give some credit to the PIER
11 Small Grants Program, and Mr. Gravely was mentioning that
12 they are going to go back and try to mine some of the
13 past small grants and do a survey of some sort to try and
14 see how many of those success stories we can identify,
15 which I think is a great effort. So, I will look forward
16 to seeing the results of that. But I do not have any
17 specific questions on these projects.

18 COMMISSIONER BYRON: Madam Chair, maybe I will
19 comment in general about all of these, as well. There
20 are a number of them that we have on the agenda to
21 approve today, and you know, as Commissioners, we like to
22 take credit for all the good work that comes out of this
23 Commission, but clearly there are a lot of hands involved
24 in this. This represents a lot of potential capital
25 creation and job creation for the State of California.

1 If these projects are technically and market feasible,
2 they can generate a great deal of revenue for the State
3 of California. I believe, and Mr. Gravely, or others
4 could correct me, that thus far the Energy Innovation
5 Small Grant Program has resulted in projects that have
6 attracted on the order of \$350 or \$370 million in
7 investment capital. And there are a number of small
8 businesses represented in these awards before you, or
9 individuals who have technology-based concepts, or
10 market-based concepts, that have gone through rigorous
11 review. And they are sitting by eagerly awaiting these
12 funds. In fact, if anything, I would like to see these
13 move faster so that these folks can get on it. This is
14 another great job creation vehicle, but it is also a
15 technology creation vehicle which provides the innovation
16 that California is oftentimes, well, famous for. So,
17 those comments, of course, apply to all of these and
18 there may be other comments, but I certainly move
19 approval of this item.

20 CHAIRMAN DOUGLAS: Is there a second?

21 COMMISSIONER EGGERT: Second.

22 CHAIRMAN DOUGLAS: All in favor?

23 (Ayes.)

24 Very well, Item 21 has been approved. Thank
25 you, Ms. Mircheva.

1 MS. MIRCHEVA: Thank you.

2 CHAIRMAN DOUGLAS: Item 22. Trustees of the
3 California State University. Possible approval of seven
4 grant applications, totaling \$664,381, from the Public
5 Interest Energy Research (PIER) program's Energy
6 Innovations Small Grant's Solicitation 09-02. I have Mr.
7 McCarthy. Very well. And we will take up Item 22 a
8 through g, so please read all of those into the record.

9 MR. McCARTHY: Yes. Good morning,
10 Commissioners. I would like to start by making a point
11 of clarification about the funding sources for Items 22,
12 23, and 24. Items 22 and 24 are funded through
13 Electricity funds, and Item 23 is funded through Natural
14 Gas funds. It may have been unclear in some of the
15 backup materials, so I wanted to just again make that
16 clarification. The items as listed on the agenda are
17 correct.

18 Moving forward, I am Patrick McCarthy, Contract
19 Manager for the Energy Innovation Small Grant Program.
20 On behalf of the program, I would like to recommend for
21 funding the highest ranking projects resulting from
22 Electricity solicitation 0902. For this solicitation, we
23 had the following response: 75 grant applications were
24 received for consideration, 28 passed initial screening
25 and proceeded to technical review, 17 exceeded the

1 minimum score at the technical review and advanced to the
2 program technical review board, where these seven are
3 being recommended for funding, valued at \$664,381. Six
4 of the seven are located in California. The individual
5 projects are as follows: 22 a) Innovative Blade Design
6 for Next Generation Wind Turbines. Research will be
7 conducted by University of California, Los Angeles. They
8 are requesting \$95,000. This project proposes using a
9 novel blade design to improve the strength, efficiency,
10 and power transfer of wind turbine blades over the inner
11 third of the blade length. The PI will investigate the
12 application of structural design concepts used in other
13 engineering disciplines on blade design, which have the
14 potential to reduce costs while allowing blade lengths to
15 grow beyond current limitations; Item 22b is titled
16 Meteorological Buoy Technology for Offshore Wind Resource
17 Assessment. The research will be conducted by MetSpar,
18 out of Solvang, California. They are requesting \$95,000.
19 This project proposes to develop and validate technology
20 to account for buoy motion, while acquiring accurate wind
21 speed and turbulence data from a floating spar buoy.
22 Spar buoys represent an opportunity to assess wind
23 resources at heights comparable to those of potential
24 offshore wind turbines, while maintaining significant
25 cost advantages over fixed position towers; Item 22c, a

1 Low-cost Inverter with Battery Interface for Photovoltaic
2 Utility System. The research will be conducted by Texas
3 A&M University, of College Station, Texas, they are
4 requesting \$95,000. This project seeks to increase
5 system efficiency by reducing the energy losses when
6 switching between resource configurations by designing
7 and fabricating a novel soft switch, high frequency AC
8 link converter in a battery photovoltaic grid interface.
9 This technology could provide highly responsive voltage
10 firming support and emergency power services; Item 22d,
11 Plug and Play Photovoltaic System. Research will be
12 conducted by Solar Red of Sunnyvale, California. They
13 are requesting \$95,000. This project proposes to design
14 an installation method that provides seamless integration
15 of solar panel mounting hardware with roofing structures.
16 They are using an all parallel AC Solar Panel, along with
17 this proposed technique. The PI aims to lower non-panel
18 costs significantly by enabling installation using
19 conventional tools and processes. Currently,
20 installation can account for over half of the total cost
21 of solar power; Item 22e, Microbial Fuel Cells from High
22 Solids Food-Processing Wastes. This research will be
23 conducted by UC Davis, they are requesting \$94,381. This
24 project proposes to investigate the potential to generate
25 electricity from food waste, using a microbial fuel cell.

1 The fuel cell would be used for solid food waste
2 treatment and reduction using either leachate from stored
3 residues, or high solids feedstock, directly; Item 22f,
4 Microbial Fuel Cells for Sustainable Wastewater
5 Treatment. This research will be conducted by the J.
6 Craig Venter Institute in San Diego, they are requesting
7 \$95,000. This project proposes to use a variable
8 microbial fuel cell to treat wastewater and generate
9 electricity. This technology would maximize utility for
10 treatment plants, enabling them to respond to dynamic
11 energy prices, loads, and waste volumes; last one for
12 this go round, Item 22g, Solar Electric Power from Heat
13 Pulses Applied to Silicon. This research will be
14 conducted by Roshan Energy out of Fremont, California and
15 they are requesting \$95,000. This project proposes a
16 novel semiconductor concept to generate electricity with
17 concentrated solar heat. This innovative concept has
18 been validated by academic experts, applies a different
19 technical approach to solar electricity generation, and
20 has the potential to significantly reduce generation
21 costs. That concludes Solicitation 09-02. If you have
22 any questions, I would be happy to take them.

23 CHAIRMAN DOUGLAS: Thank you, Mr. McCarthy.

24 Are there questions or comments, Commissioners?

25 COMMISSIONER WEISENMILLER: I was just going to

1 make one comment, which was back decades about when I was
2 learning the chemistry of batteries, at that point Texas
3 A&M was certainly recognized as one of the strongest
4 institutions in that area, so in some respects it is not
5 surprising that was the one out of California project
6 here.

7 CHAIRMAN DOUGLAS: Okay, is there a motion on
8 this item?

9 COMMISSIONER BYRON: Madam Chair, I move
10 approval of Item 22.

11 COMMISSIONER EGGERT: Second.

12 CHAIRMAN DOUGLAS: All in favor?

13 (Ayes.)

14 Item 22 is approved.

15 Item 23. Trustees of the California State
16 University. Possible approval of one grant application,
17 totaling \$94,967, from the Public Interest Energy
18 Research (PIER) program's Energy Innovations Small
19 Grant's Solicitation 09-02G. Mr. McCarthy.

20 MR. MCCARTHY: For solicitation 09-02G, we had
21 10 grant applications received for consideration. Three
22 passed the initial screening and advanced to technical
23 review, two exceeded the minimum required score, and
24 advanced to the program technical review board, which
25 came up with one project, totaling \$94,967. The

1 recommended proposal is titled A Natural Gas Fueled
2 Homogenous Charged Compression Ignition Engine (HCCI) for
3 Hybrid Vehicles. This research will be conducted by the
4 Rochester Institute of Technology in New York. This
5 project will model, design, and build a working prototype
6 HCCI natural gas engine and aims to specifically address
7 the engine control issues by using the motor to charge
8 battery packs at several preset loads, rather than having
9 to respond to dynamic inputs of the driver.

10 CHAIRMAN DOUGLAS: Thank you. Questions,
11 Commissioners?

12 COMMISSIONER BYRON: Madam Chair, no question,
13 but a comment that I hope is helpful. You will note that
14 this was a 10 percent selection rate on this particular
15 solicitation, and others have similar rates. I
16 understand, according to the selection process, that it
17 is very common for early proposals to not make the grade
18 in terms of not meeting all of our criteria, and that
19 many of these go through a second or third, so that does
20 not mean that there are not good ideas and projects here,
21 but they are often times encouraged by the selection
22 committee to reapply if, indeed, they are good
23 technologies. I found that interesting. It is a pretty
24 high hurdle to be selected for these less than \$100,000
25 grants. Having said that, I would move approval of this

1 item, as well.

2 COMMISSIONER WEISENMILLER: I will second it.

3 CHAIRMAN DOUGLAS: All in favor?

4 (Ayes.)

5 Very well, Item 23 is approved.

6 Item 24. Trustees of the California State
7 University. Possible approval of five grant
8 applications, totaling \$473,570, from the Public Interest
9 Energy Research (PIER) program's Energy Innovations Small
10 Grant's Solicitation 09-03. Mr. McCarthy. And we are
11 taking up Item 24 a through e, so please read a through e
12 into the record.

13 MR. MCCARTHY: Good afternoon, now,
14 Commissioners. Still Patrick McCarthy. We are going to,
15 let's see, so the Energy Innovation Small Grant Program
16 Solicitation 09-03 yielded the following response. We
17 had 76 grant applications received for consideration, 33
18 passed the initial screening and advanced to technical
19 review, 23 exceeded the minimum required score, and moved
20 on to the program technical review board, where five
21 proposals are being recommended for funding, valued at
22 \$473,570. The five proposals which are being recommended
23 for funding, all of which are from California, are as
24 follows: Item 24a, Battery Prognostics for Small Scale
25 Distributed Resource Applications. Research will be

1 conducted by Ambient Micro out of Half Moon Bay, they are
2 requesting \$94,984 in grant funds. The goal of this
3 project is to collect battery voltage, current, and
4 temperature information as components in a prognostic
5 health management system, providing an accurate readout
6 of stored energy from geographically disbursed renewable
7 assets; Item 24b, an Innovative Design for Cost and
8 Energy Efficient Solar Cells, this research will be
9 conducted by San Diego State University, they are
10 requesting \$95,000. This project will assess thin film
11 metal oxide sensitized solar cells as an alternative to
12 conventional solar cells. This research seeks to replace
13 the organic dye in the dye sensitized solar cell, with an
14 easily manipulated inorganic compound; Item 24c, Solution
15 Processed Solar Cells from Abundant, Non-Toxic Materials,
16 this research will be conducted by Plant Solar out of
17 Stanford, California, they are requesting \$95,000. The
18 goal of this project is to determine the feasibility of
19 using copper, zinc, tin, and sulfur in thin film solar
20 cells as an alternative to silicon-based conventional
21 cells. CZTS, as it is called, could emerge as a
22 disruptive PV technology because it has an ideal band
23 gap, high absorption coefficient, and will be inexpensive
24 to manufacture; Item 24d, Wireless Sensors for Real-time
25 monitoring of induction motors, the research will be

1 conducted by UC Riverside, and they are requesting
2 \$93,586. This project will attempt to develop multi-
3 sensor wireless systems for continuous performance and
4 condition monitoring of induction motors. PI will
5 develop fault detection software based on sensor input
6 from acoustic vibration and rotor speed sensors during
7 induced fault tests; Item 24e, Photo Thermal Voltaic
8 Skylight, research will be conducted by SeaBotix Inc. out
9 of San Diego, they are requesting \$95,000. The goal of
10 this project is to increase the efficiency in small scale
11 rotary vein motors by adding a lip seal to the end of the
12 veins, thus capturing greater amounts of expanding
13 energy. If successful, this motor will be part of a
14 system that includes an already developed tea collector
15 and a method for collecting waste heat for residential
16 hot water. If you have any questions, again, I would be
17 happy to take them.

18 CHAIRMAN DOUGLAS: Thank you, Mr. McCarthy.
19 Are there any questions or comments on Item 24,
20 Commissioners?

21 COMMISSIONER BYRON: Madam Chair, no question,
22 but one last comment on all of these, because we have
23 approved a number of them today. And, of course, Ms.
24 Mircheva and Mr. McCarthy have heard me say this before,
25 I think this is one of the best programs we have here,

1 and I think we are very fortunate to have you managing
2 these, I hope you enjoy this role at the Commission
3 because I am certainly jealous of it.

4 MR. McCARTHY: Very much so.

5 COMMISSIONER BYRON: Madam Chair, I would move
6 approval of Item - I believe is 24 - yes.

7 COMMISSIONER EGGERT: I will second.

8 CHAIRMAN DOUGLAS: All in favor?

9 (Ayes.)

10 Item 24 is approved.

11 Item 25. Minutes. September 29th, 2010,
12 Business Meeting Minutes. Is there a motion?

13 COMMISSIONER WEISENMILLER: I would move
14 approval of the Minutes.

15 COMMISSIONER EGGERT: Second.

16 CHAIRMAN DOUGLAS: All in favor?

17 (Ayes.) The Minutes are approved.

18 Item 26. Are there any Commission Committee
19 Presentations or Discussion today?

20 COMMISSIONER WEISENMILLER: I was going to make
21 three - hit three topics briefly. But first, I wanted to
22 call everyone's attention to the fact that Vic Alvo died
23 over the weekend, and Vic had a key role in energy
24 legislation after Charlie Warren moved on to DC,
25 certainly then became a very good PUC Commissioner for a

1 number of years, and part of Vic's legacy was mentoring
2 and training V. John White, and I actually first met John
3 when we worked out some legislation that, I think,
4 ultimately carried on co-gen and air quality, so
5 certainly the passing of another one of the initial
6 founding figures, in many respects, for the Energy
7 Commission. Also, I was going to note that Commissioner
8 Boyd and I both attended the ACorps meeting in San
9 Francisco last week, dealing primarily with financing, it
10 was a good session, well attended. We ran into
11 Commissioner Geesman, who is prominent in ACorps and
12 actually had a panel, and one of his panelists was Ex-
13 Commissioner Pfannenstiel, and she gave - actually, it
14 was a very good presentation on what she has been doing
15 on energy in the Navy, so anyway, that was a very good
16 time. And on Sunday, I went to the Conference of Public
17 Utilities Councils. I was invited to give a talk there,
18 a fairly large group, you know, hundreds of people, about
19 70 percent of them were attorneys practicing before the
20 PUC, and the other 30 percent were either lobbyists for
21 the either electric water or Telco Industries, also the
22 PUC members, too. So it was a very interesting
23 gathering. I think it was billed as sort of their 100th
24 anniversary of the PUC, very interesting presentation on
25 the history of the PUC, a very interesting session on PV

1 during a Q&A with a group of people for about an hour,
2 and Mike obviously held up well, and Panama on Smart Grid
3 that Nancy chaired, so it was a very interesting event.
4 Certainly, in the future, it may be an opportunity for
5 some of our attorneys who practice at the PUC to pick up
6 some of their training and education there.

7 CHAIRMAN DOUGLAS: Thank you, Commissioner
8 Weisenmiller. That is all very interesting report and
9 thank you. Are there any other items that Commissioners
10 would like to bring up?

11 COMMISSIONER EGGERT: Yes, maybe just briefly.
12 Last week on Thursday, I participated on a panel to
13 discuss - hosted by the San Jose Business Journal, to
14 talk about California's Clean Energy policies,
15 particularly AB 32, one of the panelists was the Vice
16 President from Nanosolar, who happens to be one of our
17 early small grant recipients, so it was nice to chat with
18 him about the impact of that on his organization, which
19 is now expanding operations, I believe on the order of
20 about a half a billion or \$500 million in manufacturing
21 facilities here in the State of California. Also, on
22 Friday, I participated in a session at West Coast Green
23 to talk about electric vehicle strategies in the State of
24 California that was quite well attended, to talk through
25 some of the challenges and how we might overcome them,

1 and had the great benefit of seeing your former advisor,
2 Mr. Panama Bartholomy, give a talk in the opening for
3 that day to the full audience, to talk about all of
4 California's Clean Energy programs under the CEC, and
5 generated quite a bit of excitement. He also highlighted
6 the Energy Upgrade California sort of impending roll-out
7 of that program, which even after his talk, I heard quite
8 a bit of buzz. People seem to be very excited about that
9 and how it is going to roll-out in the near future.
10 Also, just a wonderful collection of exhibitors that were
11 showing off products, especially in the area of building
12 materials that have great potential to allow us to
13 further reduce our energy consumption from our building
14 stock here in the State.

15 CHAIRMAN DOUGLAS: Thank you, Commissioner, any
16 other reports? Or should we move on to Item 27, Chief
17 Counsel's Report.

18 MR. LEVY: Good afternoon, Commissioners. I
19 would like to discuss two items in closed session with
20 you, as the first item is 27B and the second item is to
21 determine whether facts and circumstances exist that
22 warrant the initiation of litigation, or that constitute
23 a significant exposure to litigation against the
24 Commission.

25 CHAIRMAN DOUGLAS: Thank you, Mr. Levy. Item

1 28. Is there an Executive Director's Report, Ms. Jones?

2 MS. JONES: In the interest of brevity, I have
3 no report today.

4 CHAIRMAN DOUGLAS: Item 29. Is there a Public
5 Advisor's Report? No report, very well.

6 Item 30. Is there any public comment in the
7 room or on the phone? There does not appear to be any
8 public comment, so we will move to Executive Session in
9 15 minutes. Is that enough time for everyone to get
10 their lunches?

11 COMMISSIONER BYRON: Madam Chair, I believe
12 Commissioner Weisenmiller and I may need to get on the
13 road at 12:30, we may be joining you by phone.

14 CHAIRMAN DOUGLAS: All right, so let's start
15 Executive Session, then, at 12:30 so you are able to be
16 on the road and have the phone on. Thank you.

17 (Whereupon, at 12:13 p.m., the business meeting was
18 adjourned.)

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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 11th day of October, 2010.

A handwritten signature in cursive script, reading "Peter Petty", is written over a horizontal line.

PETER PETTY
CER**D-493
Notary Public