

BUSINESS MEETING
BEFORE THE
CALIFORNIA ENERGY COMMISSION

In the Matter of:)
)
Business Meeting)
_____)

CALIFORNIA ENERGY COMMISSION
HEARING ROOM A
1516 NINTH STREET
SACRAMENTO, CALIFORNIA

WEDNESDAY, MAY 8, 2013

10:00 A.M.

Reported by:
Peter Petty

Commissioners Present

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

Staff Present:

Rob Oglesby, Executive Director
Michael Levy, Chief Counsel
Jeff Ogata, Staff Counsel
Blake Roberts, Assistant Public Advisor
Harriet Kallemeyn, Secretariat

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MAY 8, 2013

10:06 a.m.

CHAIRMAN WEISENMILLER: Good morning. Let's start the Business Meeting with the Pledge of Allegiance.

(Whereupon, the Pledge of Allegiance was recited in unison.)

CHAIRMAN WEISENMILLER: Good morning. Let's start with a couple general announcements. First, we're going to have a number of natural gas vehicles outside today and certainly encourage people at lunch period, or at break period, I don't think they're there quite yet, but anyway, they're going to be there 11:00 to 1:00, they'll be parked on the sideway in front of the building, and they include a UPS CNG Box Delivery Van, Waste Management CNG Refuse Truck, a Honda Civic CNG vehicle, a Converted Cargo Van, and a Converted CNG Pick-Up Truck. I want to thank Tim Carmichael, President of the Natural Gas Vehicle Coalition, for pulling this event together, and also to Adam and his crew for coordinating the event, and also to Drew for handling the outreach.

Also, I wanted to flag that Item 41 will be held.

So with that, let's go to the Consent Calendar. I should note, if you look at 1(a), in the third line it says nine months for the extension, and in the fourth

1 line it says one year; in fact, this is for a nine-month
2 extension.

3 COMMISSIONER DOUGLAS: All right, move Consent.

4 COMMISSIONER MCALLISTER: I'll second.

5 CHAIRMAN WEISENMILLER: Okay. All those in
6 favor?

7 (Ayes.) Consent passes 5-0.

8 CHAIRMAN WEISENMILLER: Item 2. Okay, in terms
9 of Energy Commission Committee Appointments, we have only
10 one pending today, which is the Blythe Solar Power
11 Project Amendment, and that committee will be our more or
12 less standard configuration of Commissioner Douglas and
13 Commissioner Hochschild, so with that a motion?

14 COMMISSIONER DOUGLAS: Move approval of that
15 committee.

16 COMMISSIONER HOCHSCHILD: Second.

17 CHAIRMAN WEISENMILLER: All those in favor?

18 (Ayes.) This also passes 5-0.

19 CHAIRMAN WEISENMILLER: So with that, let's go
20 on to Item 3. Item 3 is being held

21 Let's look at Item 4, which is the 2013-2014
22 Investment Plan Update for the Alternative Renewable Fuel
23 and Vehicle Technology Program. Let me do one more
24 thing, and that is just to say that Randy Roesser will do
25 the presentation. And now Commissioner McAllister's

1 announcement.

2 COMMISSIONER MCALLISTER: I, by virtue of the
3 fact that a subcontractor buried fairly deeply in the
4 Investment Plan, but there nonetheless, is my immediate
5 past employer before coming to the Commission, that's the
6 California Center for Sustainable Energy, which is
7 receiving some incentive funds, would receive it if this
8 passes, so I am recusing myself from this vote and will
9 step out until the vote takes place. Thank you.

10 CHAIRMAN WEISENMILLER: Thank you. Randy, go
11 ahead.

12 MR. ROESSER: Good morning, Commissioners. I
13 am Randy Roesser, Deputy Director of the Fuels and
14 Transportation Division. I'm joined today with Jim
15 McKinney, the Alternative and Renewable Fuels and Vehicle
16 Technology Program Manager, to my left, and on my right
17 is Charles Smith, the Project Manager and principal
18 author of the 2013-2014 Investment Plan Update.

19 We are here today to present the 2013-2014
20 Investment Plan Update for possible adoption. If
21 adopted, this Update will establish the program's funding
22 allocations for the fiscal year beginning July 2013.

23 Before I begin my presentation, I would like to
24 acknowledge the work and support of the program's
25 approximately two dozen Advisory Committee members who

1 have continually devoted a lot of time and effort in
2 moving this program forward and helping us develop the
3 plan, the update that we bring forward to you today.

4 I'd also like to thank Chair Weisenmiller and
5 Commissioner Douglas and their Advisers, which I must
6 mentioned their Advisers for their invaluable support and
7 work leading up to this update today. Also, I'd like to
8 welcome Commissioner Scott as our new Transportation
9 Commissioner, welcome, and we look forward to working
10 with you on the future updates, going forward.

11 And lastly, I'd like to acknowledge the
12 leadership of Commissioner Peterman, who provided us a
13 significant amount of work and guidance in leading up to
14 this update before her departure to greener pastures,
15 maybe -- I hope they're greener pastures for her.
16 Anyway, this program wouldn't be where it is today, and
17 certainly this update wouldn't have made it to this stage
18 without Commissioner Peterman's support and guidance, so
19 I wanted to acknowledge her.

20 Okay, so the first slide we're going to talk
21 about today is I just wanted to briefly outline the
22 primary purpose of the program, which is to help attain
23 the State's climate policies, climate change policies.
24 This program also supports complimentary State goals of
25 air quality improvement, increasing alternative fuel use,

1 reducing petroleum dependence, and promoting economic
2 development in the State of California.

3 To date, four previous investment plans have
4 allocated more than \$450 million to a variety of funding
5 allocations. Of those allocated funds, more than 220
6 projects totaling about \$350 million have been funded to
7 date. As this current fiscal year winds down, staff are
8 focused on executed awards from recently closed
9 solicitations from those previous Investment Plans,
10 developing future allocations for monies that continue to
11 be available, as we have a two-year encumbrance period
12 for these fund each year, and managing the growing
13 portfolio of active projects in the program.

14 As explained in the chart up on the screen now,
15 this program utilizes a portfolio approach supporting
16 multiple fuel types and vehicle technologies. We do not
17 pick winners or losers, so we take this portfolio
18 approach of supporting a variety of fuels and
19 technologies.

20 As you can see, investments have been made in
21 projects across the supply chain from production to
22 infrastructure projects, to vehicle and manufacturing,
23 and to other smaller but certainly important supporting
24 projects.

25 The program is making significant contributions

1 toward the goals of the Governor's Zero Emission Vehicle
2 Action Plan, including installation of charging
3 infrastructure, development of regional plug-in vehicle
4 readiness plans, supporting a network of hydrogen fueling
5 stations, and supporting the Air Resources Board Clean
6 Vehicle Incentive Programs.

7 The program also supports the transformation of
8 the medium- and heavy-duty truck sector with advanced
9 technology demonstration projects and natural gas truck
10 deployment projects, as well.

11 Additional highlights include significant
12 investment in sustainable biofuel production, including
13 waste-based feedstocks. As you're well aware, waste-
14 based biofuels can produce some of the lowest greenhouse
15 gas emission results among alternative fuels that this
16 program funds.

17 In the 2011 Benefits Report, information was
18 provided among other results showing significant
19 greenhouse gas emission reductions and petroleum fuel
20 displacement results. And I would like to just note here
21 today that work has already begun by staff on development
22 of the 2013 Benefits Report, which will be completed in
23 the fall of this coming year.

24 An important attribute of the program is
25 leveraging non-state investment, and the slide here shows

1 some of the dollars that this program has brought into
2 the state in non-state funds, which is very important to
3 the continuing improvement of the state's economy.

4 The program continues to receive broad interest
5 evidenced by significant over-subscription in its
6 solicitations, and the program has trained thousands of
7 California workers and it's creating new clean energy
8 jobs, all important accomplishments of this program.

9 This next slide provides some more details on
10 the clean energy jobs that were created by the program.
11 As you can see in this chart, the programs are
12 concentrated in the manufacturing, construction, and
13 engineering sectors, sectors that were hard hit during
14 the last economic downturn.

15 Development of this 2013-2014 Investment Plan
16 Update spans approximately eight months, beginning last
17 fall in mid-September, leading up to where we are today
18 and when we're asking for your adoption of the plan.

19 Development of the Update is a public
20 transparent process that includes substantial stakeholder
21 input, received through public workshops and docketed
22 comments. We do encourage and invite significant
23 participation by the public and that call is received,
24 and participation is significant during the development
25 of the Update.

1 This chart is just a quick listing of the
2 current Advisory Committee members, it just shows the
3 variety of representatives from industry, non-
4 governmental organizations, academia, and other State
5 agencies, all strong contributors to what brings us here
6 today with this Update.

7 The next half dozen slides turn to the heart of
8 the matter, funding allocations included in this Update.
9 The Alternative Fuel Production Allocation continues at a
10 significant level, supporting projects that have both
11 short and long term value, specifically the 2020 Low
12 Carbon Fuel Standard and the 2050 Greenhouse Gas Emission
13 targets for the State.

14 This update also proposes significant
15 investment in alternative fuel infrastructure, continuing
16 investments in electric vehicle charging infrastructure
17 focused largely on work places, fleets, and multi-unit
18 dwellings, as well as ensuring that these investments
19 made under this program complement and do not overlap the
20 NRG Energy Settlement investments being made in the same
21 sector; that's an important distinction that we are
22 working closely with the terms of that settlement so that
23 we complement those investment being made.

24 It also includes hydrogen fueling
25 infrastructure supporting the deployment of Fuel Cell

1 Vehicles in the 2015-2017 timeframe, and we expect those
2 vehicles to be rolled out in California, and provides for
3 natural gas fueling infrastructure supporting public
4 fleets and other high priority fueling needs.

5 This Update also continues funding support for
6 natural gas and light-duty vehicle deployment. It also
7 includes support for medium- and heavy-duty demonstration
8 projects, an important investment supporting long term
9 greenhouse gas emission reduction and air quality goals
10 for the State of California.

11 Other categories in the Investment Plan Update
12 where funding is proposed includes Emerging Opportunities
13 which has been a category that's been in the plan over
14 the years, supporting projects with a specific focus on
15 those projects that provide Federal cost sharing,
16 bringing additional outside non-state funds into
17 California. The Manufacturing Sector is funded at a
18 lower level this year, as staff has just recently
19 completed a sizeable manufacturing solicitation and
20 awards are being rolled out currently for those results
21 from that prior solicitation.

22 And, of course, we're continuing support for
23 workforce training and development projects important to
24 ensure that California workforce is available to support
25 the transition to cleaner fuels and vehicle technologies

1 supported by this program.

2 Finally, the Update provides funding for
3 regional alternative fuel readiness and planning
4 activities, and the Centers for Alternative Fuels,
5 building on allocations from previous Investment Plans.
6 I can report that, at the two recent Advisory Committee
7 meetings where the Investment Plan Update was discussed
8 that there was strong support across most of the Advisory
9 Committee members for both of these categories, so we
10 continue that support and we believe this is an important
11 -- these are two important categories that help move the
12 whole purpose of the program forward.

13 Collectively, the seven funding allocations
14 we've just discussed, mentioned in the previous slides,
15 the program's annual budget of the \$100 million
16 appropriation, and it's here in chart form to show dollar
17 amounts by specific categories.

18 If adopted today, this Investment Plan will
19 drive the funding projects beginning fiscal year 2013-
20 2014 accomplished through current and future
21 solicitations and agreements. And, as implementation of
22 this plan progresses beginning in July, staff will begin
23 working -- and I'll shudder to say this -- but staff will
24 begin working on the 2014-2015 Update in early fall. So
25 we're constantly moving forward with the program, and

1 that is a good sign.

2 Concluding with the last slide here, I'll
3 conclude with the most informative and, frankly,
4 important slide, which again summarizes the funding
5 allocations by category for the 2013-2014 Investment Plan
6 Update, and I ask for the Commission's approval of this
7 Investment Plan Update. Charles, Jim and I would be
8 happy to answer any questions you might have.

9 CHAIRMAN WEISENMILLER: Okay, thank you. Let's
10 take public comment and then we'll see about Commissioner
11 questions or comments. Let's start with Bonnie Holmes-
12 Gen.

13 MS. HOLMES-GEN: Good morning. Bonnie Holmes-
14 Gen with the American Lung Association, California, and
15 pleased to be on the Advisory Committee, enjoyed serving.
16 And I'm here to support the 118 Program and its
17 Investment Plan, appreciation all the work that's gone
18 into the development of this plan, I know it's an
19 enormous effort.

20 I want to just focus for a moment on how this
21 program is a critical program for the Lung Association's
22 perspective because of the key purpose of promoting our
23 air quality and health goals, in addition to getting to
24 our climate change 2050 goals.

25 We recently released our State of the Air

1 Report, it's an annual report we release every year. We
2 talk about a lot of progress, but we also talk about the
3 tremendous amount of work we have to do to get to our air
4 quality goals and the huge public health burdens. And we
5 focus a lot on the transformation that we need of our
6 fuels and technologies to get to our clean sustainable
7 alternatives. We need these alternatives to bring real
8 health benefits in terms of reduced respiratory illnesses
9 and hospitalizations and emergency room visits. We need
10 to get to fewer heart attacks and strokes and fewer
11 premature deaths. All of this is really dependent on
12 transforming the fuels that we use and the technologies
13 that we use in the transportation sector, which is the
14 biggest source of our air pollution problems in
15 California.

16 So we believe this plan reflects significant
17 coordination between our air quality and our climate
18 change needs, provides funding to support both strategies
19 that get near term benefits in communities, as well as
20 those that are making that long term change we need to
21 get to our 2050 goals.

22 And in particular, I wanted to call out some of
23 the key elements that you've mentioned in terms of
24 hydrogen. We support the staff's proposed acceleration
25 in the hydrogen funding. We think it's critical to

1 launch the fueling network that we need to support the
2 roll-out that is coming, and we need the commitment in
3 this plan and in future plans to make sure that we can
4 demonstrate California's commitment to fuel cell vehicles
5 and make sure these stations are available. In terms of
6 electric vehicles, we appreciate the continued support,
7 we think that's critical, dedication of funding toward
8 plug-in electric vehicle purchase incentives, and the
9 funding toward electric vehicle charging infrastructure.
10 We would note that there still is a need for more funding
11 on those purchase incentives and we need to -- I think
12 we're going to have a gap pretty soon and we need to work
13 together and figure out how we're going to fill that gap
14 because we still need support for that program and,
15 unfortunately -- well, fortunately, fortunately the money
16 is running out -- that means that we're getting
17 tremendous demand for these vehicles, and we're pleased
18 to see that, but we need to keep that support going for
19 the next couple of years.

20 We're also very pleased with the medium- and
21 heavy-duty advanced vehicle demonstration projects. This
22 is an example of something that's grown over the past few
23 years in the Investment Plan and this is a project that
24 provides real near term benefits in communities in
25 reducing toxic diesel pollution exposures, while of

1 course promoting the transformation to cleaner fuels in
2 that sector, which is critically important.

3 So bottom line, this is money well spent,
4 especially when you consider the billions of dollars in
5 economic costs that are imposed on our society because of
6 our dependence on dirty fuels. Thanks for the
7 opportunity to participate in this important effort, on
8 this plan. I truly appreciate it and I do feel like this
9 is the best Investment Plan that's come before you, so
10 I'm very pleased to support it. Thanks.

11 CHAIRMAN WEISENMILLER: Well, thank you for
12 your service on the Advisory Committee and for being here
13 today. Jim Boyd.

14 MR. BOYD: Good morning, Commissioners. It's a
15 pleasure to be here. I think this is a first. I've been
16 here just a few short minutes as you've opened the
17 meeting, but all of a sudden the 13 years I sat up there
18 went flashing by in an instant, and it seems like I
19 haven't been gone at all.

20 Well, thanks for affording me this opportunity.
21 I'm Jim Boyd with the Sacramento firm of Clean Tech
22 Advisors, but I'm here representing today Vopak Terminals
23 of Los Angeles. I'd like to just acknowledge Mr. Anthony
24 Santich, who is the Sales and Marketing Manager for Vopak
25 in Los Angeles, and Ms. Natalie Hoffman, who is a

1 consultant to Vopak. I would note that Ms. Hoffman and I
2 have become Advisors to Vopak on about April 21st or
3 22nd, so this has happened rather quickly. And they're
4 of course here today, as am I, in support of our request
5 to you, and are available to answer any questions you
6 might have.

7 First, let me just say, as one with a lot of
8 experience with AB 118 Investment Plans from the very
9 beginning, if not creation of the legislation, let me
10 compliment the staff for their work with what I know to
11 be a very complex subject area, and it's nice to hear
12 them complimented and it's nice to have seen them again
13 in the last few days; I may have been gone for a year and
14 a half, but it's good to see old friends again.

15 We are here to make what some might feel is an
16 unusual request, that you make however what we believe is
17 a minor modification to the Draft Plan before you, a
18 modification requested in two letters to the Commission
19 submitted first on the 3rd of December last year while
20 the plan was being drafted and considered by the Advisory
21 Committee in going through the public process and its
22 meetings, and on April 23rd, a letter submitted in the
23 hopes of beating the release of the Final Draft, but I
24 note that the draft release and the letter seem to have
25 crossed in the mail, so we didn't quite make our goal of

1 trying to get it here ahead of time.

2 Let me give you some context and explanation
3 for what I'm saying and what the ask has been. Vopak is
4 the world's largest independent tank storage provider,
5 and I emphasize the word "independent," meaning they
6 don't own the product, they are just people who provide
7 terminal storage and operations thereof to customers who
8 ask for space in their facilities. They operate
9 worldwide, but they have two facilities in California and
10 in the Ports of Los Angeles and Long Beach, both.
11 They're well known to staff of the CEC and have met and
12 shared with staff on more than one occasion their
13 findings and their knowledge regarding product storage
14 needs and supply and demand of liquid fuels and other
15 liquids, and forecasts for the same, including their in-
16 depth California study that they mentioned to staff
17 earlier this year, and staff requested that they come and
18 share their findings with the staff, that Vopak did last
19 November. This interaction over the past year between
20 Vopak and the staff turned out to be a preamble to
21 Vopak's subsequent suggestion and request of the Energy
22 Commission.

23 Their December suggestion, the December 3rd
24 letter I referenced, was that the Draft Investment Plan
25 be modified "to include funding for infrastructure to

1 handle gasoline substitutes, specifically marine storage
2 terminals." This letter was docketed, distributed, and
3 available for consideration during the entire Investment
4 Plan drafting and Advisory Committee meeting process that
5 continued for some months beyond that date, but there was
6 no actions seemingly taken on this request, thus the
7 second letter was forwarded on April 23rd reiterating the
8 request. And I know that document is docketed for the
9 use of the staff, but as of yesterday didn't appear to be
10 in the public docket.

11 Now the reason for this request and suggestion,
12 as I like to call it, and why I stand before you today to
13 repeat and emphasize that request, are many. First of
14 all, while California moves forward to facilitate the
15 development of and deployment of alternative vehicle
16 technologies and the alternative fuels for those
17 technologies, there still remains a massive fleet of
18 vehicles in California dependent on some form of liquid
19 fuels, and California policies are striving to make these
20 fuels cleaner, contributing fewer greenhouse gasses, and
21 also to reduce our overall use of petroleum.

22 Secondly, there's a long identified need to
23 supply California with low Carbon Intensity, or CI fuels,
24 and fuel substitute to meet California's climate goals as
25 reflected in AB 32 and the Low Carbon Fuel Standard

1 established to deal with transportation fuels and their
2 greenhouse gas emissions. The Investment Plan makes
3 frequent references to these goals, and to the Low Carbon
4 Fuel Standard, and to Alternative Fuels Programs, and
5 specifically to fuel substitutes including "gasoline
6 substitute fuels," which is contained even in the preface
7 to the Investment Plan.

8 Thirdly, fuel substitutes of today, as we know
9 them, are not able to meet CI requirements of tomorrow
10 and I think that's something staff on multiple agencies
11 in California have known for some time. Supplies of new
12 lower CI gasoline substitutes are needed to meet this
13 need, particularly the needs and requirements of the
14 second and third tranches of the Low Carbon Fuel
15 Standard, the 2014-2016 period, and then the 2017-2020
16 requirements are all becoming quite stringent.

17 Fourthly, supplies of low CI gasoline
18 substitutes are available in the world market and
19 obtaining and using these supplies has been anticipated
20 in the operations of California's program, and I can say
21 that from my position of sitting there handling
22 transportation for all the years I was involved with the
23 Commission, and the many many interactions with our
24 friends at the Air Resources Board through those years,
25 so oft discussed subject area. These substitutes will be

1 needed for the foreseeable future and until new
2 substitutes, hopefully from California facilities from
3 operations this Commission, frankly, has helped finance
4 through this very program, and until they become
5 operational and producing significant value of volumes
6 we're going to be relying on what the world market can
7 supply. The new gasoline substitutes will in large part
8 have to be obtained and delivered by means different from
9 the ways that today's, let's call them, traditional
10 supplies are obtained; mainly, they will have to be
11 purchased on the world market, brought by marine tanker
12 to U.S. ports, and offloaded and stored, then delivered
13 to customers, which practice differs from today's
14 practices of delivery and storage primarily in rail tank
15 cars from their points of production here in the United
16 States. And I would note that the current U.S. crew by
17 rail demands are putting significant pressure on rail car
18 availability these days and thus to cost of rail are
19 being pressured.

20 Therefore, as we see it, as many have seen it,
21 new transfer and storage facilities will be needed. At
22 present, there are very limited capabilities to land
23 tanker loads of these new substitutes in California. The
24 predominant practice is to land them in Houston and rail
25 them to California, involving greater costs and greater

1 criteria emission pollutants, and greater greenhouse gas
2 emissions leading to a slightly higher CI, as we call it,
3 for these fuels.

4 Fifthly, landing these gasoline substitutes
5 instead in California facilities could benefit California
6 in many ways: lower costs to California customers and
7 thus to California citizens in the cost of the fuels.
8 This is because of both the volumes and the delivery
9 point benefits that would be derived; lower C.I. ratings
10 for these fuels for the very same reasons -- as I said,
11 fewer air pollution due to the transportation and
12 emissions, frankly, it would generate investments in
13 California's economy through construction jobs in
14 California wherever said facilities were built, and we
15 raised the opportunity of making California a hub for
16 fuel substitutes, further benefiting the economy and jobs
17 in the future versus having Houston get the benefit of
18 these type jobs.

19 Having marine tanker landings and storage
20 facilities in California would further assure us all, and
21 particularly the Commission and those who worry about
22 this, the flexibility and security in meeting future
23 California demand; when it's on your turf in great
24 volumes, you're in a greater position to influence the
25 market and take care of your customers.

1 There's a substantial basis of need for these
2 facilities --

3 CHAIRMAN WEISENMILLER: Jim, could you wrap it
4 up?

5 MR. BOYD: I will. There is precedent for
6 including provisions for and funding of fuel substitute
7 infrastructure. The IP has contained an activity of
8 upstream biodiesel infrastructure and funding therefore
9 for several years. The IP also has activities listed,
10 present and past, to fund diesel substitute production
11 and gasoline substitute production.

12 It seems an unfortunate happenstance there is
13 not provision in the Investment Plan for upstream
14 gasoline substitute infrastructure. A request for this
15 was made and goes unanswered. There has been no champion
16 within or without staff, no constituency represented on
17 the Advisory Committee to address and push for this all
18 through the investment process; as I have seen, there is
19 a lone sponsor of this idea and they're here today.

20 So why now? There's a well known need for
21 lower CI gasoline substitutes and in the very near future
22 timeframe that I've referenced, it's well publicized,
23 it's critical for the IP funding activity to be
24 established in the 2013-2014 Investment Plan because
25 projections for the requirements of low carbon

1 substitutes under the LCFS mean that marine terminal
2 storage of substance will be required soon. Given the
3 timelines to plan, permit and construct infrastructure of
4 this magnitude, any project proponent has to start,
5 frankly, in the 2013 time horizon, it cannot wait another
6 year as has been suggested by some.

7 In summary, our request is a new funding
8 activity, upstream gasoline substitutes, within the
9 category Alternative Fuel Infrastructure, and funding to
10 at least incentivize some beginning in this arena, let's
11 just say a million dollars, sending a signal that the
12 State of California means business regarding these
13 programs and this commodity. And the tables have been
14 before you and they summarize that.

15 So I thank you for your consideration, it's
16 been a pleasure to be here and to see you all, and I
17 would note that perhaps, as an alternative, the
18 Commission could direct the staff to find an existing
19 category and activity classification in the plan which
20 staff could use to solicit proposals to accomplish the
21 objective laid out here. But we've been told to date
22 repeatedly there is no such opportunity within today's
23 plan, thus I'm here today. Thank you.

24 CHAIRMAN WEISENMILLER: Okay, thank you. Tim
25 Carmichael.

1 MR. CARMICHAEL: Good morning, Commissioners.
2 Tim Carmichael with the California Natural Gas Vehicle
3 Coalition. Just here to echo support for the plan. As
4 you know, I've been a member of the Advisory Committee
5 for a few years now and I am pleased to see a progression
6 with each of these plans. I really believe they have
7 gotten better with each iteration and it doesn't mean
8 we're there yet as far as some perfection, but there are
9 good things to be happy about with this plan.

10 You know, we've debated and discussed all the
11 details about the allocation of the money, but one of the
12 things that matters to our organization, but to I think
13 all the members of the Advisory Committee and
14 increasingly so the members of the Legislature, is how
15 much transparency is there with these plans and with the
16 discussions and with the process and thinking that goes
17 in behind the numbers, and I think each round that we do
18 this we're getting better at that. And that, in fact,
19 supports our position in advocating for an extension of
20 this program going forward. So with that, I just wanted
21 to say that we're here in strong support. It was good to
22 work with the staff on this process and appreciate all
23 their efforts.

24 I also will mention that, at Commissioner
25 Weisenmiller's invitation, we have four or five fine

1 natural gas vehicles out in front of your building today,
2 which hopefully everyone will get a chance to come and
3 see in the flesh -- or in the metal. Thank you.

4 CHAIRMAN WEISENMILLER: Well, again, thank you
5 for your service on the Advisory Committee and,
6 obviously, all the Advisory Committee members for helping
7 us develop this Investment Plan, and also thank you for
8 helping organize the event today.

9 Is there anyone online on this topic? Okay,
10 then I'll start off the discussion. I think, again, this
11 has been a pretty good effort as people -- I have been
12 involved in I'm going to say almost all the Advisory
13 Committee meetings, I'm not sure about one, frankly, but
14 certainly there's been a good opportunity to work first
15 with Commissioner Peterman and her office, and then later
16 with Commissioner Douglas and her office on this. And I
17 certainly appreciate the Advisory Committee members and
18 their long participation in it.

19 I'm going to -- you know, this is a very
20 important document, it's very important I think in terms
21 of getting out the message on our accomplishments here
22 and the logic for what we're doing, and I think it does a
23 very good job on that. I think in terms of Commissioner
24 Boyd's comment, I think, as I have probably signaled
25 before, it's certainly an interesting concept to look at

1 that piece of the infrastructure; however, in terms of
2 just looking at the process going forward, this is the
3 sort of thing that I really want vetted by the Advisory
4 Committee and not sort of a last minute appeal, so I
5 would certainly encourage you to come back next year in
6 the Investment Plan process and to try to make the case
7 and, obviously having said that, we're looking for
8 categories which are pretty broad, we're not looking for
9 a category which looks or, again, at this point we
10 haven't had really a chance to do a lot of scoping on it,
11 but it sounds more like an individual set aside, you
12 know, we're looking for something that's much more
13 competitive, but I think certainly in terms of coming in
14 next year and laying out the basic potential needs on
15 infrastructure that we'd like to hear that and certainly,
16 as part of that, always remind people that to the extent
17 when we put investment funds out for physical
18 infrastructure, we have to do a CEQA document. So we're
19 certainly happier if people bring us stuff which has gone
20 through a local CEQA process, which certainly will make
21 it much faster at the end to occur. But otherwise, you
22 could basically have us go through a CEQA process, and
23 then go through it at the local level. And that tends to
24 be more, at least -- I don't know if necessary at least
25 double the quality of decisions, but certainly it doubles

1 the length.

2 So with that, again, I'm happy to open it up
3 now for questions and comments, but again, I think --

4 COMMISSIONER DOUGLAS: Yeah, I'll just say
5 briefly that I was only able to attend one Advisory
6 Committee meeting and I stepped into that meeting after
7 Commissioner Peterman was appointed to the PUC, it also
8 caused my first two years on the Commission to flash
9 before my eyes in the first 30 seconds or so of that
10 meeting because I had the honor of serving on the AB 118
11 and Transportation Committee with Commissioner Boyd and
12 it was for the first two years of the program, it was
13 good hard work getting the program off the ground. So
14 anyway, thank you, Jim. And I think that staff has done
15 a very good job with this Investment Plan. I was really
16 pleased to see the interaction between the Advisory
17 Committee meetings and staff and really kind of reflect
18 in that meeting about how far we have come in the years
19 since this program was first launched. So I want to
20 thank staff and thank the Advisory Committee members, and
21 I'm definitely supportive, very supportive of the
22 Investment Plan. I think people did a good job on it.

23 COMMISSIONER HOCHSCHILD: I'd like to chime in,
24 as well and thank staff for your hard work and, Mr.
25 Chair, for your leadership on this, and Commissioner

1 Douglas. And I'm very eager to support Commissioner
2 Scott going forward with your leadership, I'm excited
3 what can be accomplished.

4 One of the indicators of success to me is
5 follow-on funding from the private sector, so I was very
6 encouraged to see that basically in a nutshell we've
7 invested \$350 million in public dollars that has
8 leveraged \$450 million from the private sector, which is
9 I think sort of the ultimate validation that we're on a
10 good course. What wasn't clear to me, however, is what
11 is the allocation of that money, and maybe there was a
12 chart that I missed. Is that -- do we have a breakdown
13 of where that private sector has flowed within?

14 MR. SMITH: We don't have it on hand, but it is
15 something that we can prepare.

16 COMMISSIONER HOCHSCHILD: Okay. Have we
17 entertained the idea of actually having an Investor
18 Advisory Council of those, or have we hosted a gathering
19 of those --

20 MR. SMITH: Not a separate Advisory Committee.
21 We do have a representative of venture capital that
22 serves on the Advisory Committee --

23 COMMISSIONER HOCHSCHILD: On the existing
24 Advisory Committee, okay. In any case, I think it's very
25 encouraging and I just wanted to highlight that because I

1 think that's a great validation of your work.

2 MR. MCKINNEY: Commissioner Hochschild, Jim
3 McKinney, Program Manager. In terms of delineating the
4 private sector match, that's something that we can do in
5 the forthcoming Benefits Report, as well, so we can get
6 that information to you.

7 COMMISSIONER HOCHSCHILD: I'd really appreciate
8 seeing that. Thank you.

9 CHAIRMAN WEISENMILLER: Before we go on, we
10 have Chief of Staff of Assemblyman Hall on the line.
11 Please. Oh, here (in the room).

12 MR. SCHANZ: Good morning, Mr. Chairman. I'll
13 be very brief. My name is Terry Schanz, Chief of Staff
14 to Assemblymember Isadore Hall, who represents the 64th
15 Assembly District, which includes portions of Long Beach
16 and Wilmington that lead up to the Ports of Long Beach
17 and Los Angeles. I just wanted to stand here today on
18 behalf of Mr. Hall to express his support of the 2013-
19 2014 Alternative Fuel Investment category in the
20 Investment Plan. As the Commission knows, the
21 Legislature has worked very hard for several years to not
22 only modernize our Ports to make them increasingly
23 competitive and increase the capacities, but to improve
24 the air quality in the surrounding communities and reduce
25 energy consumption and make them more efficient, and to

1 reduce cost for operating businesses in the area.

2 This is not just a district issue, it's not a
3 community issue, this is really a national issue. As we
4 look at our national economy and the flow of goods and
5 the energy that is used to move goods in and out of the
6 ports, we really feel that providing infrastructure for
7 alternative fuels in the future is going to be an
8 important component not just for our national energy
9 security, but it's about helping the port to operate in a
10 more efficient manner, maintain and uphold our goals to
11 become compliant with AB 32, and most importantly to
12 continue the economic growth that we have in the ports
13 for years to come. So with that, we would definitely
14 encourage the Commission's support and consideration of
15 that when the time is appropriate. Thank you.

16 CHAIRMAN WEISENMILLER: Well, thank you. I
17 would certainly agree with you. I think 18 percent of
18 the economy in Southern California is from goods movement
19 and we can all speculate on what the air impacts are from
20 that goods movement, but again it's a significant part of
21 that. We actually have a number of aspects of 118 that
22 we work with the South Coast and certainly Mayor Foster,
23 who actually was one that was here the first time I was
24 at the Energy Commission, and certainly always looking
25 for opportunities on, again, we both look for

1 opportunities on how we can work together on trying to
2 help on the port there. So certainly, we're very
3 conscious of the issues down there and certainly trying
4 to work with that and, again, it would be probably a good
5 opportunity for the staff to get more of a follow-up with
6 you on the programs we already have down there, which
7 isn't to say we couldn't do more, but at least provide
8 that context. And certainly we would be happy to work
9 with you in the future dealing with the sort of air
10 quality, energy, and goods movements issues where, as I
11 transition to Commissioner Scott, that was in fact part
12 of her past, right?

13 COMMISSIONER SCOTT: I just wanted to add and
14 echo the thanks to Chair Weisenmiller and to Commissioner
15 Douglas for their leadership in putting this plan
16 together, and also echo the thanks that went to the
17 staff, to Charles Smith, the report's primary author, and
18 to Jim McKinney, and to Randy Roesser and his team for
19 all of their great work on this, and also the two dozen
20 or so folks that are at the beginning of the
21 acknowledgements, who lent their time and expertise to
22 put this plan together, and our Advisory Committee, as
23 well. I also made note of some of the same things that
24 Commissioner Hochschild mentioned about how the private
25 sector has also put money in so that we can leverage the

1 dollars that we have, I think that's really important.
2 And I just wanted to say thank you for the warm welcome,
3 and I very much look forward to working with the staff
4 and the Advisory Committee and the stakeholders to
5 implement this plan, and to get going on the development
6 of the next one. So, thank you.

7 COMMISSIONER DOUGLAS: So with that, then, I
8 will move approval of Item 4.

9 COMMISSIONER SCOTT: Second Item 4.

10 CHAIRMAN WEISENMILLER: All those in favor of
11 Item 4?

12 (Ayes.) Item 4 passes unanimously.

13 CHAIRMAN WEISENMILLER: I just want to take a
14 second, again, on the acknowledgements. First, I want to
15 acknowledge Commissioner Boyd for helping us get this
16 program up and sort of seeing the Investment Plan through
17 the years to where we have it now, certainly that's been
18 a huge contribution to this effort. And again, I
19 certainly hope that you'll be participating in next
20 year's Investment Plan as we go forward so we can try to
21 deal with the issue that you've raised. And I obviously
22 want to again thank all the Advisory Committee members
23 and at the same time I want to thank the staff,
24 particularly Jim McKinney and Charles Smith, and
25 obviously Randy Roesser and John Butler for this

1 activity. And I want to acknowledge, obviously,
2 Commissioner Peterman and her staff, and Sekita Grant in
3 my office, and Commissioner Douglas and her staff, and I
4 must say I'm looking forward to transitioning this one
5 over to Commissioner Scott. So with that, again, thank
6 you. Let's go on to Item 5.

7 Item 5 is going to be Palomar Energy Center,
8 01-AFC-24C. And Dale Rundquist, please.

9 MR. RUNDQUIST: Good morning, Commissioners.
10 My name is Dale Rundquist, and I'm the Compliance Project
11 Manager for the Palomar Energy Center. With me this
12 morning from the legal office is Jeff Ogata. Air Quality
13 staff is also present. Representatives from the Palomar
14 Energy Center are here, as well as on the phone.

15 The Palomar Energy Center, a 500 megawatt
16 combined-cycle power project owned by San Diego Gas &
17 Electric Company, or SDG&E, was certified by the
18 California Energy Commission on August 6, 2003, and began
19 operation on April 1, 2006. It is located in the City of
20 Escondido in San Diego County, California.

21 On December 28, 2012, SDG&E filed a petition
22 with the Energy Commission requesting to modify Air
23 Quality Condition of Certification AQ-SC13. The proposed
24 modification would change wording in AQ-SC13 and allow
25 SDG&E more time per week to repair a faulty emergency

1 generator that was installed in 2011. Per the condition,
2 maintenance testing would continue to be performed
3 between the hours of 10:00 a.m. and 3:00 p.m. SDG&E
4 would also be able to perform all of the maintenance and
5 testing of the generator within the 52 hours per calendar
6 year, as previously permitted, without increased
7 emissions or other adverse air quality impacts. Staff is
8 also requesting Errata to the published staff analysis to
9 replace part of the original verification that was
10 inadvertently omitted.

11 The Notice of was docketed, posted to the Web,
12 and mailed to the Post-Certification Mail List on January
13 9, 2013. The staff analysis was docketed, posted to the
14 Web, and mailed to interested parties on March 4, 2013.
15 The public comment period ended on April 2, 2013, and no
16 comments were received.

17 Energy Commission staff reviewed the petition
18 and finds that it complies with the requirements of Title
19 20, Section 1769(a) of the California Code of Regulations
20 and will remain in compliance with all applicable laws,
21 ordinances, regulations, and standards subject to the
22 provisions of Public Resources Code Section 25 -- 25.
23 Staff recommends approval of the proposed modification
24 based upon staff's findings. Thank you.

25 CHAIRMAN WEISENMILLER: Okay, Applicant?

1 MS. KRIPKE: Good morning, Commissioners. My
2 name is Adrianna Kripke. I am Senior Counsel in the
3 Environmental Law Department for San Diego Gas & Electric
4 Company, SDG&E. And first I want to thank the
5 Commissioners and staff for considering this application.
6 SDG&E has a high priority of repairing the Critical
7 Services Generator at Palomar Energy Center and this
8 application is an important part of that repair process.

9 Next, I simply want to say that I'm available
10 to answer any questions you may have about the
11 application. If you have any technical questions, I will
12 refer you to two of my colleagues who are on the phone;
13 they are Jason Dobbs, who is the Compliance Administrator
14 at SDG&E for Palomar Energy Center, and then Sara Head,
15 she is SDG&E's Air Quality Consultant at AECOM Technical
16 Services.

17 CHAIRMAN WEISENMILLER: Thank you.
18 Commissioners, comments, questions? I think there's a
19 clicking noise on the telephone, if we could mute --
20 actually please, online participants, if you could mute
21 yourselves? Thanks. No, try again. Again, if you've
22 got a speaker phone or something, there's a clicking
23 noise that we'd appreciate it if you would actually --

24 COMMISSIONER HOCHSCHILD: I'm not finding this
25 section in my binder, but just so I'm clear what the

1 issue is, that there's a limit to one hour per week that
2 this Critical Services Generator can operate, and the
3 request is to expand the time? What's the issue?

4 CHAIRMAN WEISENMILLER: Actually, there's two
5 issues. I mean, again, I'll have the staff -- the basic
6 thing we're looking at here is an amendment to an
7 existing permit, so the question is does this amendment
8 have any significant environmental impacts. And that's
9 back to the staff to basically explain the framing.

10 MR. RUNDQUIST: Yes. Basically they want to
11 have time to repair the engine. They've tried on several
12 occasions to repair the engine within the one-hour per
13 week timeframe, and they have not been able to
14 successfully do that. The one-hour per week timeframe
15 translates into 52 hours per year. They'll still be able
16 to do all the maintenance and testing within those 52
17 hours per year, but they want time to repair the engine
18 with more than just one hour per week.

19 COMMISSIONER HOCHSCHILD: So essentially just
20 the flexibility of when the 52 hours are covered. I get
21 it.

22 MR. HOCHSCHILD: And it's still between the
23 hours of 10:00 a.m. and 3:00 p.m.

24 COMMISSIONER HOCHSCHILD: And that's the only
25 issue we're voting on?

1 MR. RUNDQUIST: That's the only issue.

2 COMMISSIONER HOCHSCHILD: Okay, got it.

3 COMMISSIONER MCALLISTER: Could you talk about
4 like what is the problem with the engine and why it's
5 proving so difficult to repair?

6 MS. KRIPKE: I think this is a technical
7 question that I will refer to my colleagues on the phone.

8 MR. DOBBS: Thank you, Adrianna. This is Jason
9 Dobbs. We have a small group here from the plant. Can
10 everybody hear me okay?

11 COMMISSIONER MCALLISTER: Yes.

12 MR. DOBBS: So if I understand the question, it
13 was basically what are the difficulties we're running
14 into with repairing the unit within the one-hour
15 timeframe per week. And I'm going to go ahead and let my
16 Plant Manager address that question, and we also have our
17 Operations Manager here at Palomar to help answer the
18 question. So my Plant Manager is Carl LaPeter and my
19 Operations Manager is Kevin Counts, so I'll let Carl try
20 to address the question.

21 MR. LAPETER: Hi, this is Carl LaPeter, the
22 Plant Manager. You know, the difficulty we're having is
23 that in order to repair the engine we have to go through
24 some testing and troubleshooting. That requires us to
25 run the engine just to see what's not functioning

1 correctly, or how it's not functioning correctly, and
2 then we need to sit down and effect repairs on the
3 engine, and then we need to restart the engine to test to
4 see that the repairs have corrected the problem. That
5 evolution, we may have to iterate that evolution a few
6 times to narrow down the issues and correct all the
7 problems. And in doing that, we have to run the engine
8 for a lot more time than one hour per day.

9 COMMISSIONER MCALLISTER: So I guess I'm
10 curious, is it that the engine won't start and stay on?
11 Is it an emissions issue? Is it a not reaching maximum
12 power issue? Or what's the problem with this engine that
13 makes it so -- I mean, that requires all this
14 troubleshooting?

15 MR. LAPETER: The engine -- and to the original
16 problem we had was the engine was not starting as
17 designed, and wouldn't start as designed every time. In
18 other words, it just -- we'd give it a start signal and
19 sometimes it would come up to speed, not go on line, and
20 sometimes it wouldn't start properly, so it indicates a
21 problem mostly with the control system in the engine.

22 COMMISSIONER MCALLISTER: Who is the
23 manufacturer and what's your sort of ongoing maintenance
24 relationship with them?

25 MR. LAPETER: The manufacturer is Cummins, C-u-

1 m-m-i-n-s --

2 COMMISSIONER MCALLISTER: Right.

3 MR. LAPETER: -- and we had their service
4 technicians here on site multiple times and one of the
5 problems we've had is that their service technicians
6 require us to run the engine more in order to repair it
7 and test it.

8 COMMISSIONER MCALLISTER: So, I mean, we're
9 kind of assuming that with this flexibility you'll be
10 able to lock it in and work it out, and let us know when
11 the problem of reliability and the ability to start every
12 time and engage, and do what it's supposed to do, is
13 going to be fixed once and for all?

14 MR. LAPETER: Well, I mean, no piece of
15 machinery can be fixed once and for all; I mean, one of
16 our issues is that, if there are future problems with the
17 engine, we'd need to have the flexibility of repairing
18 those, which is why we didn't ask for a temporary change,
19 we asked for a change to the permit that would allow us
20 in the future, should there be a problem with this
21 engine, to repair it quickly and get it functioning back
22 per design. It is a critical emergency -- we call it a
23 Critical Services Engine, it essentially is used here to
24 keep the plant ready to start should there be a Grid
25 outage.

1 COMMISSIONER MCALLISTER: I appreciate your
2 rigorous engineering answer. Nothing is forever, right?

3 MR. LAPETER: And, well, that's true. You
4 know, I wouldn't think of promising that we could fix it
5 once and for all, I mean, every engine, every piece of
6 machinery needs some maintenance every -- you have to
7 expect things will at some time fail if for no other
8 reason than wear and tear, or possible age.

9 COMMISSIONER MCALLISTER: So this is a
10 reciprocating engine. Is that correct? No?

11 MR. LAPETER: That's correct, it is a natural
12 gas fuel reciprocating engine.

13 COMMISSIONER MCALLISTER: Okay. All right,
14 well, thanks for your answer. I appreciate it.

15 MR. LAPETER: All right. I hope that answered
16 the question.

17 COMMISSIONER DOUGLAS: Okay, so if there are no
18 further questions, I move approval of Item 5.

19 COMMISSIONER HOCHSCHILD: Second.

20 CHAIRMAN WEISENMILLER: All those in favor?

21 (Ayes.) Item 5 passes unanimously. Thanks,
22 Dale.

23 MR. RUNDQUIST: Thank you.

24 CHAIRMAN WEISENMILLER: Let's go on to Item 6.

25 Russell City Energy Center Project, 01-AFC-7C. And this

1 is Bruce Boyer.

2 MR. BOYER: Good morning, Commissioners. My
3 name is Bruce Boyer and I'm the Compliance Project
4 Manager for the Russell City Energy Center Project. With
5 me this morning is Jeff Ogata, Assistant Chief Counsel,
6 and the Office Manager from Environmental Office, Eric
7 Knight. We also have technical staff from Air Quality,
8 Hazardous Materials and Visual, to answer any questions.
9 We also have representatives from Russell City present
10 here, too.

11 The Russell City Project will be a 600 megawatt
12 combined-cycle power plant located in the City of Hayward
13 and Alameda County. The project was certified by the
14 Energy Commission in October of 2007, is currently under
15 construction, and is approximately 90 percent complete.
16 The anticipated on line date is June 22, 2013. The
17 original Russell City Project was certified by the Energy
18 Commission in July of 2002. A subsequent amendment to
19 move the project facility approximately 1,300 north and
20 west of the original location was approved in October of
21 2007.

22 On November 8, 2012, Russell City filed a
23 petition to modify the final decision. The requested
24 modifications are in the technical areas of air quality,
25 hazardous materials management, and visual resources. A

1 Notice of Receipt for the Petition to Amend was mailed to
2 the Russell City Post-Certification Mail List, docketed,
3 and posted to the Web on November 19, 2012. An Addendum
4 to the Petition to Amend was received and docketed on
5 March 20, 2013. Today's Business Meeting notice was also
6 mailed to the Russell City Listserv.

7 In response to the Amendment filing by the
8 project owner and subsequent Notice of Receipt published
9 by Energy Commission staff, comments were received by
10 Hayward Area Recreation and Park District, or HARD, the
11 City of Hayward Public Works Department, League of Women
12 Voters, Eden Area, and Cal Pilots Association. All of
13 the relevant comments are addressed in staff's analysis.

14 In response to staff's analysis, one comment
15 letter was received on May 6, 2013 from Sierra Club.
16 Sierra Club's comments mostly reiterate the comments from
17 HARD, and those comments will be addressed shortly.

18 Staff's analysis of the Petition to Amend was
19 docketed and posted to the Web on April 8, 2013, and
20 mailed to interested parties on April 9, 2013. The
21 public comment period ended on May 6, 2013.

22 Now I would like to briefly identify the
23 requested changes in the technical area of air quality.
24 First is the modification of certain air quality
25 Conditions of Certification to make clarifications and

1 administrative changes required by the project's final
2 design. These changes will not increase emissions and
3 are being incorporated in the Bay Area Air Quality
4 Management District's authority to construct permit.

5 Second is the deletion of AQSC-12 that requires
6 the Wood Stove Replacement Program to mitigate for winter
7 PM10 because the requirements are being accomplished with
8 offsets provided in AQSC-13. Staff agrees with the
9 proposed changes.

10 Here are the requested changes to Visual
11 resources: first is the modification of VIS-2 to change
12 the on-site landscape planning time. The proposed
13 changes allow the planning to be completed following
14 commercial operation. This change will help prevent the
15 new on-site landscaping from being damaged by
16 construction equipment. Staff agrees with this change.
17 Second is the deletion of VIS-9 trailside improvements.
18 On the screen are two images, image 1 shows the view
19 taken from the deck of HARD's Interpretive Center looking
20 toward Mt. Diablo that was taken in September of 2001; a
21 visual simulation of the proposed power plant location is
22 inserted. As we can see, the project blocks the view of
23 Mt. Diablo. The second image was taken in February of
24 2013 and is an actual photo of the power plant from the
25 same location as the 2001 photo. As we can see in this

1 photo, the view of Mt. Diablo is not blocked. When the
2 project was licensed in 2002, the blocked view from
3 HARD's Interpretive Center for Mt. Diablo was mitigated
4 by VIS-9. Russell City was required to work with HARD
5 staff to develop and install trailside improvements that
6 included benches and information kiosks, information
7 panels, and free of charge view scopes on a shoreline
8 trail where the view for Mt. Diablo would not be affected
9 by the project. Russell City was to pay the amount
10 designated by HARD staff to design the plan and install
11 the amenities. Russell City agreed to the budget amount
12 that was specified by HARD for VIS-9.

13 In 2007, a petition to move the project 1,300
14 feet north and west of the 2002 location was approved.
15 The new location no longer blocked the view of Mt.
16 Diablo. The project owner agreed to continue to provide
17 the trailside amenities to assist the public. The
18 project owner has informed staff that the HARD Board of
19 Directors has declined to enter into an agreement with
20 them to provide the identified trailside improvements
21 required in VIS-9. Without HARD Board approval, the
22 project owner cannot complete VIS-9; since VIS-9 is no
23 longer required to mitigate a significant visual impact,
24 the project owner has requested it to be deleted. Staff
25 agrees with this request.

1 The third visual modification is for VIS-10 to
2 provide alternative offsite visual enhancement measures.
3 This proposed modification requires additional
4 information, was not addressed in staff's analysis, and
5 will be heard at a later Business Meeting.

6 The last proposed change is to hazards
7 materials management. The modification request is to
8 HAZ-5, to change spacing requirements around a sulfuric
9 acid tank. HAZ-5 currently requires that no combustible
10 or flammable material is stored, used, or transported
11 within 50-feet of the sulfuric acid tank. The requested
12 modification would allow a setback of less than 50-feet,
13 provided that an approved firewall barrier is installed
14 in between the tank and the flammable or combustible
15 material. Staff agrees with this change.

16 Staff is determined that, with the adoption of
17 the revised and deleted Conditions of Certification in
18 the technical areas of Air Quality, Visual, and Hazardous
19 Materials Management, the modified Russell City Energy
20 Center project would conform with all applicable Federal,
21 State, local, and Bay Area Air Quality Management
22 District laws, ordinances, regulations and standards, and
23 would not result in significant environmental impacts.

24 Now we're going to have Eric Knight address the
25 comments by Sierra Club.

1 MR. KNIGHT: Good morning, Commissioners. The
2 Sierra Club filed a letter on May 6th. The letter
3 essentially reiterates a number of points that were made
4 by the Hayward Area Recreation District and the City of
5 Hayward. One comment in the letter is that they agree
6 with both HARD and the City of Hayward that the project
7 will have visual impacts on the Hayward Shoreline Marsh.

8 That issue was addressed in the 2007 Amendment
9 to the original Commission Decision in 2002. The
10 Commission found that visual impacts would be mitigated,
11 the visual impacts of the Shoreline Park, that is, will
12 be mitigated by several Conditions of Certification, VIS-
13 2, which required landscaping onsite, VIS-3, which
14 required painting of the facility in a color that would
15 blend as best as possible to the setting, and VIS-10,
16 which required off-site landscaping to compensate for the
17 visual contrast that the project would create by blocking
18 some of the less attractive buildings around the
19 facility, that are very visible from the shoreline park,
20 which you can see in the picture on the right.

21 And VIS-9 was no longer needed, as Mr. Boyer
22 mentioned this morning, because the impact to Mt. Diablo,
23 or the view from the Interpretive Center of Mt. Diablo
24 would no longer be blocked by the facility.

25 The Sierra Club also reiterates points made by

1 the City that the Conditions of Certification and the
2 license are orders of magnitude less than what was
3 originally proposed by the Applicant. This is a
4 reference to the architectural treatment to the facility,
5 which you can see on the left, which is what's called the
6 Wave. That was included in the project in 2002 because
7 the City of Hayward requested it; however, prior to the
8 amendment being filed in 2006, I believe it was, the City
9 Council -- Hayward City Council -- voted unanimously to
10 allow Calpine to remove that element to the project. So
11 in 2007, when the Commission approved the amendment to
12 relocate the facility, the Commission approved the
13 project without architectural treatment, but still found
14 the impacts to be mitigated below significance from the
15 shoreline marsh.

16 COMMISSIONER MCALLISTER: Just a quick
17 clarifying question. So was that -- did that comment at
18 all on the sort of budget issues, you know, so that the
19 wave would have required a certain investment, and was
20 there any sort of -- anything more specific than just
21 releasing of the specific requirement to build the wave?
22 Or was there some discussion about "and the investment
23 doesn't have to be made?"

24 MR. KNIGHT: Are you asking did the Commission
25 in its decision address it? Not to my knowledge, no. It

1 was just the element itself was discussed.

2 The Sierra Club also supports HARD, the Hayward
3 Area Recreation District's position that visual impacts
4 of the project's lighting, including aviation warning
5 lights on the marsh must be analyzed. Sierra Club also
6 believes that Federal Aviation Administration requirement
7 for planes and helicopters to fly up wind of the project
8 will affect sensitive species on the marsh, including the
9 California Least Tern.

10 These issues are really outside the scope of
11 the Amendment that's before you right now and they were
12 addressed in the original Commission Decision and the
13 Amendment Petition No. 1 to relocate the facility. But
14 I'll just briefly touch on those issues.

15 So the visual effects of project lighting on
16 the surrounding area were addressed in the 2007 Decision,
17 Condition VIS-4 requires the project lighting, excluding
18 aviation lights, to be hooded, shielded, directed
19 downward, and inward, and be kept off when not in use to
20 minimize impacts. Clearly, you cannot do that with
21 aviation warning lights, but all the other plant lighting
22 will be designed in that fashion.

23 Condition TRANS-10 requires the owner to
24 implement a number of measures to discourage pilots
25 coming out of or flying into Hayward Executive Airport,

1 which is very close by to the project site, to not fly
2 over the power plant at low altitudes because there's a
3 concern about thermal plumes coming off the facility out
4 of its exhaust stacks and cooling structure.

5 As discussed in the Commission Decision in
6 2007, aircraft don't need to fly over the site to land at
7 the airport, or when they're taking off. And there was a
8 survey done for one month, I think it was April of 2007,
9 I believe, where it logged 10,000 flights in and out of
10 the airport, only 40 of them flew over the power plant
11 site, the relocated power plant site, or within close
12 proximity to it at low altitude. So that's about .004
13 percent of the aircraft. So the Commission found the
14 impact to be less than significant, the risk was less
15 than significant; however, they did require -- the
16 Commission did require TRANS-10, which was its
17 notification to pilots not to overfly the facility, out
18 of an abundance of caution, I suppose, is what the
19 concern was. So the requirement to not fly over it, in a
20 sense very little additional traffic would potentially
21 fly over the marsh as a result of TRANS-10, the condition
22 that the Commission imposed on the project. So
23 presently, I don't know the number, but I'm sure many
24 planes fly over the marsh presently, so the additional
25 traffic would be pretty minimal.

1 Impacts to a special set of species were
2 addressed in the original proceeding 2007 amendment. The
3 primary impacts to California Least Tern -- this is the
4 species that is identified in the Sierra Club's letter --
5 the primary impact of concern at that time was the
6 architectural screen and the landscaping providing
7 perching opportunities for raptors that would prey on
8 sensitive species on the marsh. So Condition BIO-14 was
9 included in the original decision in 2002 as it requires
10 a Perch Deterrent Management Plan, and with removal of
11 the architectural screen that condition was eliminated
12 from the 2007 Decision.

13 And in the final staff assessment for the
14 original project, biology staff had determined that
15 project lighting, because it would be shielded and
16 screened, would not present a risk to wildlife in the
17 area. As required by TRANS-10, an aviation warning
18 lighting plan was submitted to Commission staff for
19 review in June of 2010, that plan was reviewed by traffic
20 staff and signed off on and approved, demonstrating
21 compliance with the FAA requirements for marking and
22 lighting the facility. If the Commission would like
23 staff to review the plan again to consider the Sierra
24 Club's concerns about the impacts of that lighting to any
25 species in the marsh, we would be happy to do so.

1 And the last comment is Sierra Club mentions
2 that, at a minimum, the visual conditions need to be
3 significantly increased and not reduced or removed. And
4 as I mentioned previously, with the existing Conditions
5 of Certification, the Commission did find the impacts to
6 be mitigated below significant. So that concludes my
7 presentation.

8 CHAIRMAN WEISENMILLER: Thank you. Just one
9 clarifying question. Was the Sierra Club an Intervener
10 in either the original or the project amendment?

11 MR. KNIGHT: I don't know that.

12 CHAIRMAN WEISENMILLER: Okay, could you check?
13 Or perhaps the Applicant knows.

14 MR. WHEATLAND: Good morning, Commissioners.
15 I'm Greg Wheatland. I'm outside counsel for the Russell
16 City Energy Center. This Sierra Club was a participant
17 in the 2007 proceedings, but to my knowledge was not an
18 Intervener.

19 CHAIRMAN WEISENMILLER: Thank you. Okay, let's
20 go on to the Applicant.

21 MR. WHEATLAND: Well, as I said, I'm Greg
22 Wheatland and with me this morning is Barbara McBride.
23 She is Director of Environmental Services for Calpine.
24 We'd like to thank the staff for their thorough
25 consideration of this amendment, for their staff report,

1 and for the excellent summary of the issues here this
2 morning. We don't need to repeat anything that they have
3 said to you in introducing this item, but we are here and
4 available to answer any questions that you may have and
5 to respond to any questions or issues that may arise from
6 parties that speak to you this morning.

7 CHAIRMAN WEISENMILLER: Okay. I think we have
8 two parties in the room who want to comment. Let's start
9 out with the Hayward Area Recreation Park District, John
10 Gouveia.

11 MR. GOUVEIA: Good morning. Good job on my
12 name. It's John Gouveia, I'm the General Manager of
13 Hayward Area Recreation Park District. With me is my
14 Park Superintendent, Mr. Larry Lepore, sitting behind me,
15 and also one of our Board members, Minane Jameson.

16 The Hayward Area Recreation Park District,
17 HARD, respectfully requests that the Commission reject
18 staff's recommendation to approve Amendment No. 4 and,
19 with it, changes to the Conditions of Certification that
20 includes VIS-9. We would further request the formation
21 of a committee to fully address the request by the
22 Russell City Energy Center, LLC to the Commission in
23 their submitted Russell City Amendment No. 4 and the
24 opposition of HARD and other groups and agencies for
25 these pleadings by RCEC.

1 On January 23, 2013, HARD requested Intervener
2 status. In a letter dated February 13, 2013, our request
3 was denied by the Chair, who indicated that because no
4 committee had been formed, it was within his authority to
5 do so. It was also stated that, should a committee be
6 formed, we would be allowed to re-file. As a public
7 agency that will be directly and negatively affected by
8 RCEC's requested revocation and other changes to existing
9 Conditions of Certification, we believe that these
10 proceedings are of widespread and vital interest, and
11 that the public interests will be best served by
12 formation of a committee and un-bifurcated evidentiary
13 hearings in which HARD can then re-file for formal
14 Intervener status. HARD requests that none of the power
15 plant owner-operators' requested changes to the existing
16 Conditions of Certification are addressed in a bifurcated
17 manner, but should be part of evidentiary hearings and
18 include all of RCEC's requests. HARD would like to
19 emphasize that un-bifurcated evidentiary hearings to
20 address all the requested changes to the various VIS
21 Conditions of Certification concurrently is especially
22 appropriate. HARD believes that all potential visual
23 impacts need to be studied and addressed, including
24 aviation safety perimeter lighting; an evidentiary
25 hearing would accomplish this. And we thank you for your

1 consideration in this matter.

2 I also brought a few photos to say a picture is
3 worth a thousand words, so if I could get the staff to
4 flash those up on the screen for me? So here are some of
5 the views from our Interpretive Center. You see the Bay
6 Trail sign and you see the power plant in the background.
7 And if staff could just move to the next? Thank you. I
8 also want to emphasize that, you know, about 20 years ago
9 I was in Alaska and I took photos of the glaciers, and
10 when I show them to people, I tell them you cannot
11 imagine the magnitude of these structures until you're
12 actually standing there, and I would say the same thing
13 about these photos: the photos show what the plant looks
14 like, but do not show the magnitude when you're standing
15 on our trail. Next slide, please.

16 This is the rail -- you can see the rail there
17 right from the end of our Interpretive Center, so as
18 people walk to the trail, that's the view that they're
19 seeing. Next.

20 With that, I will provide copies of the
21 letters, the letter that I just read for the
22 Commissioners, so they can make it part of the record,
23 and I would be happy to answer any questions you might
24 have, and I thank you for your time.

25 CHAIRMAN WEISENMILLER: Okay, thank you. Let's

1 go on to -- we have at least one, if not two gentlemen,
2 from the California Pilots Association, Andy Wilson.

3 MR. WILSON: Mr. Chairman, Commissioners, my
4 name is Andy Wilson, I'm a Director at Large, California
5 Pilots Association. Our mission is to protect air space,
6 protect airports, sometimes things slip through the
7 cracks with the FAA and also with our great Department of
8 Transportation Division of Aeronautics, so my first
9 comment is your Compliance Officer left out the fact that
10 he's been contacted by the FAA about these issues, and
11 also I'd like to point out that there's a longstanding
12 study on thermal plumes by the FAA, and that continues to
13 move on, so you're going to hear this more today and in
14 the future. Aviation was also addressed by your staff.
15 So I have a couple of comments. One is you've heard
16 about the perimeter lighting; if you look at the slide
17 before you, this is a daylight photo that's in your
18 packet, and I don't see any perimeter lighting. I don't
19 see any aviation lighting. I mean, do you see it? This
20 is what a pilot would see. And typically lighting is
21 associated with nighttime, but the lighting required by
22 the FAA is also on during the day. So California Pilots
23 Association's position is that the lighting is too dim,
24 there's not enough lighting.

25 Now, when you say don't overfly the power

1 plant, if you look at the photo, where's the power plant?
2 How much of that photo do you see that pilots have to
3 avoid? And this is a confusing issue between the FAA and
4 Cal Pilots. So the perimeter aviation safety lighting is
5 just simply and utterly inadequate, and we're contesting
6 this with the FAA. So the issue is, on the VIS issue, we
7 might have a little bit of a difference between HARD and
8 also the Sierra Club, but we're going to try to work that
9 out.

10 The other issue is there's new findings by
11 CASA, which is the Australia FAA, and typically the
12 Capstone Calculations were used on thermal plume
13 velocities, that's no longer done. CASA has changed
14 their philosophy, Cal Pilots pointed this out during the
15 Quail Brush proceedings, and we also sent a letter
16 bringing this to the attention of staff, and we haven't
17 heard that addressed.

18 So now there's an issue of where does Cal
19 Pilots go from here. So do we file a complaint? Do we
20 request a meeting? And where do we proceed? So
21 basically those are my comments. And thank you very
22 much.

23 CHAIRMAN WEISENMILLER: Thank you. Stuart
24 Flashman.

25 MR. FLASHMAN: Good morning. Stuart Flashman,

1 I'm an attorney, I'm here representing Audrey LePell and
2 Citizens Against Pollution. And we have commented
3 extensively on this plant throughout the whole process,
4 and we're here today primarily to indicate our support
5 for the position of HARD in terms of the mitigation, and
6 ask the Commission not to approve this amendment,
7 certainly at least not without further study of what are
8 the actual visual impacts on HARD and its facilities with
9 the revised location, and now that the plant is actually
10 constructed, and you can see what the visual effects are.

11 I want to emphasize a couple of things, one is
12 that this is a moving target. This is the fourth
13 amendment that's being made to this proposal, and the
14 plant hasn't even started operations yet. So there are
15 going to be continuing problems and a continuing need for
16 the public to be involved, and for public agencies to be
17 involved. But the operators of the plant have basically
18 taken a position that, if people want to get mitigation
19 for impacts, they need to site a Settlement Agreement,
20 and what that Settlement Agreement is, is basically
21 saying "were out of this, we won't comment anymore, we
22 won't be participating anymore." It's kind of like
23 Chess, when you play Chess you're trying to get rid of
24 your opponent, and one of the ways you get rid of your
25 opponent is you take their pieces off the board. And

1 that's what Russell City Energy Center and Calpine are
2 doing here, is they're going after the various opponents
3 of this project, particularly the public entities, and
4 saying, "Yeah, we'll give you something, but you need to
5 sign this agreement saying you're out of the process.
6 Take yourself off the board." And they've been pretty
7 successful with this. And one of the problems they've
8 had is with HARD because HARD has said, "This is still in
9 process, we don't know where it's going, and we need to
10 be able to maintain our ability to raise objections if we
11 need to." And consequently, they haven't reached an
12 agreement with Calpine, and Calpine has said, "Fine, you
13 don't get any mitigation." And we think that's against
14 the public interest, to take that sort of approach to
15 this. We do think that there are continuing issues
16 around the lighting, not only the aviation lighting, but
17 also the lighting at the plant. I don't know how much of
18 it is construction lighting and how much it's permanent,
19 but right now if you go along the shoreline there in the
20 evening, it's quite bright. I don't know if staff has
21 already started monitoring the requirements on this
22 plant, but right now you can see the plant quite clearly
23 and brightly in the evening after the sun sets, which is
24 not supposed to be the case. So there are some issues
25 here that still need to be addressed. This project is

1 nowhere close to finished, and it's unfortunate that
2 Calpine is taking this hard line in trying to get its
3 opponents off the board, so to speak. Thank you.

4 CHAIRMAN WEISENMILLER: Thank you. Staff, do
5 you have any -- well, first, is there anyone on the
6 phone? Or anyone else in the room? Then, staff, do you
7 have any responses to the comments?

8 MR. KNIGHT: Thank you. In response to the
9 last comment about the lighting, I was focused on the
10 operational lightings, I'm not certain if we had a
11 condition on this project for construction phase
12 lighting, we typically do, but that task lighting
13 sometimes is kind of hard to control. But for
14 operational lighting, our inspection hasn't occurred yet
15 per the Condition VIS-4, I think I said it was. We're
16 supposed to go out and inspect that before the first
17 turbine roll, so that hasn't occurred. The Condition
18 specifies exactly how the lighting was supposed to be
19 designed, and there's performance measures, specific
20 design measures identified. And then, when it's
21 installed, we're notified and come out and we'll inspect.
22 If there's any issues, if there's offsite glare that's
23 visible, we will notify the owner and the owner will have
24 to make corrections within 30 days, and that's set out in
25 the condition.

1 In regard to Mr. Wilson's comments about the
2 aviation lighting, what was required is the condition
3 says that they shall install lighting per the FAA
4 requirements, and the lighting plan that was submitted to
5 us verified that they were putting lights out there that
6 met FAA requirements, so I understand Mr. Wilson's
7 comments that they had issues with that FAA lighting not
8 being bright enough, but the plan did show Calpine was
9 installing lighting per current FAA requirements. And I
10 think that's about it.

11 CHAIRMAN WEISENMILLER: Thank you. Applicant?

12 MR. WHEATLAND: Yes, I'd like to comment
13 briefly on what Mr. Flashman stated. Stu, I consider a
14 good friend, but I think in this issue he's been
15 misinformed. After the 2007 amendment, Calpine and HARD
16 sat down and had numerous discussions over the years
17 regarding the trail improvements. These discussions
18 began in 2009, and in 2011, Calpine negotiated with the
19 HARD staff the amount that would be necessary to install
20 these trailside improvements, the benches, the kiosks,
21 the telescopes. There was agreement that the cost would
22 be \$77,500. Calpine also negotiated with the HARD staff
23 at that time two agreements, one agreement was to install
24 the trailside amenities at a cost of \$77,500, that
25 agreement is simply an agreement to install the

1 facilities, no strings attached, that we also negotiated
2 at that time a cooperation agreement, this was an
3 additional agreement that offered HARD the opportunity
4 not to oppose the project if they chose to do so. These
5 two agreements, separate agreements, were both tendered
6 to the HARD Board on the meeting of June 13, 2011. The
7 Board had the opportunity to elect to sign either or both
8 agreements, and decided to sign neither. Undeterred,
9 Calpine continued to have discussions with the HARD staff
10 over the following two years, and again on August 27,
11 2012, this matter came back before the HARD Board.
12 Again, the HARD Board had the opportunity to sign an
13 agreement to install the trailside amenities at the cost
14 that HARD said these amenities would cost, and again the
15 Board declined to do so. So Calpine has negotiated in
16 good faith with HARD. Calpine has put forward an
17 agreement to install the amenities, no strings attached.
18 And HARD's decision not to install these amenities isn't
19 because the cost is unreasonable, or there hasn't been an
20 agreement tendered to do so, but instead because they
21 would like to re-litigate issues such as aviation safety
22 that have been extensively litigated in the 2007
23 proceeding, in the Commission's re-hearing of that
24 decision, in Petitions for Writ before the Supreme Court,
25 and even before the Environmental Review Board of the

1 EPA. So these issues have been extensively litigated in
2 other forums, but these issues are not appropriate here.

3 CHAIRMAN WEISENMILLER: We have a request for
4 the Sierra Club to make a statement, so I was going to
5 ask them to come forward and afterwards I will again turn
6 to the staff and Applicant, if they have a response.
7 But, please, Mr. Ernest Pacheco.

8 MR. PACHECO: Ernest Pacheco. Hi. I would
9 like to respond to some of the comments made about HARD
10 refusing to participate with Calpine for this trailside
11 mitigation. That's not the entire record. The Vice
12 President of RCEC LLC was asked for three years to
13 produce the final lighting plan, including the aviation
14 safety lighting; he refused in meeting after meeting. A
15 direct quote, "We're not required to give it to you, we
16 will give it to you when we're required to," which is 60
17 days, I believe, before turbine roll. So HARD and HASBA,
18 which is also a interagency composed of HARD, the City of
19 Hayward, and East Bay Regional Park District, had
20 repeatedly asked for this information for years. It was
21 finally produced recently. Now the next step is what is
22 the analysis, what is going to be the visual impact of
23 this FAA required aviation safety lighting? Okay, well,
24 there is no analysis. The 2007 analysis did not include
25 the aviation perimeter safety lighting. We did a freedom

1 of request to Fish & Wildlife to say, "What data do you
2 have on this? What analysis have you done?" There was
3 not a single email we got back from Fish & Wildlife,
4 there's not a single email, not a single noted phone
5 call, not a single document of any kind of analysis of
6 what the impacts of the lighting are going to be on the
7 HARD shoreline. Now, understand, staff referred to the
8 fact that the lighting planned, the COC, was that they
9 had to be down casting lights and shaded, okay, that's
10 great, except for that when the FAA started speaking up,
11 saying we don't want this plant here, and you will be
12 hearing a lot more from them in the near future, this is
13 not a dead issue, one of the things that the Commission
14 did to try to mollify the FAA was to say, "Okay, we're
15 going to put some little lights on the perimeter." But
16 no analysis has ever been done with that. And as you
17 heard today, Cal Pilots is saying that the lighting is
18 completely inadequate. Cal Pilots has been talking to
19 the FAA and you will be hearing more on that. So, in the
20 absence of any analysis at all of the unshielded aviation
21 safety lighting, which by definition have to be
22 unshielded, otherwise you can't see them from a plane,
23 they have to be bright enough to be seen 24/7, that's the
24 Condition of Certification that the Commission itself
25 included, HARD cannot fulfill its responsibilities to

1 enter into any final mitigation until we know what the
2 full impacts of this lighting is going to be. And I
3 would also say that, while the aircraft are going to be
4 routed over the shoreline, directly over the lease tern
5 colony, which is depending on how you count the second or
6 third most productive lease tern colony in the state,
7 this is a Federally listed species, again, completely
8 unanalyzed by Fish & Wildlife, EPA, or the Commission's
9 own staff from our Freedom of Information Request. If
10 the staff has some analysis that's been done in
11 cooperation with Fish & Wildlife and EPA, we'd love to
12 see it. We have not seen it yet. When the planes fly
13 over the shoreline, there's a very definite visual
14 impact. HARD brings thousands of school children through
15 the shoreline every year, a couple times a week they
16 bring classes through and they teach them about the
17 shoreline. Well, seven and eight-year-olds, by the end
18 of the program, they're loving the shoreline and they're
19 covered in mud, and they're happy and want to come back,
20 but when you have planes flying 650-feet over their head,
21 it's a real distraction, it's a big visual distraction to
22 the users of the HARD shoreline, completely unaddressed.
23 Evidentiary hearings on the VIS, the requested VIS
24 amendments, are where we can hash all this out. We can
25 interact with CEC staff, Sierra Club will participate,

1 Calpine will participate, HARD will participate when you
2 bring in Fish and Wildlife and EPA to decide what the
3 impacts will be. Thank you.

4 CHAIRMAN WEISENMILLER: Okay, so staff, let's
5 start with staff. Do you have any response to the last
6 comment?

7 MR. KNIGHT: As I mentioned earlier in my
8 comments, staff did consider the effects on the
9 California Least Tern, we're not really hearing new
10 information that we think the Commission needs to
11 consider. I mean, the issue about aircraft being
12 redirected from overflying the facility pursuant to
13 TRANS-10, the Commission decision discusses how there's
14 very little traffic that actually -- the point was that
15 the airplanes do not need to fly over Russell City Energy
16 Center's site as they depart from or fly into the
17 airport, and during that survey in 2007, of 10,000
18 flights, about 40 of them flew either over or in close
19 proximity to the power plant. So I don't know if those
20 planes -- let's assume all 40 of those, you know, were
21 redirected over the marsh, because they don't have to if
22 you look at the position of the plant, they could
23 continue to fly over industrial structures and not the
24 marsh, but that's about .004 percent of the traffic for
25 that period of time, so that's a pretty small number of

1 planes. So I would assume planes are already flying over
2 the marsh presently as they fly in and out of the
3 airport. And, again, the impacts to the Lease Tern, the
4 primary concerns there were perching opportunities and
5 noise was another issue that was addressed, and that was
6 BIO-14, I believe, that's in the Commission decision to
7 address noise affecting -- both during construction and
8 operation -- to the Lease Tern colony and other sensitive
9 special status species.

10 And I guess the visual effect of planes flying,
11 I mean, they do that presently, so it's a part of the
12 existing baseline condition. Visual resources, staff
13 didn't analyze that, and the Commission decision is
14 probably silent on that, but that's a part of the
15 existing setting right now.

16 COMMISSIONER HOCHSCHILD: Could I ask a
17 question just on that topic of the gentleman from the
18 Pilots Association, come up? Actually, when I was
19 getting my pilot's license, I landed at Hayward quite a
20 bit. Is it on final approach to 28 left that you'd have
21 to fly over?

22 MR. WILSON: No.

23 COMMISSIONER HOCHSCHILD: Where is the --

24 MR. WILSON: All right, so for the record, my
25 name is Andy Wilson, Director at Large for California

1 Pilots Association. So as you're landing on the runway,
2 in front of me, or as yourself and landing, it is not on
3 the straight end approach, it is approximately 1.5 miles
4 perpendicular to the center of the runway. Okay? But
5 here's the problem, very basically: when you depart the
6 pattern, let's talk about the pattern of 28 left, is an
7 oval shape, and that oval shape is approximately one mile
8 from the runway; however, it does stretch -- you're
9 allowed to go further out than the one mile to 1.5. So
10 you've already heard your staff say there is traffic that
11 flies over this, but one of the things that -- it's not
12 an option, that's an option -- so if you have lighting,
13 if it's on the aeronautical charts and your VFR, you can
14 avoid it if it's marked, okay? So we're discussing that
15 with the FAA. One of the things that has been overlooked
16 from day one, when you do an IFR approach to Hayward
17 Executive, if you're a precision approach, you stay more
18 or less lined up center line, you're looking at your
19 instruments, you come out of the clouds, and you land on
20 the runway. Other types of approaches are what they call
21 circle to land; Hayward Executive has a circle to land
22 approach. So what happens is, as you come in underneath
23 the clouds at a certain descent altitude, if you have the
24 airport environment in sight, meaning if you begin to see
25 the runways, the tower, the hangar buildings, then you

1 execute a left turn, which you have to come around to the
2 front of the runway that you're approaching to make the
3 landing. So this is all visual. So the FAA per their
4 charts says that you have to fly over the power plant,
5 that's based on category of aircraft. Category A is
6 about 1.5 miles. That puts you just over the power plant
7 stacks. The next category, Category -- that was A and B
8 -- so C and D take you to I think it is 1.8 miles, so if
9 this is the power plant and the stack, you have to do
10 something like this visually. Larger aircraft would go
11 beyond that.

12 COMMISSIONER HOCHSCHILD: Right. So let me be
13 specific, I mean, whether it's VFR or IFR, I mean, the
14 impact -- I mean, are we going to see a significant
15 number of aircraft having to divert so they're flying
16 directly over the shoreline, as a consequence of the --

17 MR. WILSON: That is an interesting question
18 because, as I said, the FAA is continuing to work on this
19 and they've now put in the AIM, the Aeronautical
20 Information Manual, you can't fly downwind of a power
21 plant, and you have to avoid overflight. So visually you
22 would have to go out beyond the stacks in the power plant
23 to go towards the shoreline. But very critical and what
24 the FAA is looking at it is, on the instrument approach,
25 you have to fly over that area, you can't avoid it. So

1 that's where the discrepancy comes in. If you're IFR,
2 yes, the flight count could be down, but if you're VFR,
3 you might be able to avoid it, but it will send more
4 traffic over the shoreline. So in finalizing this, this
5 is not a closed issue, the FAA has already contacted your
6 staff --

7 CHAIRMAN WEISENMILLER: We'll wait to hear from
8 FAA.

9 MR. WILSON: I'm sorry?

10 CHAIRMAN WEISENMILLER: I said we'll wait to
11 hear officially from FAA.

12 MR. WILSON: You did.

13 CHAIRMAN WEISENMILLER: We will wait to hear
14 officially.

15 MR. WILSON: You don't have to, you've already
16 been informed.

17 CHAIRMAN WEISENMILLER: Okay, thank you.

18 Staff, do you have any more on this?

19 MR. OGATA: Thank you, Chair Weisenmiller,
20 Commissioners. My name is Jeff Ogata. I'm Staff Counsel
21 for staff on this matter today. There are some very
22 delicate, but important issues that are being raised here
23 in this particular amendment that I think also involve a
24 much more general perspective about how we look at
25 amendments, and that question is whether or not some of

1 these issues have previously been litigated in the actual
2 AFC proceeding. And a number of concerns that you're
3 hearing today, I think, are important concerns, however,
4 with respect to this particular amendment, I don't think
5 any information has been brought to your attention,
6 brought to staff's attention, at least, that would change
7 our opinion about whether or not we should support this
8 amendment request. The VIS-9 condition is obviously an
9 interesting condition, but again, I personally don't see
10 the direct connection between all the lighting issues and
11 providing trailside amenities, and I'm sure there is --
12 somebody can articulate that, but I don't think it's been
13 done clearly enough for us to really understand what that
14 is.

15 The second part of that, though, is I think
16 even more sort of delicate, and that is that that was a
17 condition that was deemed important in 2002 when this
18 project was first licensed because it blocked the view of
19 Mt. Diablo. When the project came in for amendment and
20 it was recertified in 2007, Russell City agreed to
21 maintain that condition even though there was no longer a
22 direct nexus between that condition and an impact, the
23 impact had gone away. So arguably, that is a condition
24 that the Applicant has agreed to do, but sort of one
25 their own, and so there is a debate about whether or not

1 the Commission should incorporate those kinds of
2 community benefits or other kinds of agreements in our
3 licensing because that's not something that really is
4 connected to an impact that staff has determined exists.
5 Now, we have done that because we believe that licensees
6 should build a project according to how they describe it
7 to us, and this is what we certify, so we have on many
8 occasions put those kinds of requirements into our
9 license. But at this point in time, you know, really if
10 push sort of comes to shove and this thing actually gets
11 litigated, I would wonder whether or not there is a way
12 that we would be able -- the Commission would be able to
13 justify continuing this condition in the absence of a
14 nexus of a significant impact that we have previously
15 litigated. So I'm not talking about right now, maybe
16 there's other things that can be said right now, but
17 unfortunately this is not the forum for that, that forum
18 -- the timing for that has long since passed. So there
19 are a number of things that we are willing to do,
20 obviously the issue about the aviation lighting is a
21 serious issue, there's sort of a contradiction between
22 lighting that's visible for aircraft and lighting that
23 may affect the birds; obviously some want less lighting
24 and some you need more lighting, so there's a
25 contradiction there.

1 Staff has done its best to ensure that the
2 current lighting protocols meet FAA standards. If in
3 fact FAA standards are changing, then we'll consider that
4 and Cal Pilots should probably bring that to our
5 attention, as the Chair indicated, as time goes forward,
6 but at this point in time that's not really an issue for
7 us, that's not part of the amendment request. So there
8 are a number of issues that are sort of outside the
9 scope, and which is what we started with this discussion
10 about in responding to the Sierra Club's letter. There
11 are a number of issues that are directly related and
12 we've responded to that in the staff analysis, but there
13 are a number of issues that are totally outside the
14 amendment request, and we've responded to them to try to
15 bring some clarity; but, really, those issues have
16 already been litigated and from our perspective that
17 matter is closed.

18 Now, if the parties believe there is a change
19 of conditions that require some change in how we do these
20 things, then obviously they can talk to staff and if
21 they're not satisfied with what staff is doing, then they
22 can bring a complaint to the Commission, and that would
23 be the process. But this amendment proceeding at this
24 point in time, I don't believe, is the appropriate forum
25 for some of these issues that are being raised. Thank

1 you.

2 CHAIRMAN WEISENMILLER: Applicant, do you have
3 anything else to say on these issues?

4 MR. WHEATLAND: Well, just very briefly. For
5 all the reasons that Mr. Ogata has stated, we have felt
6 all along that these issues such as the aviation safety
7 lighting are closed issues. We did tell that to HARD.
8 Mr. Pacheco, though, says that we didn't provide them a
9 copy of the aviation safety lighting plan, and that's
10 incorrect; even though we felt that that plan wasn't
11 relevant to any decision that needed to be made about
12 where you would place the benches and the viewing scopes,
13 nevertheless, on September 29th of 2011, Ms. McBride, who
14 is here today, sent a letter to Minane Jameson of HARD
15 and we transmitted a copy of the aviation safety plan and
16 a construction lighting plan to HARD for their
17 examination.

18 CHAIRMAN WEISENMILLER: Commissioners, any
19 questions or comments?

20 COMMISSIONER DOUGLAS: I've got a few
21 questions. For Calpine, in particular, what's your
22 current expectation for your commercial on line date?

23 MS. MCBRIDE: Our commercial operations date is
24 July 14th right now.

25 COMMISSIONER DOUGLAS: And do you know what

1 your landscaping schedule is if you were to --

2 MS. MCBRIDE: The on-site landscaping?

3 COMMISSIONER DOUGLAS: Yes, the on-site --

4 MS. MCBRIDE: It will be completed as soon as
5 we can after commercial operations. We just have to move
6 all of the kind of construction equipment that we're
7 using. We're using some of those areas for lay down
8 where we're going to plan on installing the landscaping.

9 COMMISSIONER DOUGLAS: So in terms of start to
10 finish on the landscaping, is it a near term and the work
11 all gets done? Or does it happen over the course of a
12 couple months?

13 MS. MCBRIDE: Well, the ideal planting season
14 is going to be the spring, so probably the spring after
15 commercial operations.

16 COMMISSIONER DOUGLAS: Let's see here. Let me
17 see if anyone else has questions, I may have a few more,
18 but --

19 COMMISSIONER MCALLISTER: I just wanted to dig
20 in on that a little bit, pardon the pun. What's the sort
21 of mature -- so there's the issue of the near term
22 landscaping planting, but there's also sort of the issue
23 of what the scale of the mitigation actually is, we've
24 heard staff say that there is a significant impact,
25 visual impact, and I guess I'm wondering if you could

1 describe sort of the mature plan. What's the timeframe
2 for when the vegetation and other landscaping would be
3 sort of fully -- sort of mitigated, you know, provided as
4 much mitigation as it will. What's the long term --

5 MR. WHEATLAND: Well, the mature plan will have
6 basically three components in terms of overall
7 improvements, one is what we call the on-site landscaping
8 and that's the plan that will be done around the
9 perimeter of the project in certain locations, that's the
10 landscaping that will occur after we begin commercial
11 operation and remove the equipments on the lay down areas
12 and establish the fencing, so that's the first component
13 of the plan. The second component is an off-site
14 landscaping component that's in this 10, and that's not
15 before you for consideration today, but Calpine is
16 looking at opportunities to do other visual enhancements
17 in the general vicinity of the project site and other
18 areas other than just immediately adjacent to the
19 project. We don't have a timetable on that yet because
20 we're still exploring the options for what can be done
21 off-site. Any off-site improvements that we would make
22 need the cooperation of the property owners that would be
23 adjacent to the project, and need to be physically
24 capable of being installed, such as they don't interfere
25 with underground pipelines and other effects, and finally

1 they have to be done properly so that they wouldn't
2 create any threats such as purchase for raptors or any
3 threat to the marshland. So it's a delicate process and
4 we don't have a timeline for the final off-site
5 mitigation plan. And then finally, I should mention that
6 Russell City is also paying to East Bay Regional Park
7 District under a separate voluntary agreement about
8 \$300,000 for additional trail site improvements to the
9 adjacent marshlands, and also Russell City is going to
10 pay \$200,000 improvements to the Park District for West
11 Whitton entrance, landscaping and improvements. Russell
12 City is going to deed to the East Bay Regional Park
13 District a 26-acre parcel of seasonal wetlands that's
14 adjacent to the Russell City site, and it's going to
15 provide East Bay Regional Park District an endowment not
16 to exceed \$150,000 to maintain that property. So these
17 are additional enhancements that we're doing to the
18 marshland in the vicinity of the project. And with
19 respect to East Bay Regional Park District, that's under
20 a voluntary agreement.

21 MS. MCBRIDE: And I actually have to correct
22 myself because the condition of VIS-2 actually says that
23 90 days after commercial operation date, the onsite
24 landscaping will be installed.

25 MR. WHEATLAND: So it could be within 90 days

1 during the fall planting season.

2 COMMISSIONER MCALLISTER: Okay.

3 CHAIRMAN WEISENMILLER: Actually, I was going
4 to ask, so to our Chief Counsel, just on the scope of
5 today as I understand it, is looking at the proposed
6 amendments and the environmental impacts of those?

7 MR. LEVY: Correct, Chairman. The Amendment
8 process, they have a license that's already been granted
9 to them, their certificate is a final document. And the
10 issues that the Commission has previously adjudicated
11 aren't before the Commission and really can't be reopened
12 unless there are certain circumstances that occur. One
13 of those circumstances is the amendment that's being
14 sought today, and that frames the issues for your
15 consideration today. So you can't really go outside the
16 scope of what they've asked to amend in this proceeding.
17 If you determine that they're not meeting some Conditions
18 of Certification, somebody, your staff can file a
19 complaint and you can address those at that time, and
20 that could provide a venue to modify Conditions of
21 Certification. Also, if you find that noncompliance with
22 a condition is somehow relevant to whether you should
23 grant the amendment, that's an avenue. But apart from
24 that, the amendment is really the limitation of your
25 authority today, and the rest of the permit is really

1 final.

2 CHAIRMAN WEISENMILLER: In the context of the
3 amendment the issue is really, is there significant
4 environmental impact associated with that Amendment?

5 MR. LEVY: The scope of the Amendment is two-
6 fold, is 1) are there changes to the project that are
7 proposed that either could create new or increase
8 significant adverse environmental effects under CEQA, or
9 generate non-compliance with LORS, Laws, Ordinances,
10 Regulations, or Standards, that the Commission had
11 already determined the project complies with. And that's
12 what you're looking at in terms of the amendment.

13 COMMISSIONER MCALLISTER: So I think I need a
14 little more information there. So we're proposing here
15 to eliminate VIS-9 and so that originated in a previous
16 configuration of the plant that no longer exists; on the
17 other hand, it did actually carry with it what I
18 understand would be a significant investment in
19 mitigation, you know, their Wave and major construction
20 involved with that mitigation. So we know that the
21 visual impact of the new configuration of the plant is
22 still significant and mitigatable, so I'm interested in
23 hearing from staff whether that kind of the scale of the
24 original commitment to one type of mitigation is
25 legitimately discussable in this forum today as sort of

1 the baseline for mitigation of the new configuration. So
2 I'm wanting to sort of see and understand a little bit
3 more of the conversations that have taken place between
4 Applicant and HARD and the others.

5 CHAIRMAN WEISENMILLER: Yeah, your question may
6 get to both legal and technical issues.

7 COMMISSIONER MCALLISTER: Yeah, absolutely.

8 CHAIRMAN WEISENMILLER: So both of you may need
9 to chime in.

10 MR. KNIGHT: Well, on the technical side of
11 things, VIS-9 was only to address the impact from the
12 Interpretive Center and their view towards Mt. Diablo,
13 and that was looking at the project with the screening,
14 that was a part of the project, that wasn't actually a
15 mitigation measure. So VIS-9, what it required was,
16 because that view would no longer be visible from that
17 location -- and I was actually the visual analyst on that
18 project back in 2002 -- I went out and talked with the
19 docents and the directors of the Interpretive Center and
20 they told me how Mt. Diablo factored into their program
21 there when they bring school kids through there, you
22 know, a thousand kids a year, and they said it would be a
23 loss to them if they couldn't see the mountain anymore.
24 So the compromise, because I actually tried to get
25 Calpine to consider redesigning things so that they could

1 still see the mountain from that view, what the project
2 has proposed, but it was not feasible to do that. So the
3 compromise was to pick two locations on the trail where
4 the view would not be impacted, and set up these
5 interpretive panels and view scopes, so the view could
6 still be enjoyed, and actually it probably would be
7 enhanced because then there would be more information to
8 even the general users of the trail about the importance
9 of Mt. Diablo and how it factors into everything. So
10 that was the limit of VIS-9, it wasn't the screening,
11 that was a part of the project as proposed and that was
12 proposed at the request of the City of Hayward, they
13 wanted something distinctive for this project as you
14 crossed the Bay into the City, there was a gateway
15 entrance to the City, and they wanted something that
16 would really stand out, so that was the concept for the
17 Wave. My personal opinion as the visual analyst, the
18 Wave caused more contrast, so it made my job more
19 difficult, so anyhow that's the reason for VIS-9 and what
20 it entailed.

21 COMMISSIONER HOCHSCHILD: Could I ask a follow-
22 up to that, which is just I wanted to clarify the only
23 issue initially raised was just the power plant blocking
24 the view of Mt. Diablo? Because it does also block the
25 view of the rest of the skyline there, and I'm just

1 curious at the time that was the only issue?

2 MR. KNIGHT: Well, that was the issue -- the
3 way you do a visual analysis is you pick points in the
4 area that are the most sensitive, they call them key
5 observation points, and from that viewpoint the primary
6 concern was blocking the view of Mt. Diablo. There were
7 other viewpoints in the marsh where the project was
8 analyzed and the impacts were assessed, and the
9 recommendation there was things like painting the
10 facility in an appropriate way, doing onsite landscaping.
11 And because there's some limitations on how tall that
12 landscaping can be because of the concern about perching
13 opportunities for raptors that would prey on sensitive
14 species, VIS-10 was added and that's to compensate for
15 the project's impacts as seen from the marsh, by
16 screening away some of the other buildings, existing
17 buildings. So if you can't do much to screen the power
18 plant because they're so tall and you're limited in how
19 tall the landscaping can be, what can you do to the
20 overall view shed? And so Calpine proposed the offsite
21 landscaping that became part of VIS-10, so to screen away
22 those bright light-colored buildings that aren't very
23 attractive, and reduce the overall visual quality from
24 that viewing area.

25 COMMISSIONER SCOTT: Can I ask a follow-up on

1 the landscaping question? I feel like we heard a few
2 different answers and I just wanted to get some
3 concreteness on the schedule. So first I think you
4 indicated it might be next spring, but then we heard it
5 needs to be done within 90 days, and so is there a
6 concrete schedule for when the landscaping is going in
7 and what that's going to look like?

8 MR. KNIGHT: Well, the condition as it appears
9 in your packet, where staff has -- we didn't accept all
10 of the changes that Calpine proposed in their amendment
11 -- the second to the last paragraph in the verification
12 says the project owner shall complete installation of
13 landscaping within 90 days of commercial on line date, or
14 operation date. So that's July -- I forget the exact
15 date, but sometime in July, so 90 days later they have to
16 have that landscaping installed. There was a request to
17 have it done during the optimal planning season, but
18 given this location near the Bay, and not as hot as
19 Sacramento, we felt that you could do that in September
20 or October.

21 COMMISSIONER SCOTT: Okay, so the on line date
22 I think you said was July 14, 2013, so within 90 days of
23 that the landscaping will be completed?

24 MR. KNIGHT: Yes.

25 COMMISSIONER SCOTT: Okay, thanks.

1 COMMISSIONER MCALLISTER: I want to just
2 understand, so clearly there are big issues and there are
3 longer term issues here, and this amendment proposes to
4 eliminate VIS-9, and there are significant impacts that
5 persist. And I want to sort of understand the process
6 that staff envisions working through VIS-10, and making
7 sure that does come up with a mitigation strategy, a
8 broad mitigation strategy as you described, that works.
9 So I'd kind of like to hear from staff and potentially if
10 HARD is willing to give its perspective on this, it would
11 be nice to hear from them just about why the ongoing
12 discussion and lack of agreement, and what those longer
13 term concerns are because I think we need to take those
14 seriously, as well.

15 MR. KNIGHT: In terms of VIS-10, I think
16 there's a benchmark, and that's in the Commission
17 decision, it's probably referenced in the Commission
18 decision, it references staff's analysis and it shows a
19 conceptual drawing or simulation of landscaping of those
20 offsite buildings, so it has kind of the benchmark that
21 you think it would achieve. And we understand and we've
22 been out in the field, staff has been out in the field
23 with Calpine, and there's landowner disagreement now
24 about putting landscaping on their properties, there's
25 underground linears that were not envisioned at the time

1 that need to be accounted for, so there may be
2 significant limitations actually planning landscaping in
3 the areas that were originally identified. At the time,
4 we had information from the landowners that they did
5 agree to this landscaping, so we had information and we
6 believed it would be feasible, that's turned out not to
7 be the case. So we're working with Calpine now on some
8 various options, other things they could try, but always
9 trying to match at least what was envisioned in the
10 original Commission decision, so that's the benchmark.
11 And we encourage -- we invite HARD and the City of
12 Hayward to participate in those discussions and try to
13 come up with a workable plan that achieves the mitigation
14 that was envisioned in the Commission decision.

15 CHAIRMAN WEISENMILLER: Okay, well
16 coincidentally we had a request from HARD to speak. But
17 having said that, you know, we've gone through a couple
18 different things of saying anyone having a comment, no,
19 and then we go on to staff, and then someone pops up, so
20 again, some degree of deference to public agencies, I
21 certainly encourage you to do that, but again we'll
22 signal that once more I'll go back to the staff and to
23 the Applicant, and then we may have questions. But
24 again, it's certainly well past the point of -- but
25 please come forward.

1 MR. KNIGHT: Could I just add one more comment

2 --

3 CHAIRMAN WEISENMILLER: Sure.

4 MR. KNIGHT: -- to respond to the
5 Commissioner's question. So what we envision is a new
6 plan being submitted pursuant to VIS-10, and then we can
7 post that on the webpage, make it available to anybody
8 who wants to see it, and we'll go through the process to
9 determine if we think it's adequate and meets the intent
10 of VIS-10 before it's approved by staff.

11 COMMISSIONER MCALLISTER: Thank you.

12 MR. LEPORE: Larry LePore. I'm a Park
13 Superintendent with the Hayward Area Recreation and Park
14 District. And thank you for allowing additional
15 comments. I'm the staff person who I think has been
16 involved, at least at the staff level, for the longest
17 period of time of current staff members that are with the
18 district. Actually, some of my knowledge of this whole
19 thing goes back to the late '90s, early 2000's during the
20 energy crisis when this energy plan was first proposed.
21 At that time, I worked for the Hayward Unified School
22 District. And I can tell you that, at that time, when
23 Calpine was first promoting, you know, going out and
24 doing the PR work, trying to promote this new energy
25 plan, I attended a number of community meetings where

1 there were some offers of money, financial consideration
2 as part of this approval process. And that changed over
3 time. At one point, there was spoken in public meetings
4 that HARD would receive \$5 million to address the impacts
5 on our shoreline properties, the school district would
6 receive \$5 million, and the City of Hayward would receive
7 \$5 million. I can't find that in any written
8 documentation, I have been able to locate some HASBA
9 Minutes where that number at one point was \$500,000
10 offered to HARD. So just, you know, trying to respond to
11 a little bit of your question of, you know, where the
12 financial thing might be in negotiations which I was part
13 of with respect to Calpine in the so-called voluntary
14 agreements. The language that is in those voluntary
15 agreements basically state that HARD would not be able to
16 oppose or publicly oppose any of the future proceedings
17 with Calpine for X amount of dollars, and that VIS-9
18 number which we were requested to develop was based on
19 that visual point on our almost southernmost property.
20 Now that the energy plan has been moved almost a quarter
21 mile to the north, yes, that visual point is not affected
22 anymore, but we now have a quarter mile of visual impacts
23 that are more than what they were in 2002. So moving the
24 plant north doesn't affect our southernmost deck on our
25 shoreline building, but our shoreline trail continues

1 north from that point, and is certainly affected by the
2 visual impact of the current plant, for a quarter mile
3 more than it would have been previously. So the impacts
4 are certainly greater today than they would have been if
5 the plant had stayed a quarter mile to the south.

6 In negotiations with Calpine, I wrote a letter
7 in 2010 proposing that we receive -- HARD -- this was a
8 proposal that we would get the same type of dollars that
9 they had already agreed to and signed an agreement with
10 the East Bay Regional Park District. The East Bay
11 Regional Park District is our partner on the shoreline.
12 They maintain, we maintain, the same trail. Our parcels
13 hopscotch to the north of where the shoreline
14 Interpretive Center is. They have a trail entrance at
15 Whitton which Calpine agreed to provide them \$200,000 to
16 develop and improve. My request as a staff person was to
17 make that identical since we have two entrances to the
18 same trail, \$200,000; since they've already agreed, why
19 are you treating East Bay Regional differently than
20 you're treating HARD? We are both, again, special
21 districts serving and are the stewards of the shoreline.
22 The other amount that I proposed was \$300,000, again,
23 identical to what they had already agreed to with East
24 Bay Regional, and that was for the same installment plan
25 and the level of service needs to be similar for the

1 visitors of the shoreline, so basically ongoing
2 maintenance of those shoreline properties. And then, in
3 addition to that was the \$77,500 that was requested. So
4 the maximum amount at that point in negotiations was
5 \$577,500. That was outright rejected by Calpine and they
6 would not agree to that, even though they had agreed to
7 \$500,000 of it with East Bay Regional, and the \$77,500
8 that we had already agreed to for the trailside
9 amenities. So, you know, I just wanted to offer that as
10 some of the other history that has occurred, on one hand,
11 going back 13 years where numbers are being thrown out,
12 to where we are today, it's a significant difference for
13 the impacts of this power plant on the shoreline and our
14 properties. Thank you.

15 CHAIRMAN WEISENMILLER: Okay, thank you. If
16 you want to submit that letter, or Calpine wants to
17 submit the other letters into the record, we're happy to
18 take it.

19 MR. LEPORE: They're already in your record.

20 COMMISSIONER DOUGLAS: And you know, I just
21 wanted to make a comment at this point because there's a
22 very fine line between dealing with issues that were
23 reviewed by the Commission when it voted out the decision
24 and the amendments that came before us, and looking at
25 the amendment that's before us today. So, you know,

1 discussion about what the visual impact of moving that
2 plant was on different portions of the trail, I mean,
3 those are exactly the issues that were analyzed. On the
4 other hand, I think that I do want to be sure that the
5 mitigation that was part of our decision in the past was
6 in fact offered in a no strings attached way. I don't
7 want to go through the he said, she said, it was, it
8 wasn't, but I do think that it would be -- I find myself
9 hopeful in the sense that the Applicant has said to us
10 that they are willing to offer that \$77,500 for trailside
11 amenities, where we're willing to offer that on a no
12 strings attached basis, that was part of the overall
13 agreement and decision that the Commission has voted out
14 in the past. I understand that the specific issue of
15 blocking Mt. Diablo, that that was provided for is no
16 longer before us in the same fashion; but nevertheless,
17 that condition remained in the Decision.

18 So I guess a question for Calpine, if I could.
19 Would you continue to be willing to enter into that kind
20 of agreement with HARD on a no strings attached basis
21 provided that, you know, I don't think, on the other
22 hand, it's really fair for us to make it a condition that
23 such an agreement be entered into, it takes two to enter
24 into an agreement, and so I think no strings attached is
25 important, and I also think that HARD would have a choice

1 to make if we went this direction about whether or not to
2 enter into an agreement, and it's their choice to make,
3 we're not going to force them to. So that's just a
4 question for you, if you could.

5 MR. WHEATLAND: One second, please. Calpine
6 would be willing to provide HARD \$77,500 to undertake
7 these trailside improvements, even if there is no
8 Condition of Certification that would require us to do
9 so. The key thing to emphasize here is that that
10 requires HARD's cooperation and agreement in order to
11 have that happen, and it requires HARD's cooperation and
12 acceptance of the funds without additional conditions or
13 burdens upon Calpine. But those funds would be available
14 if HARD chose to accept them, and didn't impose
15 additional conditions upon us, even if there was no
16 Condition of Certification from the Commission.

17 COMMISSIONER DOUGLAS: Thank you, Mr.
18 Wheatland, that's very helpful and, you know, to further
19 clarify -- and I think you understood what I asked very
20 clearly, but I'll say it again -- I think there should
21 not be conditions going in either direction, frankly. I
22 think that HARD should not impose additional conditions,
23 you know, Calpine should not impose additional
24 conditions. I think this was part of the package we
25 moved forward with. I think that it's a -- I appreciate

1 the willingness expressed to move forward with that on a
2 voluntary basis should HARD agree to take part without
3 either party imposing additional conditions on the other
4 by way of an agreement like this.

5 COMMISSIONER MCALLISTER: So just to fill in a
6 couple of gaps I have here, so we're talking about
7 loading these visual issues into VIS-10 going forward,
8 right? So I guess I'm wondering sort of if such an
9 agreement would be independent from VIS-10, and so what
10 does that leave in terms of discussion points for VIS-10,
11 and what kind of scale are we talking about with respect
12 to mitigation under VIS-10, an open question, but I think
13 it's important to highlight that, okay, \$77,500 or
14 whatever the number is doesn't necessarily mean anything
15 for VIS-10 going forward. So I guess I'm just kind of
16 wanting to have that idea, or that process fleshed out a
17 little bit more.

18 MR. WHEATLAND: All right, well, I think Mr.
19 Knight had covered this very well, but at the sake of
20 repeating, when the Commission -- staff and the
21 Commission did its Visual Impact Analysis of the project
22 at its new location in 2007 -- and by the way, I was here
23 for the original proceeding in 2002 and for 2007 -- but
24 when they did their analysis, they looked at the impacts
25 from specific key observation points, and they built

1 conditions into the decision based on the impacts that
2 they determined at those KOPs. So, for example, VIS-9
3 was attached to the KOP viewing the project from the HARD
4 Interpretive Center. VIS-10 was built from the viewpoint
5 of trails within the shoreline and what VIS-10 required
6 the Applicant to do was to plant trees along a row of
7 warehouses that, as you view the project, would be off on
8 the right-hand side. There was a group of warehouses
9 that were white warehouses, and since there was no
10 additional visual mitigation that could be done to the
11 project itself, staff recommended and the Commission
12 agreed that there would be a condition to plant trees in
13 front of these warehouses. That's what VIS-10 is, it's a
14 tree planting program in front of specific locations.
15 And as Mr. Knight mentioned, the difficulty we've had is
16 that the Applicant went to each of the warehouse owners
17 and said, "We'd like to plant trees in this location at
18 no cost to you." And we found two problems, some
19 warehouse owners have refused to allow the trees to be
20 planted; in other instances we have found that there are
21 pipelines that run underneath the tree planting location
22 on the property edge, which don't allow us to plant the
23 trees, or we've run into objections from those that feel
24 that the trees would provide nests for raptors or perches
25 for raptors. So given the difficulties in planting those

1 trees, we're exploring other opportunities within the
2 vicinity of the project to add some visual enhancement
3 because it may not be feasible to plant the trees in
4 those locations.

5 COMMISSIONER DOUGLAS: I think one point or
6 suggestion, I guess it's a bit of both, that I wanted to
7 raise, as well, is that in the compliance process there
8 are opportunities for public engagement. I mean, we
9 clearly have a community here that is interested and
10 concerned about how this project could look, how it could
11 impact the park, and both with the question of the plan
12 coming in on the aviation lighting and the question of
13 how VIS-10 might be proposed to be amended. These are
14 conversations that we do, should, and need to have
15 community engagement in. So I'd certainly leave that to
16 staff in terms of the format and the nature of that kind
17 of outreach, but I know that you do that often and well,
18 and it's clearly clearly needed in this case because
19 we've clearly got diverse and well represented public
20 interest. And in a number of the visual issues around
21 this, I see it really as a compliance issue more than,
22 you know, a -- I don't see it as a reopening of past
23 decisions and past weighing of evidence done by the
24 Commission; but in terms of compliance and in terms of
25 considering potential new amendments, there definitely

1 needs to be that level of public engagement, kind of a
2 heightened level of public engagement.

3 COMMISSIONER MCALLISTER: So, yeah, I very much
4 agree with that point. I think there are some open
5 questions here that need development and the
6 stakeholders, that there is a certification that has been
7 litigated and is done, but there are these issues that we
8 still need to take seriously. Now, I guess, hope not to
9 be a couple years down the line, or a year down the line,
10 and kind of have something in front of the Commission
11 that says, "Oh, we want to dismiss VIS-10," but actually
12 have a solution to these problems, that have some weight
13 behind it, and shows the community engagement, and shows
14 these alternatives, I think, that are yet to be seen are
15 very important for the community and we should make sure
16 that they get satisfactory treatment.

17 If I might, I wanted to just shift gears and
18 ask, you know, there was some discussion in the back and
19 forth here in our packet about the Emissions Reduction
20 Credits, and I wanted to just ask Calpine what's the plan
21 for making sure that those get procured and when that's
22 likely to happen.

23 MS. MCBRIDE: They've already been surrendered
24 to the Air District. All the Emissions Reduction Credits
25 that we are required to surrender to the Air District

1 have been surrendered, the PM-10 and all the rest under
2 AQSC-13.

3 COMMISSIONER MCALLISTER: The PM-10 and the PM-
4 2.5, so all of that is at an end point?

5 MS. MCBRIDE: Yes.

6 COMMISSIONER MCALLISTER: Thank you.

7 COMMISSIONER DOUGLAS: Okay, so I think that
8 we've had a robust discussion about this amendment. I
9 don't know if there are more comments or questions. I
10 want to say -- oh, Commissioner Scott.

11 COMMISSIONER SCOTT: I just had one question
12 also on a slightly different topic, which is that you
13 mentioned the hazardous materials, and the setback of
14 less than 50-feet, and that was okay provided there was a
15 firewall. Is the firewall there already? What does that
16 schedule or path look like?

17 MR. BOYER: It's already been ordered, but it's
18 not in place yet. The plans have been submitted to the
19 Delegate Chief Building Official for review of the plans.

20 COMMISSIONER SCOTT: And that would obviously
21 be in place before --

22 MR. BOYER: It all will be in place before the
23 sulfuric acid is put into the tank.

24 COMMISSIONER SCOTT: Okay, thank you.

25 COMMISSIONER DOUGLAS: All right, so with that

1 I would like to move approval of this item. I want to
2 again note the discussion we had about voluntary
3 arrangements outside of a condition. I personally hope
4 that both parties will see their way through to getting
5 to that agreement, but I understand that that's in the
6 hands of two parties who would need to come to agreement
7 to do that; hopefully we've simplified things by
8 suggesting there be no additional external conditions of
9 any sort going in either direction. But with that, I'll
10 move approval of this item.

11 COMMISSIONER SCOTT: Second.

12 CHAIRMAN WEISENMILLER: All those in favor?

13 (Ayes.) This passes unanimously. Thank you.

14 CHAIRMAN WEISENMILLER: So we're going to take
15 a break. We'll be back at 1:30.

16 (Off the record at 12:23 p.m.)

17 (Back on the record at 1:37 p.m.)

18 CHAIRMAN WEISENMILLER: Hopefully everyone had
19 an opportunity to avail themselves of the natural gas
20 vehicles outside. And again, I would like to thank
21 staff, Adam and Drew and Tim Carmichael, for helping us
22 organize that.

23 So let's go on to Item 7. Default Cool Roof
24 Performance Values for Low-Sloped Roofs that Use
25 Aggregate as the Surface Layer. And this is David Ware.

1 MR. WARE: Thank you, Commissioners. And good
2 afternoon. I did bring some items to show you, to
3 illustrate this item, and I will tell you about these
4 things in just a moment. I'm one of the staff people in
5 the Building Standards and Development Office. And the
6 item before you recommends your approval of the Default
7 Cool Roof Performance Value for Low-Sloped Roofs that use
8 Aggregate materials, these samples of materials that I
9 have in front of me.

10 The proposed Default Cool Roof Values for these
11 kinds of product types are based upon onsite testing
12 results. Public Resources Code 25402 requires the Energy
13 Commission to establish a process for the approval of new
14 products, materials, and calculations methods, and this
15 process is described as compliance options. We have been
16 before this Commission on several occasions for all kinds
17 of different kinds of compliance options for your
18 recognition of, and this is in that same vein.

19 The Building Efficiency Standards incorporate,
20 implement the Public Resources Code through Section
21 10109, and that allows you to make improvements to the
22 compliance procedures within the Standards, and to
23 respond to changing market conditions. This item, as I
24 mentioned, is a compliance option and is part of that
25 process.

1 As you are well aware, the Building Energy
2 Efficiency Standards require that all roofing products
3 meet specific cool roof properties for solar reflectance
4 and thermal emittance, and that they are tested,
5 certified, and labeled by the Cool Roof Rating Council.
6 Aggregate roofing materials, these kinds of things that I
7 have in front of me, are one particular roofing product
8 type that's made up of small stone or gravel-like
9 material, and it's used as the finished layer of low-
10 sloped roofing primarily used on non-residential building
11 roofs.

12 The Cool Roof Rating Council's test procedures
13 require that all roofing products have samples of
14 finished roofing material tested and certified, however,
15 roofing assemblies made up of these kinds of materials
16 that I have in front of me cannot be tested in the
17 prescribed manner of the Cool Roof Rating Councils.
18 Essentially, the Cool Roof Rating Council's protocols
19 call for a sample size of 13' X 13' and aggregate
20 materials used in those sample sizes representing the
21 finished roofing product installed on low-sloped roofs
22 can weigh anywhere between 400 to 1,000 pounds.

23 As a consequence, testing of these kinds of
24 products often result in the testing samples being
25 damaged, and the results of the testing is not a valid

1 representation of the installed Aggregate roof because of
2 the damage that has led to it, and the conclusion from
3 the testing that the cool roof properties of this type
4 deteriorates substantially over time with aging. This
5 contrasts with the expectation that Aggregate, as a
6 whole, as indigenous material, installed on a roofing
7 would indeed maintain the cool roof properties over long
8 periods.

9 The Cool Roof Rating Council is aware of this
10 concern, but to date has not modified its program
11 requirements, nor has it adopted alternative testing
12 procedures to respond to the concerns that the aggregate
13 roofing manufacturers have expressed.

14 To determine valid testing results for
15 Aggregate roofs, the Energy Commission sponsored onsite
16 testing of actual installed systems, and this testing was
17 conducted by Lawrence Berkeley National Laboratories Heat
18 Island Group in the spring of last year. This was part
19 of a larger study that the Commission's Energy Research &
20 Development Division was undertaking. Results of this
21 test confirmed indeed that roofs installed with Aggregate
22 materials do not substantially deteriorate over time.
23 They do indeed maintain a relatively high solar
24 reflectance.

25 Staff solicited stakeholder comments and

1 conducted a public webinar to review the proposed Default
2 Cool Roof Performance Value for Aggregate Materials based
3 upon the study results from LBNL. No objections were
4 received. However, there were several suggestions made
5 by participants that would improve staff's proposed
6 Default Solar Reflectance Values and staff has
7 incorporated those suggestions into the numbers in the
8 eligibility criteria that associates the proposal. Staff
9 believes that the proposed Default Cool Roof Properties
10 are a valid representation of the long term performance
11 of Aggregate Roofs, and recommends your approval of this
12 item. I would be happy to answer any questions that you
13 may have, and I'd also like to note that we had two --
14 had -- past tense -- had two representatives of the
15 industry that support this activity, one of those
16 representatives had to leave after the first item, there
17 is still a representative here from the industry that
18 supports this, and he is here also to answer any
19 questions that you may have on this item.

20 COMMISSIONER HOCHSCHILD: Just a quick
21 question. And I wish I could channel Art Rosenfeld
22 better than I can, but just the term "Aggregate" refers
23 to any type of crushed rock? Or is it a specific type of
24 crushed rock?

25 MR. WARE: More or less, a generic description,

1 the California Building Code describes Aggregate as
2 gravel or stone, crushed gravel or stone, and they are
3 crushed to certain sizes. And that's a size, for
4 example, this larger rock. This is a size, for example,
5 this small crushed rock. And those sizes are expressed
6 in the California Building Code, and we've referenced
7 those size categories out of the Building Code in our
8 proposed --

9 COMMISSIONER HOCHSCHILD: Okay, it's just rock,
10 it's not mixed with anything else?

11 MR. WARE: Well --

12 COMMISSIONER HOCHSCHILD: Or it can be.

13 MR. WARE: Well, the representative that is
14 here can --

15 CHAIRMAN WEISENMILLER: I was actually going to
16 ask you to have him come to the dais and introduce
17 himself.

18 MR. WARE: It's used everywhere for all kinds
19 of different things, roofing is just one item in which
20 crushed rock is used.

21 CHAIRMAN WEISENMILLER: Please step up, yeah.
22 Why don't you step up and introduce yourself and we can
23 see if there are other questions.

24 MR. PENEDA: Yes, my name is Louis Pineda,
25 General Manager, Vice President of A-1 Grit Company.

1 CHAIRMAN WEISENMILLER: Thank you. Now, do you
2 have any comments for the record on the Standards?

3 MR. PINEDA: What we've been working with is
4 with the folks from Lawrence Berkeley National Lab, and
5 this has been many years and gestation where we've been
6 trying to develop a standard with the Cool Roof Rating
7 Council. Unfortunately, the protocols and the testing
8 methodology is lacking for Aggregates, therefore the
9 study was concluded last year. We were able to
10 demonstrate that white Aggregate does not degrade over a
11 certain period of time. Currently, the testing method
12 requires a three-year age; we were able to visit sites in
13 Los Angeles Basin that were nearly 20 years of age, where
14 we were able to demonstrate that white Aggregate was
15 holding its solar reflectance and thermal emittance
16 qualities over much much longer than the required three
17 years.

18 CHAIRMAN WEISENMILLER: Thank you.
19 Commissioners, any questions or comments for this
20 gentleman or for the staff?

21 COMMISSIONER MCALLISTER: Yes, I actually
22 worked -- an old consulting firm that I worked for, I
23 don't know if they're still around, is actually the
24 administrator of the CRRC, so I know those folks who
25 actually you probably deal with -- it does not produce

1 any conflict here for me, this was a long time ago. But
2 I guess I'm wondering what the status of the discussions
3 about CRRC, and obviously it's a membership group of the
4 various players in the industry, you know, many of them,
5 -- most of them, I think, are members of the CRRC, what's
6 the status of the discussions to get them to modify or
7 incorporate sort of this alternate procedure for
8 Aggregates into their standards for testing?

9 MR. WARE: Well, as you're fairly familiar
10 with, Commissioner, the CRRC has monthly meetings or
11 quarterly meetings, in particular, where their technical
12 advisory committee gets together and ultimately there's a
13 Board that has to ratify any recommendations that are
14 made by the technical group. What has been proposed that
15 is most promising to the representatives of the Aggregate
16 industry, but also representatives of all roofing
17 materials is an accelerated age solar testing protocol,
18 which Lawrence Berkeley National Labs' Heat Island Group
19 has proposed for actually several years and continues to
20 refine that based upon comments that the technical
21 committee has suggested. So I think the timing life for
22 the adoption of that accelerated test is unknown, but I
23 think it's safe to say that the CRRC recognizes this
24 concern and the need for an -- not an alternative
25 procedure -- but something to help complement the

1 procedures that they do have, and they're working towards
2 that. And hopefully within the next 12 months, something
3 would be a little more forthcoming from them.

4 COMMISSIONER MCALLISTER: So the proposal on
5 the table is to use the numbers out of the Berkeley
6 procedure as part of Title 24 Building Standards. Is
7 that correct?

8 MR. WARE: Yes. These would be Default Age
9 Solar Reflectance Values that Aggregate materials can
10 use. It doesn't preclude manufacturers of Aggregate from
11 utilizing this CRRC test procedures, they would still
12 have to go through those test procedures and get a
13 measured initial solar reflectance, so it still has to be
14 a relative white rock, and all we're saying is if you
15 meet that initial testing value going through the
16 protocol of CRRC, we will allow you to use this default.
17 These defaults are actually not conservative, per se, but
18 even Louis' company, A-1 Grid, offers rock that has a
19 solar reflectance higher than defaults that we have, and
20 has gone through the CRRC testing.

21 COMMISSIONER MCALLISTER: Okay, so this seems
22 reasonable to me. And really we're talking about just
23 the aging, not the initial values or any exceptions to
24 the CRRC policy or standards. Okay, thank you.

25 COMMISSIONER DOUGLAS: I just wanted to say that

1 this is really welcome progress on this issue and
2 appreciate your being here and your colleague who had to
3 leave making the trip because we definitely -- this is a
4 material we want to understand better, it's very relevant
5 to Title 24, and so I'm pleased to see the project being
6 proposed.

7 MR. PINEDA: Thank you for the opportunity.

8 COMMISSIONER MCALLISTER: Thanks for helping
9 everybody work it out. So with that, I'll move Item 7.

10 COMMISSIONER DOUGLAS: Second.

11 CHAIRMAN WEISENMILLER: All those in favor?

12 (Ayes.) Item 7 passes unanimously. Thank you.
13 Thanks for being here.

14 CHAIRMAN WEISENMILLER: Let's go on to Item 8,
15 which is Placer Hills Union School District, possible
16 approval of Agreement 0112-12-ECD for \$687,000, and this
17 is ECAA funding. Anne Fisher.

18 MS. FISHER: Good afternoon, Commissioners. My
19 name is Anne Fisher and I'm with the Special Projects
20 Office. The Placer Hills Union School District is
21 requesting a \$687,000 loan to install a 190 kilowatt roof
22 mounted solar electric system at Weimar Hills School
23 located in Weimar, California. It is estimated the
24 project will reduce the school's energy use by 295,000
25 kilowatt hours per year, for a savings of \$52,981 on

1 their annual energy bill.

2 Approximately 94 percent of the school's
3 electricity will be produced by the Solar Electric System
4 and net metering will be used to credit excess production
5 back to the school.

6 The project will be funded by a one percent
7 ECAA loan and a \$129,583 California Solar Initiative
8 Rebate. The simple payback for the project is 13 years.
9 Staff requests approval of this loan. Thank you.

10 CHAIRMAN WEISENMILLER: Thank you. Any
11 comments or questions, Commissioners?

12 COMMISSIONER HOCHSCHILD: Sounds like a great
13 project.

14 MS. FISHER: Thank you.

15 COMMISSIONER DOUGLAS: Move approval.

16 COMMISSIONER SCOTT: Second.

17 CHAIRMAN WEISENMILLER: All those in favor?

18 (Ayes.) This is approved unanimously. Thank
19 you.

20 CHAIRMAN WEISENMILLER: Let's go on to your
21 next item which is 9, Winters Joint Unified School
22 District. Possible approval of Agreement 014-12-ECD.
23 This is a \$150,000 loan, again this is ECAA funding.

24 MS. FISHER: Good afternoon, Commissioners.
25 Again, my name is Anne Fisher and I'm with the Special

1 Projects Office. The Winters Joint Unified School
2 District is requesting a \$150,000 loan to install a
3 district-wide energy management system and retrofit
4 interior lighting at John Clayton School in the
5 Administration Building, in Winters, California. It is
6 estimated the project will reduce the school's energy use
7 by 234,600 kilowatt hours, and 6,600 therms per year, for
8 a savings of \$46,838 on their annual energy bills.

9 The project will be funded by a one percent
10 ECAA loan and a \$27,000 PG&E rebate. The simple payback
11 for the project is 3.2 years. Staff requests approval of
12 this loan. Thank you.

13 CHAIRMAN WEISENMILLER: Commissioners, any
14 questions or comments?

15 COMMISSIONER MCALLISTER: I would just point
16 out that 3.2 years is an incredible payback and, you
17 know, at the risk of sounding like a loan shark here,
18 it's like at these rates, you know, why not get a bigger
19 loan? Anyway, so this is a classically wonderful
20 project, easy to calculate the payback, it's clear that
21 the payback is there, and in Winters maybe there's the
22 potential for HVAC upgrades and deeper savings that they
23 could also take on. They've chosen to apply for this
24 one, the staff evaluated it, and this is obviously a
25 great project. So I'm very supportive. So I'll move

1 Item 9.

2 COMMISSIONER SCOTT: Second.

3 CHAIRMAN WEISENMILLER: Item 9 has been moved
4 and seconded. All those in favor?

5 (Ayes.) Item 9 also passes unanimously.

6 CHAIRMAN WEISENMILLER: Let's go on to Item 10,
7 City of Fort Bragg. Possible approval of Agreement 013-
8 12-ECD. This is a \$607,596 loan and, again, this is ECAA
9 funding. And Joseph Wang.

10 MR. WANG: Good afternoon, Commissioners. My
11 name is Joseph Wang and I'm also with the Special
12 Projects Office. And this is another application for the
13 ARRA one percent ECAA loan.

14 The City of Fort Bragg has applied for a
15 \$607,596 loan to install 12 energy efficiency measures at
16 six city facilities. The city has conducted a city-wide
17 energy audit and over 20 projects were identified during
18 the course of this process. They decided to install
19 these 12 measures. These measures include retrofitting
20 the interior and exterior lights in various City
21 buildings, and installing variable speed drives for the
22 pumps and fans, and then they also would like to install
23 a new energy efficient digester gas boiler for their
24 waste water treatment plant. And then they also would
25 like to install two small photovoltaic systems at their

1 facilities.

2 These projects are expected to reduce about
3 332,062 kilowatt hours of electricity and 16,843
4 equivalent therms of propane annually. The estimated
5 annual energy cost savings for these projects are about
6 \$80,634, with simple payback of 7.5 years. Staff has
7 reviewed the feasibility study and would like to
8 recommend approval of this loan.

9 CHAIRMAN WEISENMILLER: Thank you.
10 Commissioners, any questions or comments?

11 COMMISSIONER HOCHSCHILD: Just real quickly.
12 For this project, as well as the others, it's terrific
13 stuff. I'm just wondering, do we as a matter of protocol
14 suggest to these parties that they provide a public
15 information placard or kiosk, or any way for members of
16 the public, parents, etc., who are using these
17 facilities, to actually know these technologies are being
18 deployed, that savings are being realized? Is there any
19 public information element to this project, or others
20 that we're funding through --

21 MR. WANG: From the local jurisdictions, they
22 post some kind of acknowledgement about CEC loans, and
23 they also help us to release our press releases when
24 these projects were installed.

25 COMMISSIONER HOCHSCHILD: Okay. Well, I would

1 just say I think this is really important work. I think
2 part of the work, you know, we should be thinking about
3 is actually how to make sure that it's understood by the
4 public that this is happening and that there's a benefit
5 to it because I think there's a real value, particularly
6 for public facilities in helping promote further projects
7 of this nature. But with that, I would move this item.

8 COMMISSIONER DOUGLAS: Second.

9 CHAIRMAN WEISENMILLER: All those in favor?

10 (Ayes.) This item also passes unanimously.

11 Thank you.

12 MR. WANG: Thank you.

13 CHAIRMAN WEISENMILLER: Let's go on to Item 11.

14 We're now hitting a string of PIER Electricity funding,
15 and I will say for the record all of these have gone --
16 as the lead Commissioner on R&D, I've gone through all of
17 these, they're great projects.

18 So let's start with Item 11, and that comment
19 will cover through Item 34, so anyway. So this is
20 Farasis Energy, Inc. Possible approval of Agreement PIR-
21 12-006, \$749,710, again, electricity funding. Rhetta
22 DeMesa, please.

23 MS. DEMESA: Good afternoon, Chairman and
24 Commissioners. My name is Rhetta DeMesa with the Energy
25 Generation and Research Office. And I'll be presenting

1 for your approval today the next two items on the agenda,
2 both of which resulted from a competitive solicitation
3 that focused on plug-in electric vehicle battery
4 standardization and recycling.

5 The first one, Farasis Energy, we're
6 recommending a grant in the amount of \$749,710. Farasis
7 is an advanced lithium ion cell manufacturing company
8 based in Hayward, California, and in collaboration with
9 Lawrence Berkeley National Lab will develop and
10 demonstrate the technical and cost feasibility of battery
11 recycling technology known as direct recycling, which was
12 designed specifically for large lithium ion batteries
13 such as those found in electric vehicles. The direct
14 recycling approach is a closed loop system in which high
15 value materials such as lithium and graphite which are
16 not currently recovered in existing recycling
17 technologies, for instance, PV batteries, will be
18 recovered with over a 95 percent yield. The recycled
19 material that is recovered will then be made suitable for
20 use in the production of new electric vehicle battery
21 packs. The project will include a small-scale
22 demonstration of the integrated process and use the
23 effort to develop an accurate cost model for implementing
24 the technology throughout California.

25 In closing, staff requests approval of this

1 agreement.

2 CHAIRMAN WEISENMILLER: Thank you. With the
3 obvious note that obviously the CEV is very important to
4 us and certainly dealing with the battery issues now is
5 very important. So I think these particular projects are
6 particularly important to occur. So does anyone have any
7 questions or comments on this?

8 COMMISSIONER HOCHSCHILD: I would move the
9 item.

10 COMMISSIONER DOUGLAS: Second.

11 CHAIRMAN WEISENMILLER: All those in favor?

12 (Ayes.) This item passes unanimously. Thank
13 you.

14 CHAIRMAN WEISENMILLER: Let's go on to your
15 next item, which is Item 12. This is Lawrence Berkeley
16 National Lab, possible approval of PIR-12-015. This is
17 for a \$250,290 grant to the Department of Energy's
18 Lawrence Berkeley National Lab. Rhetta, please.

19 MS. DEMESA: Thank you. As mentioned, this is
20 a proposed grant to Lawrence Berkeley National Lab. The
21 focus of this agreement is on developing strategies for
22 sustainable and cost-effective recycling and disposal
23 pathways for PEV battery packs. Under the agreement,
24 LBNL will develop PEV Consumer Adoption Scenarios for
25 California in the short, medium, and long terms, which

1 will be used to gauge how quickly recycling
2 infrastructure must be scaled up, and target areas for
3 early deployment. Then, using the Consumer Adoption and
4 Disposal Scenarios in California, they will develop
5 centralized and decentralized recycling scenarios at
6 varying levels of component and material recovery. The
7 team will then apply a cost and environmental impact
8 model to the recycling scenarios that calculates
9 transportation distances and determines optimal battery
10 collection and recycling facility locations, as well as
11 practical opportunities for beneficial co-location with
12 existing industrial facilities.

13 Information resulting from this effort can be
14 used by decision makers to guide future choices about
15 battery recycling skills in California. Again, staff
16 requests approval of this grant.

17 CHAIRMAN WEISENMILLER: Any questions or
18 comments?

19 COMMISSIONER MCALLISTER: I would just make a
20 comment that this really fits in well with the industrial
21 ecology kind of approach, and the material flows in the
22 battery economy are not trivial, they're actually very
23 very significant, and so I think attacking these
24 important issues, potential problems head on before they
25 become problems, is really important research and just

1 super concrete for the policy process and just practical
2 making this happen in the real world and the
3 implementation side. So I would support this project.
4 So I will move Item 12.

5 COMMISSIONER SCOTT: Second.

6 CHAIRMAN WEISENMILLER: All those in favor of
7 Item 12?

8 (Ayes.) Item 12 passes unanimously.

9 CHAIRMAN WEISENMILLER: Let's go on to Item 13.
10 Sierra Institute for Community Environment. Possible
11 approval of PIR-12-003. This is a \$300,000 grant. This
12 is also PIER Electricity funding. Rizaldo, please.

13 MR. ALDAS: Good afternoon, Commissioners. My
14 name is Rizaldo Aldas with the Energy Research &
15 Development Division. This project, as well as the next
16 seven items are results of our recently completed grant
17 solicitation called the Community Scale Renewable Energy
18 Development Deployment and Integration, or REDDI. This
19 service station offered RD&D funding in three research
20 areas, a) community-scale renewable energy integration
21 demonstration, b) community-scale renewable energy
22 integration exploration, and c) breakthrough community-
23 scale renewable energy technology development.

24 This particular project for community and
25 environment is under research area B on the exploration.

1 The project will create an integrated renewable energy
2 action plan for Plumas County. Part of the effort is
3 developing institutional partnerships, management
4 solutions, and site specific plans to promote the use of
5 woody biomass for thermal energy. The project will also
6 explore the use of combined heat and power, biomass
7 powered units, and other more commonly implemented
8 renewable energy technology such as solar.

9 Through the development of the Plumas Energy
10 Efficiency and Renewables Management Action Plan, which
11 they call PIERMAP, this project will reduce the use of
12 high cost fossil fuels of public institutions by
13 integrating woody biomass and other renewable energy in
14 the existing infrastructure in Plumas County.

15 With that, I request your approval of this
16 item. Thank you.

17 CHAIRMAN WEISENMILLER: Thank you.

18 Commissioners, any questions or comments?

19 COMMISSIONER SCOTT: I will move the item.

20 COMMISSIONER DOUGLAS: Second.

21 CHAIRMAN WEISENMILLER: All those in favor?

22 (Ayes.) This item passes unanimously.

23 CHAIRMAN WEISENMILLER: Let's go on to Item 14.

24 City of Davis. Possible approval of Agreement PIR-12-
25 011. This is a \$300,000 grant. This is PIER Electricity

1 funding. And Rizaldo Aldas again.

2 MR. ALDAS: Good afternoon, again. For the
3 record, my name is Rizaldo Aldas with the Energy Research
4 and Development Division. This project with the City of
5 Davis is under Research area of Renewable Energy
6 Integration Exploration of the grant solicitation that I
7 mentioned earlier.

8 In this project, the City of Davis will develop
9 a long term renewable energy deployment roadmap that is
10 consistent with this goal of supplying all energy needs
11 in the form of electricity and natural gas --

12 CHAIRMAN WEISENMILLER: Could you hold on for
13 one second?

14 COMMISSIONER DOUGLAS: So before we continue
15 this item, I just wanted to make my standard disclosure,
16 which is that I'm an Adjunct Professor at U.C. Davis and
17 U.C. Davis is, I believe, a sub or in some way involved
18 in this contract. The department that I work for when I
19 teach my Renewable Energy Law class is not in the same
20 department that's involved in this agreement, and this
21 disclosure applies to my co-teacher, or co-professor,
22 Mike Levy, our Chief Counsel, as well. So with that, you
23 can continue.

24 CHAIRMAN WEISENMILLER: So please continue.

25 MR. ALDAS: If I may mention again, the effort

1 being proposed here will build upon a previously
2 developed Climate Action Adaptation Plan which laid out
3 and received carbon neutrality and net zero energy goals.
4 The initial project currently called the Davis Future
5 Renewable Energy and Efficiency, or Davis FREE, will
6 provide a comprehensive analysis of available renewable
7 energy and energy efficiency options for the Davis
8 community. It will include developing local energy
9 databases, supply curves, and net zero building
10 guidelines for use in prioritizing recommended actions,
11 to also develop methodologies and energy flow models that
12 will be used to optimize renewable energy deployment
13 plan. If successful, this project would provide a
14 template for a comparable action for other California
15 communities. And with that, I request your approval of
16 this item. Thank you.

17 CHAIRMAN WEISENMILLER: Thank you.

18 Commissioners, any questions or comments?

19 COMMISSIONER HOCHSCHILD: Move the item.

20 COMMISSIONER DOUGLAS: Second.

21 CHAIRMAN WEISENMILLER: All those in favor?

22 (Ayes.) This item passes unanimously. Thank
23 you.

24 CHAIRMAN WEISENMILLER: Let's go on to Item 15.

25 South Tahoe Public Utility District. Possible approval

1 of Agreement PIR-12-018. This is a \$139,830 grant, and
2 this is also PIER Electricity funding. Gail Wiggett,
3 please.

4 MS. WIGGETT: Good afternoon, Commissioners.
5 My name is Gail Wiggett and I'm with the Energy Research
6 Division. I'm presenting for your approval this
7 afternoon an agreement proposed under Research Area B of
8 the previously mentioned REDDI solicitation. This
9 agreement is with South Tahoe Public Utility District in
10 the amount of \$139,830, with match of \$72,352 provided by
11 a diverse array of local independent stakeholders. This
12 is a 22-month project and it has goals of developing a
13 model partnership process to test in a multi-
14 jurisdictional setting for creating a comprehensive
15 community plan that will integrate local renewable energy
16 technologies at the distribution and Grid level. They
17 also want to explore ways to coordinate energy loads and
18 resources of water and other community infrastructure
19 service systems, with distribution level Grid operations
20 using advanced communications and control technologies,
21 and working among historically independent stakeholders.
22 And then they want to develop a strategic renewable
23 energy plan for the South Tahoe PUD Region to develop,
24 evaluate and explore renewable energies, and hopefully
25 this plan will serve as a model for illustration for

1 similar communities in rural areas. With that, I thank
2 you for your consideration and if you have any questions,
3 I'd be happy to answer them.

4 CHAIRMAN WEISENMILLER: Thank you.

5 Commissioners, any questions or comments?

6 COMMISSIONER DOUGLAS: No. I move approval.

7 COMMISSIONER HOCHSCHILD: Second.

8 CHAIRMAN WEISENMILLER: All those in favor?

9 (Ayes.) This item passes unanimously. Thank
10 you.

11 CHAIRMAN WEISENMILLER: Let's go on to Item 16.

12 Cogenra Solar, Inc. Possible approval of Agreement PIR-
13 12-012 for a \$525,000 grant. Hassan Mohammed, please.

14 MR. MOHAMMED: Good afternoon, Commissioners.
15 My name is Hassan Mohammed. I'm from the Energy Research
16 and Development Division. I'm here to seek grant
17 approval for this project for a total amount of \$525,000
18 to Cogenra Solar, Inc. This project is also part of the
19 community-scale solicitation. The goal of the project is
20 to develop advanced solar co-generation system that will
21 use both solar PV and thermal storage technologies in a
22 combined heat and power configuration to generate
23 dispatchable electricity and capture and store the heat
24 to deliver hot water or cooling services to buildings.
25 Cogenra has commercialized a similar solar system;

1 however, this proposed system would operate at higher
2 temperatures and use an organic rankine cycle system to
3 convert the heat into additional electricity. The
4 ability to tap into the sun's energy and the flexibility
5 to allocate it to direct power, dispatchable power, and
6 hot water would particularly benefit renewable energy
7 projects in California.

8 This project is 22 months long and the project
9 team is providing \$155,600 (ph). And with this, I
10 request your approval. Thank you.

11 CHAIRMAN WEISENMILLER: Thank you.
12 Commissioners, any questions or comments?

13 COMMISSIONER MCALLISTER: Is there anybody from
14 Cogenra here among us? No?

15 MR. MOHAMMED: Actually in the morning there
16 was the project manager on line, but --

17 COMMISSIONER MCALLISTER: Okay. I think this
18 is a really interesting area to capture the heat that's a
19 byproduct of PV and use it for something useful. I'm
20 particularly intrigued by the cooling potential here,
21 which indicates it's a higher quality heat. So I would
22 be definitely interested in this, very supportive. So
23 with that, I'll move Item 15.

24 COMMISSIONER SCOTT: Second.

25 CHAIRMAN WEISENMILLER: All those in favor?

1 (Ayes.) Item 16 passes unanimously. Thank
2 you.

3 CHAIRMAN WEISENMILLER: Let's go to Item 17.
4 City and County of San Francisco. Possible approval of
5 Agreement PIR-12-010. And this is a \$300,000 grant, and
6 this is once more PIER Electricity funding. Jason
7 Harville.

8 MR. HARVILLE: Good afternoon, Commissioners.
9 My name is Jason Harville and I'm with the Energy
10 Generation Research Office. We are requesting approval
11 of this 23-month agreement with the City and County of
12 San Francisco. As you mentioned, the agreement is a
13 \$300,000 grant and also includes an additional \$300,000
14 in match funding, and is a planning project under the
15 aforementioned solicitation that Rizaldo introduced.

16 The purpose of this project is to investigate
17 options and create a roadmap for integrating through a
18 smarter microgrid the existing energy systems, renewable
19 energy generation distribution and storage, and other
20 enabling technologies in the eco district of San
21 Francisco's central corridor. This project is novel in
22 that it's investigating an integrated energy system which
23 will serve multiple stakeholders. This includes
24 commercial, municipal, and residential properties, and
25 it's on a large community scale.

1 To date, this type of project has only been
2 demonstrated on a continuous single owner type property
3 such as a university campus or a military installation.
4 This is an important attempt to create such an integrated
5 system on a community level.

6 The benefits of this project are not only for
7 the City of San Francisco, but also communities across
8 California, by providing analysis of the challenges to
9 creating such an integrated system, and creating a
10 roadmap which can be followed by urban planners across
11 the state. We request approval of this item and I'd be
12 happy to take any questions. Thank you.

13 COMMISSIONER HOCHSCHILD: I just wanted to --
14 this is for the Civic Center area, I'm presuming?

15 MR. HARVILLE: I'm sorry, I didn't quite hear
16 you.

17 COMMISSIONER HOCHSCHILD: It's for the Civic
18 Center Area? That's where the, last time I heard, the
19 clean energy idea was -- is it -- am I --

20 MR. HARVILLE: I'm not exactly sure where the
21 Civic Center is, I'm not that familiar with San
22 Francisco, it's an area between I believe Second and
23 Sixth Street, and then Market and Townsend.

24 COMMISSIONER HOCHSCHILD: Oh, interesting. So
25 it's South of Market. Is it going to be publicly owned

1 infrastructure even though it's served by PG&E? Or
2 what's the --

3 MR. HARVILLE: It's across a wide range. There
4 is PG&E and also NRG Thermal, it's a thermal energy
5 company in the area, and so this is across public
6 interests and private interests. They're really
7 attempting to create an integrated project across all
8 these different interests. And one of the key goals of
9 this project is investigating like regulatory hurdles and
10 the challenges to integrating all these different
11 interests into a Smart-grid at this kind of level.

12 COMMISSIONER HOCHSCHILD: Okay.

13 CHAIRMAN WEISENMILLER: Anyone else? Questions
14 or comments?

15 COMMISSIONER SCOTT: I'll move the item.

16 COMMISSIONER MCALLISTER: Second.

17 CHAIRMAN WEISENMILLER: All those in favor?

18 (Ayes.) This item also passes unanimously.

19 Thank you.

20 MR. HARVILLE: Thank you.

21 CHAIRMAN WEISENMILLER: Let's go on to Item 18.

22 Cool Earth Solar, Inc. Possible approval of Agreement

23 PIR-12-016 with Cool Earth Energy Solar, Inc.

24 \$1,726,438. This is also PIER Electricity funding.

25 Michael Sokol.

1 MR. SOKOL: Good afternoon, Commissioners. I'm
2 Michael Sokol with the Energy Research and Development
3 Division. And I recommend funding this agreement with
4 Cool Earth Solar, titled "Predictable Solar Power and
5 Smart Building Management for California Communities."
6 This was awarded under Research Area A of the Community-
7 Scale Renewable Energy solicitation introduced by Rizaldo
8 and the purpose of this agreement is to demonstrate and
9 evaluate an integrated community-scale renewable energy
10 system that involves three primary components. The first
11 will be to deploy 100 kilowatts of cooler solar
12 innovative low cost concentrating photovoltaic prototype
13 technology; secondly will be to deploy a series of
14 networked total sky imagers on the campus site, to
15 develop a high resolution solar forecasting model for the
16 community; and third will be to utilize the generated
17 forecasts to optimize the concentrating PV system
18 performance and also for active smart building energy
19 management for onsite building load in the community.
20 The partners for this project are Lawrence Livermore
21 National Lab and Sandia National Lab, along with Cool
22 Earth Solar, and the demonstration site is at Livermore
23 Valley Open Campus Community, which was formed by a
24 partnership between both of those national labs, and the
25 City of Livermore and others to increase collaboration

1 between National Labs and private industry by hosting
2 scientists in an open environment. This community is
3 also the home for iGate, which is the Innovation for
4 Green Advanced Transportation Excellence, which is
5 designated as an iHub by Governor Schwarzenegger in 2010.

6 This is a 22-month agreement and it includes
7 over \$1 million in match funding provided by Cooler Solar
8 and I recommend this agreement for approval.

9 COMMISSIONER HOCHSCHILD: What's the
10 concentration ratio of this technology? Do you know, is
11 it --

12 MR. SOKOL: I believe it's a low concentration.
13 It's very innovative concentrator and then it's an
14 inflatable plastic tube that's a concentrator itself --

15 COMMISSIONER HOCHSCHILD: Right, right.

16 MR. SOKOL: I can get you the specific numbers
17 on the concentration.

18 COMMISSIONER HOCHSCHILD: But this is a low
19 concentration technology?

20 MR. SOKOL: That's my understanding, yes.

21 COMMISSIONER HOCHSCHLID: Okay.

22 CHAIRMAN WEISENMILLER: Any other questions or
23 comments?

24 COMMISSIONER HOCHSCHILD: I will move the item.

25 COMMISSIONER MCALLISTER: I'll just comment, I

1 do like the integration with the Building Energy
2 Management System, the integration of building
3 technologies and generation technologies, it's the future
4 in a lot of ways, a lot of very important ways, so it's
5 important and I'll second it.

6 CHAIRMAN WEISENMILLER: All those in favor?

7 (Ayes.) This item passes unanimously. Thank
8 you.

9 CHAIRMAN WEISENMILLER: Let's go on to Item 19.
10 Redwood Coast Energy Authority. Possible approval of
11 Agreement PIR-12-022, and this is a \$1.75 million grant.
12 And this is in PIER Electricity funding. And Michael
13 again.

14 MR. SOKOL: All right, well once again my name
15 is Michael Sokol with the Energy Research and Development
16 Division. And I recommend funding this agreement with
17 the Redwood Coast Energy Authority titled "Repowering
18 Humboldt with Community-Scale Renewable Energy" and this
19 agreement was also awarded under Research Area A of the
20 demonstration category of the Community-Scale Renewable
21 Energy Solicitation introduced by Rizaldo.

22 The purpose of this agreement is to demonstrate
23 and evaluate an integrated woody biomass fuel cell and
24 gasifier system to provide combined heat and power to the
25 demonstration facility. In addition, the project team

1 will develop, implement and evaluate a local energy
2 upgrade program for the surrounding community, which
3 includes renewable energy, energy efficiency, and
4 electric vehicle charger opportunities.

5 The project will take the initial steps and to
6 evaluate the priority actions identified in the Repower
7 Humboldt Strategic Plan, which was developed under a 2008
8 Energy Commission funded renewable energy secure
9 community grant. And the demonstration site is located
10 in the Mad River Valley Community in Humboldt County with
11 the bioenergy CHP system demo located at Blue Lake
12 Rancheria Casino and Resort Complex, which is within that
13 community.

14 The project partners include Schatz Energy
15 Research Center at Humboldt State University, Blue Lake
16 Rancheria which is a local Federally recognized Native
17 American Tribe, and the Pacific Clean Energy Application
18 Center at U.C. Berkeley.

19 This is a 22-month agreement with over \$1.7
20 million provided in match funding by the project team,
21 and I recommend this agreement for funding.

22 CHAIRMAN WEISENMILLER: Great. Thank you.
23 Commissioners, any questions or comments on this one?

24 COMMISSIONER DOUGLAS: Move approval.

25 COMMISSIONER HOCHSCHILD: Second.

1 CHAIRMAN WEISENMILLER: All those in favor?

2 (Ayes.) This also passes unanimously. Thank
3 you.

4 CHAIRMAN WEISENMILLER: Let's go on to Item 21.
5 Sun Synchrony, PIR-12-019. This is a \$475,095 grant, and
6 this is also PIER Electricity funding. Prab Sethi,
7 please.

8 MR. SETHI: Good afternoon, Commissioners. My
9 name is Prab Sethi and I am with the Energy Generation
10 Research Office. There is a correction to the agenda for
11 this item. The matching fund should be \$325,692 instead
12 of \$350,692.

13 Sun Synchrony is an Awardee for the REDDI
14 solicitation in Research Area Breakthrough Community-
15 Scale Renewable Electric Technology Development. The
16 objective of the breakthrough power density for rooftop
17 PV applications projects are to develop the new
18 generation of the concentrated photovoltaic technology
19 and to combine it with a unique tracker and power
20 converter electronics.

21 The proposed project would generate higher
22 solar energy efficiency, resulting in more power per
23 scale meter of the rooftop, and support enhanced
24 penetration of solar energy to the buildings and
25 institutions in California.

1 The length of this agreement is 22 months,
2 requested PIER funding is \$475,095, match funding
3 \$325,692. The project team includes the prime
4 contractor, Sun Synchrony from Alameda, and subcontractor
5 Sandia National Lab, Livermore. The host sites are
6 college campuses, Peralta Community College District in
7 Oakland and Alameda. And I request approval of this
8 agreement.

9 CHAIRMAN WEISENMILLER: Thank you.
10 Commissioners, any questions or comments?

11 COMMISSIONER HOCHSCHILD: What's the
12 concentration ratio for this?

13 MR. SETHI: It's somewhere around 500 --

14 COMMISSIONER HOCHSCHILD: Five hundred?

15 MR. SETHI: Yes.

16 COMMISSIONER HOCHSCHILD: Wow.

17 COMMISSIONER SCOTT: I move the item.

18 COMMISSIONER MCALLISTER: I'll second.

19 CHAIRMAN WEISENMILLER: All those in favor?

20 (Ayes.) This item also passes unanimously.

21 CHAIRMAN WEISENMILLER: Let's go on to Item 22.

22 University of California Berkeley.

23 COMMISSIONER DOUGLAS: And, Chairman

24 Weisenmiller, the same disclosure regarding my being

25 Adjunct Professor at U.C. Davis applies to Item 22. It

1 also applies to Item 28, 31, and 33.

2 CHAIRMAN WEISENMILLER: And that also applies
3 to Chief Counsel Levy?

4 COMMISSIONER DOUGLAS: And that disclosure, all
5 those disclosures, also apply to our Chief Counsel.

6 CHAIRMAN WEISENMILLER: Thank you. Okay, so
7 this is \$600,000 and this is PIER Natural Gas funding.
8 And Reynaldo Gonzalez, please.

9 MR. GONZALEZ: Good afternoon, Commissioners.
10 My name is Rey Gonzalez and I am the Vehicle Technology
11 Staff lead in the Energy Generation Research Office. The
12 first two items I'll be presenting, Items 22 and 23, are
13 projects that are a result of a competitive solicitation
14 which targeted proposals for developing promising
15 technologies to advance the performance, fuel efficiency
16 and competitiveness of natural gas engines. The research
17 identified in the solicitation is consistent with the
18 Natural Gas Vehicle Research Roadmap, a completed and
19 publically vetted roadmap which identifies a priority to
20 develop a broader range of natural gas engines and
21 natural gas vehicles.

22 Staff is seeking an approval of Item 22. This
23 is a grant agreement with the University of California at
24 Berkeley, to develop an advanced natural gas engine. The
25 goal of this project is to demonstrate and improve fuel

1 economy of a natural gas engine by using advance
2 technology known as Skip Fire, in combination with Sonar
3 Deactivation Technology. The concept of Skip Fire is a
4 method where fuel is regulated to certain cylinders by
5 using torque demand as a control mechanism. This is done
6 instead of the current throttled engine design, which is
7 prevalent in most spark ignited natural gas engines.

8 To date, Skip Fire technology has been used on
9 gasoline engines and this project will leverage that
10 technology and demonstrate it in a 6.2 liter natural gas
11 converted engine. This project will also aim to improve
12 power density by incorporating turbo charged technology
13 to increase boost pressure. If successful, this project
14 will lead to improvements in thermal efficiency of a
15 natural gas spark ignited engine and targeting a 20
16 percent increase in fuel economy over the federal test
17 procedure. Staff is seeking approval of this project and
18 I can answer questions at this time.

19 CHAIRMAN WEISENMILLER: Thank you.
20 Commissioners, any questions or comments?

21 COMMISSIONER MCALLISTER: I would just note
22 that the transportation area is a very diverse one and
23 this was -- natural gas is definitely fitting -- I mean,
24 you guys talked about the Investment Plan earlier and
25 probably talked about some of the diversity needs of it

1 and how it covers lots of bases, and clearly natural gas
2 is one of those, so this is a very needed project and
3 I'll move it if there are no other comments, I'll move
4 item 23 (*sic*).

5 COMMISSIONER DOUGLAS: Second.

6 CHAIRMAN WEISENMILLER: All those in favor?

7 (Ayes.) Item 22 passes --

8 COMMISSIONER MCALLISTER: Twenty-two, sorry.

9 CHAIRMAN WEISENMILLER: Okay. So let's go on
10 to Item 23. Gas Technology Institute. This is PIR-12-
11 017 and this is a \$1 million grant. This is again PIER
12 Natural Gas funding. And Rey.

13 MR. GONZALEZ: Staff is seeking approval of
14 this grant agreement with the Gas Technology Institute,
15 partnering with Cummins Westport, Inc. to develop an
16 alpha phased advanced spark ignited natural gas engine
17 capable of meeting or exceeding current California Air
18 Resources Board emission standards. This proposed
19 project targets the development of a 6.7 liter natural
20 gas engine that matches a typical ratings and torque and
21 horsepower of diesel engines in the same size. By
22 matching this torque and horsepower range of a
23 conventional fuel counterpart, there is a better
24 opportunity to maximize the choices of vehicle
25 application.

1 The project's objectives include improving fuel
2 economy by 5-10 percent, using the previous Cummins
3 Westport 5.9 liter gasoline burn engine as the baseline.

4 Cummins Westport will apply its proven designs
5 and emission controls systems as demonstrated in their
6 currently available 8.9 liter engine and also a recently
7 announced 11.9 liter metric spark ignited natural gas
8 engine. This project will also demonstrate engine
9 greenhouse gas emissions levels that will be at or below
10 the anticipated U.S. EPA 2017 GHG emission standards.
11 Staff is seeking approval of this project.

12 CHAIRMAN WEISENMILLER: Thank you.

13 Commissioners, any questions or comments?

14 COMMISSIONER SCOTT: I move Item 23.

15 COMMISSIONER MCALLISTER: I'll second.

16 CHAIRMAN WEISENMILLER: All those in favor?

17 (Ayes.) Item 23 passes unanimously.

18 CHAIRMAN WEISENMILLER: Let's go on to Item 24.

19 National Renewable Energy Lab. And this is Agreement
20 500-12-008 and this is \$313,000 and is also PIER Natural
21 Gas funding. And Rey Gonzalez again.

22 MR. GONZALEZ: Thank you. Staff is seeking
23 approval of a contract with National Renewable Energy
24 Laboratory to develop a new natural gas vehicle research
25 roadmap. The current research roadmap was developed in

1 2008 and has been instrumental in providing guidance for
2 natural gas vehicle research development and
3 demonstration efforts by identifying and prioritizing
4 research opportunities and defining barriers relevant to
5 advancing clean and efficient natural gas vehicle
6 technologies. Successes can be measured by the number of
7 products where we funded earlier research, and those
8 products have gone on to make it to market, one of which
9 is a Westport Innovations 15-liter liquefied natural gas
10 engine, which is targeted at the Class 8 vehicles, the
11 heaviest classification of vehicles, and typically the
12 most fuel consuming vehicles.

13 Developing a new natural gas vehicle research
14 roadmap will define more current pathways to addressing
15 barriers for deploying high efficiency and advanced
16 natural gas vehicle technologies. Key tasks in this
17 project include conducting technology forums in
18 California, and this will be a way of efficiently
19 implementing the research roadmap. A technical advisory
20 committee will also be part of this project and it will
21 include participants from the California Air Resources
22 Board, the Public Utilities Commission, the Energy
23 Commission's A.B. 118 program, U.S. DOE, among others.
24 As the industry is pushing to deploy more natural gas
25 vehicles, particularly in the medium- and heavy-duty

1 sector, the revised roadmap will help guide the research
2 necessary to drive to cleaner and high efficient natural
3 gas vehicles. Staff is requesting approval for this
4 project.

5 CHAIRMAN WEISENMILLER: Thank you.

6 Commissioners, any questions or comments?

7 COMMISSIONER SCOTT: I'll move this item.

8 COMMISSIONER DOUGLAS: Second.

9 CHAIRMAN WEISENMILLER: All those in favor?

10 (Ayes.) This item passes unanimously. Thank
11 you.

12 MR. GONZALEZ: Thank you.

13 CHAIRMAN WEISENMILLER: Let's go on to Item 25.
14 Diakont Advanced Technologies, Inc. Possible approval of
15 a Agreement PIR-12-09, a \$1 million grant, and this is
16 Natural Gas funding. Johann Karkcheck, please.

17 MR. KARKCHECK: Good afternoon, Commissioners.
18 My name is Johann Karkcheck. This item, as well as the
19 next item, are a result of the 2012 Pipeline Integrity
20 Technology Demonstration solicitation. So the first one
21 I am here seeking approval of a 21-month grant agreement
22 for \$1 million with Diakont Advanced Technologies, Inc.
23 The project total is \$2.6 million with \$1.6 million in
24 recipient match. The proposed research will develop and
25 demonstrate Diakont's prototype multi-channel scanning

1 electromagnetic acoustic transducer or MS EMAT sensor.
2 This technology will be applied for remote inline
3 inspection of natural gas pipeline girth welds. The
4 sensor will add to the suite of Diakont's pipeline
5 crawler that is currently used in integrity management
6 practices of utilities in California. The sensor can
7 detect a variety of well defects such as incomplete
8 fusion, cracks, and excess reinforcement. The resultant
9 data will be manually verified by a trained technician to
10 provide the pipeline operator a pipeline feature list for
11 use in risk mitigation planning.

12 The MS EMAT technology has been under
13 development for two years, it has been verified by a
14 third party testing lab. This project will complete the
15 detailed development necessary to take the sensor to the
16 commercialized level so it can be utilized by pipeline
17 operators to increase the safety of the pipeline
18 infrastructure in California. The developed module will
19 be evaluated both internally at Diakont and through
20 utility-scale testing in PG&E's service territory.
21 Following successful demonstrations, the MS EMAT sensor
22 is set to be commercialized in a two to three-year
23 timeframe. Staff requests approval of this agreement
24 with Diakont Advanced Technologies, Inc., and I would be
25 happy to answer any questions you may have.

1 CHAIRMAN WEISENMILLER: Thank you.
2 Commissioners, after the San Bruno accident, you know, we
3 sort of reached out to President Peevey and the
4 conclusion was we needed to shift some of the gas PIER
5 funding into areas of pipeline safety, and so these two
6 products are a result of that. Certainly strong
7 concurrence with the PUC on that and going forward in
8 next year, we reached out with the general, again, to
9 make sure that we're providing an appropriate level of
10 funding in pipeline safety stuff for R&D.

11 COMMISSIONER HOCHSCHILD: That makes all the
12 sense in the world. I move the item.

13 COMMISSIONER DOUGLAS: Second.

14 CHAIRMAN WEISENMILLER: All those in favor?

15 (Ayes.) This passes unanimously. Thank you.

16 CHAIRMAN WEISENMILLER: Let's go on to your
17 next item, which is Item 26. Acellent Technologies, Inc.
18 And this is PIR-12-013, \$622,622, and again PIER Natural
19 Gas funding. Johann.

20 MR. KARKCHECK: So I'm here seeking approval of
21 a 27-month agreement for \$622,622 with Acellent
22 Technologies, Inc. The project will apply Structural
23 Health Monitoring, or SHM technology, to continuously
24 monitor the integrity of natural gas pipelines, providing
25 operators early indications of any damage with minimal

1 labor involvement. The SHM technology consists of a
2 network of distributed piezoelectric sensors and
3 actuators embedded on a thin dielectric film. This
4 comprises an Accellent Smart Layer which can be applied
5 to new or existing pipelines. Modules of diagnostic
6 hardware will be placed at regular intervals along the
7 pipeline, allowing signals from the Smart Layer to be
8 collected, analyzed, and transmitted to the back office.
9 The real time integrity information will provide the
10 location and magnitude of pipeline defects, enabling the
11 risk mitigation efforts to be prioritized by the operator
12 accordingly. The real time active pipeline integrity
13 detection, or rapid system, will be developed and
14 demonstrated to bring to market a commercially viable
15 plug-and-play structural health monitoring system that
16 can be easily adapted to meet a given pipeline operator's
17 needs. Demonstration and testing will take place both
18 internally at Acellent's facilities, as well as on a PG&E
19 pipeline asset. Following successful demonstration, the
20 rapid system is planned to be commercialized in the two
21 to three-year timeframe, just like the Diakont project.
22 Staff requests approval for this agreement with Acellent
23 Technologies, Inc., and I would be happy to answer any
24 questions you may have.

25 CHAIRMAN WEISENMILLER: Great, thank you.

1 Commissioners, any questions or comments?

2 COMMISSIONER MCALLISTER: It seems like another
3 -- I got a nice briefing on this and I feel like I agree
4 with you completely that these technologies are, you
5 know, evaluating underground pipelines is an incredibly
6 difficult technical challenge, and these two I think
7 really go together well for different aspects of that
8 challenge, to try to attack them and figure out low cost
9 ways of solving them. So I will move Item 26.

10 COMMISSIONER HOCHSCHILD: Second.

11 CHAIRMAN WEISENMILLER: All those in favor?

12 (Ayes.) Item 26 has passed unanimously. Thank
13 you.

14 CHAIRMAN WEISENMILLER: Let's go on to Item 27.
15 CleanWorld. This is Agreement PIR-12-007. This is an
16 \$820,000 grant. This is also PIER Natural Gas funding.
17 And I think we have Ms. Gutierrez.

18 MS. GUTIERREZ: Thank you. Good afternoon,
19 Commissioners. My name is Aleecia Gutierrez. I'm from
20 the Energy Research and Development Division. And the
21 projects that I'm presenting are a result of grant
22 solicitation PON-12-506, which was a grant solicitation
23 to provide funding for renewable natural gas production
24 processes with value added co-products and co-benefits to
25 make renewable natural gas production for transportation

1 fuel more cost competitive with conventional and natural
2 gas.

3 There were four projects total proposed for
4 funding and I'll be providing a brief description of
5 three of those. The first project is with CleanWorld and
6 the grant would provide funding to design, construct, and
7 demonstrate a commercial scale fertilizer production
8 system at the South Sacramento Transfer Station that will
9 concentrate and enhance the digester effluent into
10 nutrient rich fertilizers. The liquid and solid
11 fertilizers can be customized to meet the local market
12 demand by making adjustments via a semi-automated process
13 to the raw input materials.

14 The match funding of \$690,830 is from
15 CleanWorld. And staff requests approval of this project.

16 CHAIRMAN WEISENMILLER: Thank you.
17 Commissioners, any questions or comments on this one?

18 COMMISSIONER DOUGLAS: No. I move approval.

19 COMMISSIONER SCOTT: Second.

20 CHAIRMAN WEISENMILLER: All those in favor?

21 (Ayes.) This also passes unanimously. Thank
22 you.

23 CHAIRMAN WEISENMILLER: Let's go on to Item 28.
24 University of California, Riverside. This is Agreement
25 PIR-12-020. This is for \$359,847, PIER Natural Gas

1 funding. And you again, thanks.

2 MS. GUTIERREZ: So this is a project with U.C.
3 Riverside and this grant would provide funding to develop
4 a cost-effective method to separate carbon dioxide for
5 small- to medium-scale renewable natural gas production
6 projects. The project will address the high cost of
7 carbon dioxide separation and improve the net efficiency
8 of the conversion process by maximizing carbon feedstock
9 that would typically be lost during the conversion
10 process. The carbon dioxide will then be converted into
11 a value added co-product such as methanol dimethyl ether
12 or potassium carbonate. We request approval of this
13 project, and if you have any questions I would be happy
14 to answer them.

15 CHAIRMAN WEISENMILLER: Thank you.
16 Commissioners, any questions or comments?

17 COMMISSIONER MCALLISTER: What is the
18 deliverable here? Are they doing a prototype? Are they
19 testing it out in the lab? What's the sort of end result
20 of this particular --

21 MS. GUTIERREZ: It's a design of the technology
22 and, if successful, then they would do a pilot size
23 design. Right now, this project itself is lab-scale.

24 COMMISSIONER MCALLISTER: Okay, so are there
25 any contingencies here where part of it, sort of if it

1 doesn't work out, then there's a decision point part-way
2 through if it doesn't work out, then they would
3 potentially not get sort of part of the money?

4 MS. GUTIERREZ: Yeah, so we do have critical
5 project reviews in all of our projects, and if it's not
6 looking promising, then we would make that determination
7 at that time.

8 COMMISSIONER MCALLISTER: Okay, great. And I
9 just wanted to -- you know, as the Chair pointed out, we
10 go through lots of these really quickly, and that is in
11 no way to indicate -- should not be interpreted that
12 there hasn't been a lot of due diligence; in fact, quite
13 the contrary, this is the end result of a huge process
14 where staff does lots of due diligence, and you know,
15 generally speaking they're over -- the Chair probably
16 knows the numbers here, but many more applicants than
17 funds. And so really the ones that we're awarding are
18 the ones that ranked highest and really had the most
19 viability, so I just wanted to point that out.

20 CHAIRMAN WEISENMILLER: That's good.

21 COMMISSIONER MCALLISTER: So I'll move Item 28.

22 COMMISSIONER DOUGLAS: Second.

23 CHAIRMAN WEISENMILLER: All those in favor?

24 (Ayes.) Item 28 also passes unanimously.

25 CHAIRMAN WEISENMILLER: Let's go on to Item 29.

1 Interra Energy, Inc. Possible approval of agreement PIR-
2 12-021. This is \$808,147. This is also PIER Natural Gas
3 funding and also Ms. Gutierrez.

4 MS. GUTIERREZ: Thank you. So this grant will
5 fund construction and testing of a biomass pyrolysis
6 reactor called the Reciprocating Reactor. This reactor
7 will improve thermal efficiency and biomass pyrolysis
8 without requiring combustion or oxidation reactions by
9 recovering the heat potential stored within the phased
10 changes of steam to liquid water. In addition to the
11 renewable natural gas produced by the system, it will
12 produce biochar, an economically valuable soil amendment.

13 The project includes \$228,146 in match provided
14 by Interra. And if you have any questions, I'd be happy
15 to answer.

16 CHAIRMAN WEISENMILLER: Okay, thank you.
17 Commissioners, any questions or comments on this one?

18 COMMISSIONER DOUGLAS: No. Move approval.

19 COMMISSIONER SCOTT: Second.

20 CHAIRMAN WEISENMILLER: All those in favor?

21 (Ayes.) This also passes unanimously. Thank
22 you. Thanks again.

23 CHAIRMAN WEISENMILLER: Let's go on to Item 30.
24 U.S. Geological Survey. Possible approval of Agreement
25 500-12-007 for \$314,000. This is PIER Electricity

1 funding. Joe O'Hagan.

2 MR. O'HAGAN: Thank you, Chairman Weisenmiller.
3 My name is Joe O'Hagan. Good afternoon, Commissioners.
4 To facilitate energy permitting in the Desert Renewable
5 Energy Conservation Planning Area, to ensure such
6 development is consistent with the Federal Bald and
7 Golden Eagle Protection Act, and to inform management and
8 mitigation strategies within the DRECP plan itself, it's
9 critical that we get additional information on the status
10 of the Golden Eagle in this area, and how habitat laws
11 from renewable energy development in the DRECP is
12 affecting the prey base for this species.

13 This proposed project would assess nesting
14 success of the Golden Eagle, look at habitat availability
15 within the area, and also develop a standardized protocol
16 for accessing information on Golden Eagle populations and
17 to inform renewable energy developers and monitoring
18 requirements. This project was developed through the
19 Interagency Working Group, as was the project on Golden
20 Eagles I brought to the Commission last Business Meeting,
21 and this project was also identified as a high priority
22 research need. I ask your approval of this project. I'm
23 available for any questions.

24 CHAIRMAN WEISENMILLER: Okay, thank you.

25 Commissioners, any questions or comments?

1 COMMISSIONER DOUGLAS: Just briefly. Again,
2 this is another really important item, and I spoke to
3 this the last Business Meeting when we had another item
4 involving Golden Eagle research, but it's really
5 important for renewable energy permitting in California
6 to get a handle on some of these research questions, and
7 so I'm really pleased to recommend this to the
8 Commission, and I'll move approval of this item.

9 COMMISSIONER HOCHSCHILD: Second.

10 CHAIRMAN WEISENMILLER: All those in favor?

11 (Ayes.) This item also passes unanimously.

12 Thanks, Joe.

13 CHAIRMAN WEISENMILLER: Let's go on to Item 31.

14 University of California, Riverside. And this is
15 Agreement 500-12-009, \$400,963. And this is also PIER
16 Natural Gas funding. And this is Marla Mueller.

17 MS. MUELLER: Good afternoon. I am Marla
18 Mueller with the Energy Research Division, the
19 Environmental Program. This proposed contract is to
20 construct a Phase 2 study on the impact of natural gas
21 composition on the performance and emissions of heavy-
22 and medium-duty natural gas vehicles. In Phase 1, the
23 University of California, Riverside found some
24 significant impacts to emissions and air pollutants for
25 legacy heavy-duty vehicles, from varying the natural gas

1 composition. However, the one newer technology bus test
2 did not show any specific fuel effects. The use of
3 natural gas for transportation is a fuel diversification
4 strategy with recognized air quality benefits. And the
5 demand for natural gas vehicles will grow as the price of
6 natural gas comes down.

7 The objective of this research is to study
8 impacts relating to the use of a broader range of natural
9 gas compositions on vehicles than those historically used
10 in California. Issues to be studied include the impacted
11 different natural gas on fuel economy, operability, and
12 emissions of air pollutants. The Air Resources Board is
13 co-funding this project for \$120,000. An advisory
14 committee would be formed with personnel from
15 organizations such as the Air Resources Board, the Air
16 Districts, and Gas Utilities to provide guidance to the
17 project. This information will be very valuable to the
18 Air Resources Board, as they are in the process of
19 updating their specifications for natural gas for use in
20 vehicles. The project may show that a broader range of
21 natural gas compositions than has been used in California
22 can be used without adversely impacting air quality.
23 This could help expand sources for natural gas fuels in
24 California. However, the project may also show that, in
25 order to protect public health, some legacy vehicles

1 should be removed from service before a broader range of
2 natural gas is made available for vehicles. Staff asks
3 for approval of this agreement. And thank you for your
4 consideration.

5 CHAIRMAN WEISENMILLER: Thank you. As most of
6 you know, there's a pretty wide range of gas quality, you
7 know, the LNG particularly has a pretty high quality,
8 while the California gas has fairly low BTU content, and
9 so as you mix those in, I think probably one of the real
10 concerns, say, in the South Coast, if we ever were in a
11 position of importing LNG, is what that would tend to
12 mean. I think at this point, we're more likely to be
13 exporting it than importing it, but it's important to
14 sort of try to pin these down.

15 COMMISSIONER MCALLISTER: Yeah, absolutely. Is
16 there any inclusion of biogas and those sorts of issues
17 in the compositions?

18 CHAIRMAN WEISENMILLER: Certainly, again, you
19 can have a real range, particularly the biogas, and also
20 the quality and constituents. I think one of the
21 concerns on the PG&E system is just exactly what biogas
22 could do on the injection side. And the constituents is
23 always an issue. One of the things that Sempra had is at
24 one point the Transwestern System got PCBs into their
25 system, which obviously we've never quite gotten rid of,

1 and as we go forward on some of the hydrostatic testing,
2 you know, that that involves the water, and then one of
3 the issues after you put the water through is that it can
4 be absorbing PCBs or whatever that's in the pipe, so
5 certainly both of our gas utilities have to worry about
6 the disposal of the water after it's been used for the
7 safety testing. So, again, certainly interesting issues
8 here. Any questions or comments?

9 COMMISSIONER SCOTT: I move Item 31.

10 COMMISSIONER DOUGLAS: Second.

11 CHAIRMAN WEISENMILLER: All those in favor?

12 (Ayes.) Item 31 passes unanimously. Thank
13 you.

14 CHAIRMAN WEISENMILLER: Let's go on to Item 32.
15 Lawrence Berkeley National Laboratory. This is Agreement
16 500-12-010. And this is for \$575,423. And this is again
17 PIER Natural Gas funding. And David Stoms.

18 MR. STOMS: Good afternoon, Commissioners. My
19 name is David Stoms. I'm with the Energy Research and
20 Development Division. The Scoping Plan for AB 32
21 identifies geologic carbon sequestration as a potentially
22 important strategy for reducing greenhouse gas emissions
23 in California, but a well known risk of injecting and
24 storing fluids under high pressure underground is the
25 potential to induce seismic activity. This risk of

1 seismic activity could become a barrier to the
2 implementation of this strategy for two reasons, one, the
3 more obvious risk of damage to people and property, but
4 also the risk of fracturing the caprock that's holding
5 the fluid underground and then releasing the carbon
6 dioxide into the atmosphere.

7 Given that carbon sequestration hasn't been
8 developed at a commercial scale to this point, there's a
9 need to quantify this level of risk of induced
10 seismicity. This proposed interagency agreement, and
11 it's a collaboration between Lawrence Berkeley National
12 Lab as the prime contractor, and the California
13 Geological Survey as a subcontractor, to address this
14 knowledge gap.

15 The study will consist of two major
16 components, the first phase involves assessment of the
17 data and samples that are available to address the most
18 pressing questions about the potential risks of induced
19 seismic events, and then upon completion of this phase,
20 the study will perform laboratory analyses and
21 experiments on available samples, and create computer
22 simulations of potential seismic events. The project
23 should provide preliminary risk assessment information
24 relevant to informing development of seismic hazards
25 regulations, and permitting for sequestration projects in

1 California. It's also part of the Energy Commission's
2 planned cost share for WESTCARB. And I would request
3 your approval of this project.

4 CHAIRMAN WEISENMILLER: Thank you. You know, I
5 was going to say Lawrence Berkeley Lab has always had a
6 pretty active nuclear science division, which I'm an
7 alumnae of, and on the modeling side, there's a couple
8 ways you can model nuclides, one of them is a collective
9 or liquid drop model, and they have tended to apply that
10 also in the geysers in terms of how that operates, so I
11 would assume that some of this is coming out of that sort
12 of experience, again, of how to model this, sort of
13 collective interactions. But certainly the issue is
14 important to us, to understand as David indicated, if
15 you're doing carbon sequestration and induce seismicity,
16 which certainly we've seen at the geysers with the liquid
17 injections, then the next question is do you still
18 maintain the integrity of the injected fluids.

19 COMMISSIONER HOCHSCHILD: Has carbon
20 sequestration happened anywhere in the country yet?

21 CHAIRMAN WEISENMILLER: Well, the question in
22 part is how good is the sequestration; it's not unusual
23 to do CO₂ injection for like enhanced oil production, and
24 so there are some of the fuels in the San Joaquin Valley,
25 the oxy petroleum ones tend to actually -- they can use

1 either steam or hot water, or they can use CO₂ injection
2 to produce enhanced oil recovery. And I think there's a
3 lot of that also, I believe in Texas, where again you
4 would use that. Now, the next obvious question is, once
5 you've injected it, you know, how long does it stay under
6 and that part is certainly one of the issues that this
7 gets to. But it's not unusual, like I said, to inject CO₂
8 into that ground.

9 COMMISSIONER DOUGLAS: All right, well it is
10 timely and important research, so it's good to see it go
11 forward. I'll move approval of this item.

12 COMMISSIONER SCOTT: Second.

13 CHAIRMAN WEISENMILLER: All those in favor?

14 (Ayes.) This item passes unanimously. Thank
15 you, David.

16 MR. STOMS: Thank you.

17 CHAIRMAN WEISENMILLER: Let's go on to Item 33.
18 California State University, San Diego. This is possible
19 approval of the 13 highest ranking grant applications
20 totaling \$1,215,944. This is PIER Electricity and
21 Natural Gas funding. And Raquel Kravitz, please.

22 MS. KRAVITZ: Good afternoon, Commissioners.
23 My name is Raquel Kravitz from the Energy Research and
24 Development Division for the Energy Innovation Small
25 Grants Program, commonly known as EISG. Staff seeks

1 approval for funding of the 13 highest grant proposals
2 totaling a little bit over \$1.2 million from the four
3 categories of the EISG solicitation 12-02, consisting of
4 Transportation Electric, Transportation Natural Gas,
5 Natural Gas, and Electric.

6 From the 13 projects that are being recommended
7 for funding, there were two projects totaling a little
8 bit over \$178,000 for Transportation Electric, one
9 project totaling over \$91,000 for Transportation Natural
10 Gas, two projects totaling over \$189,000 for Natural Gas,
11 and eight projects totaling over \$756,000 for Electric.

12 To give you a little bit of background, the
13 EISG program has been around since 1998. It is a
14 component of Public Interest Energy Research, and the
15 mission for this program is to support the healthy growth
16 and development of new energy technologies that have not
17 yet been established. It is open to everyone and the
18 types of applications that we receive are from
19 individuals, small businesses, nonprofit organizations,
20 and academic institutions. It provides up to \$95,000 for
21 hardware concepts and up to \$50,000 for modeling
22 concepts.

23 So one of the requirements for this program is
24 that it must cover one or more of the PIER R&D research
25 areas, it must address a California energy problem, and

1 it must provide a tangible benefit to California's
2 electric and natural gas ratepayer.

3 Just to let you know, all of the 13 projects
4 are in California except for one, and that is located in
5 Tacoma, Washington; however, this project will spend more
6 than 80 percent of the EISG funds in California working
7 with subcontractors located in Lake Elsinore, California,
8 and Napa, California.

9 So on the average, we do have about three
10 solicitations a year seeking innovative research on the
11 four categories. And the best measure that I can tell
12 you about this program is that over half of the funds,
13 over half of the projects that get funded through this
14 program, receive follow-on funding, which is a great
15 indicator that there are other people out there that are
16 also interested in the concept.

17 The EISG program solicitation is very
18 competitive. Only projects that meet the multiple levels
19 of review get recommended for funding. It's a two-stage
20 process after the administrative review where they look
21 at each of the projects, whether it meets one or more of
22 the PIER R&D research, and they look at whether it
23 provides a clear vision of a market connection in
24 California that would benefit the Grid connected electric
25 consumers. And then after that it goes through a

1 technical review and in this review they look at the
2 overall technical merit of the project. And after that,
3 it goes through a program technical review where they
4 look at the guidelines for the policies and procedures.

5 For Solicitation 12-02, there were 43 proposals
6 that were received. After the multiple levels of review,
7 there are 13 projects that are being recommended for
8 funding. I ask your approval to fund the 13 projects
9 under this solicitation, and I'll be more than happy to
10 answer any of your questions. Thank you.

11 CHAIRMAN WEISENMILLER: Thank you.
12 Commissioners, again, in terms of backdrop, when we were
13 going through the PIER reauthorization debate, one of the
14 things we had was Jim Sweeney had gone through the
15 results of this program and, again, it's more like
16 \$100,000 seed capital, and sort of looked at the job
17 creation from that sort of independently and did a pretty
18 great paper on what the impacts had been from this. So,
19 again, it's gotten pretty high marks for that sort of
20 follow-up and for basically converting intellectual
21 capital into jobs and businesses in California. So, any
22 questions or comments?

23 COMMISSIONER DOUGLAS: Well, it's always --
24 this is a great program and it's always nice to see it
25 come to the Business Meeting, and learn a bit about the

1 amazing innovation that's going on and that we're helping
2 support. So anyway, thank you for your work on that.
3 I'll move approval of this item.

4 COMMISSIONER MCALLISTER: I'll second.

5 CHAIRMAN WEISENMILLER: All those in favor?

6 (Ayes.) This item passes unanimously. Thank
7 you.

8 MS. KRAVITZ: Thank you.

9 CHAIRMAN WEISENMILLER: Let's go on to Item 34.
10 County of Santa Clara. This is possible Agreement ARV-
11 12-043. This is a \$300,000 grant. This is ARFVTP
12 funding. And James Zhang (*sic*).

13 MR. FREEMAN: Good afternoon, Commissioners.
14 My name is Andre Freeman and I'm a member of the Fuels
15 and Transportation Division's Emerging Fuels and
16 Technologies Office. With your permission, we'd like to
17 present Items 34 through 40 together, as these are all
18 agreements resulting from a recent natural gas
19 infrastructure solicitation that is funded through the
20 Alternative Renewable Fuel and Vehicle Technology
21 Program.

22 CHAIRMAN WEISENMILLER: Please do so.

23 MR. FREEMAN: Thank you. This competitive
24 solicitation was open to the installation of new
25 infrastructure, as well as upgrades to existing

1 infrastructure for natural gas fueling. All projects
2 were scored on the throughput and the associated
3 environmental benefits of the stations, the need for
4 additional infrastructure in the region, the cost-
5 effectiveness of the projects, as well as the
6 demonstrated necessity for public funding to get the
7 stations completed. Additional points and preferences
8 were given to school districts with a reduced match
9 requirement, and any projects that were using renewable
10 fuel resources for either LNG or CNG development were
11 given additional points.

12 Now I'd like to briefly go through the list of
13 projects and then take any questions you have about the
14 specific projects afterwards. I also have the individual
15 CEC Project Managers in the audience to answer any
16 detailed questions you may have.

17 Item 34 is an agreement with the County of
18 Santa Clara, who will be installing the publically
19 accessible CNG station in San Jose, California. This
20 facility will enable the fueling of their CNG buses, as
21 well 250 other fleet vehicles that will be purchased over
22 the next five years, as well as the opportunity for
23 members of the public and local fleets to fuel at this
24 facility.

25 Item 35 is an agreement with Poway Unified

1 School District, who will receive funding for the
2 installation of CNG fueling equipment that will be
3 accessible to both the school district and the general
4 public, as well. This facility will be used to fuel 35
5 school buses, as well as the public vehicles and local
6 fleets.

7 Item 36 is an agreement with the Murrieta
8 Valley Unified School District, who will be installing
9 CNG infrastructure that will allow them to replace their
10 50 diesel buses with CNG alternative buses. Other
11 regional school districts will be able to utilize this
12 facility as an emergency facility if their CNG fueling
13 facilities go down. This area is economically
14 distressed, so the local school districts really couldn't
15 afford another alternative if their CNG infrastructure
16 went down.

17 Item 37 is an agreement with the City of
18 Sacramento to install two LNG fueling skids and to
19 refurbish two of the existing LNG fueling skids at their
20 Meadowview facility. This funding will enable the
21 expansion of the LNG fleet, while retiring aging diesel
22 trucks. The City plans to source at least 30 percent of
23 their fuel from renewable sources with the hopes of
24 increasing that upwards of 100 percent if economically
25 feasible, and if there is enough California-based

1 renewable fuel produced over the next few years.

2 Item 38 is an agreement with the City of Santa
3 Clarita to build CNG infrastructure that will allow the
4 City and public vehicles to fuel for the region. This
5 infrastructure will allow trucks, buses, and members of
6 the public to simultaneously fuel without a wait time.
7 This facility is currently impacted and they usually have
8 people waiting to use the pumps, so this will expand the
9 facility to meet the increased demand that they have.

10 Item 39 is an agreement with Waste Management
11 Collection Recycling to establish a compressed natural
12 gas station serving the Inland Empire Region. This
13 facility will allow Waste Management to replace the end
14 of life diesel vehicles that they use in their fleet with
15 cleaner compressed natural gas burning trucks. This
16 facility will also provide fueling to regional fleets.

17 Finally, Item 40 is an agreement with the City
18 of Anaheim to upgrade existing natural gas infrastructure
19 that supports the City's existing fleet. It will also
20 help accommodate the fueling needs of the City's
21 expanding natural gas fleet and surrounding fleets.

22 With that, I would like to take any questions
23 you may have.

24 CHAIRMAN WEISENMILLER: Actually, we have I
25 think on the line either one or two gentlemen from the

1 County of Santa Clara.

2 MR. VANCE: Yes, hello. This is Brad Vance and
3 Dennis Brooks from the County of Santa Clara. And we're
4 here and available to answer any questions you might
5 have.

6 CHAIRMAN WEISENMILLER: Thank you.
7 Commissioners, questions or comments for staff or for
8 these gentlemen?

9 COMMISSIONER HOCHSCHILD: Just a more general
10 question, but one of the threats that I see associated
11 with natural gas is fugitive emissions, and just looking,
12 not so much specific to these others, but just in
13 general, other than the gas pipeline inspections, have we
14 been getting proposals to deal with fugitive -- just
15 because methane is 24 times more potent than CO₂ and so
16 the consequences of that from a climate perspective are
17 significant, I'm just curious if that --

18 CHAIRMAN WEISENMILLER: We have a PIER contract
19 to do some measurement, although I would point out there
20 was a recent EPA report and what they concluded is
21 obviously there are fugitive emissions, there are amounts
22 somewhere in the spectrum, but that the technology issues
23 are not that difficult in terms of dealing with that, and
24 particularly presumably they're also cost-effective, so
25 they were certainly on the lower end of the scale. I

1 think that came out not last Monday, but the week before.
2 But we do have one that's -- I'm trying to remember if
3 it's the last PIER contract to basically go out and do
4 some measurement and sampling in California of that.

5 COMMISSIONER MCALLISTER: I think the last
6 Business Meeting when I think you were elsewhere, but we
7 approved what looked like a very good contract to
8 research the issue of fugitive emissions, specifically,
9 and it was sort of trying to get a handle on that very
10 issue, which is terrific.

11 COMMISSIONER SCOTT: I would just add that I
12 think it's important for us to have grants like this that
13 help us speed the transition from higher more polluting
14 vehicles, to newer -- I mean, from older more polluting
15 vehicles, higher polluting vehicles, to the newer and
16 cleaner vehicles, especially in places like some of the
17 school districts that Andre mentioned, where they
18 wouldn't be able to do this otherwise.

19 COMMISSIONER HOCHSCHILD: But then I would move
20 Items 34 through 40.

21 CHAIRMAN WEISENMILLER: Yeah, I was just going
22 to note that we did have -- I guess Waste Management is
23 out there. We had some CNG vehicles out there today, and
24 when I talked to them, they said that operation of these,
25 and actually seen with the Federal Express, that these

1 were very clean burning compared to the old diesels they
2 had. So with that, can we have a second for that?

3 COMMISSIONER SCOTT: Second.

4 CHAIRMAN WEISENMILLER: Moved and seconded.

5 All those in favor?

6 (Ayes.) This has also been approved
7 unanimously.

8 CHAIRMAN WEISENMILLER: As we indicated at the
9 beginning of the session, Item 41 has been held. So now
10 we'll go on to Item 42. Green Charge Networks. Possible
11 approval of Agreement ARV-12-052. And this is for
12 \$2,087,153. And this is a grant and ARFVTP funding. And
13 Mr. Tanimoto, please.

14 MR. TANIMOTO: Good afternoon, Chair and
15 Commissioners. My name is Lindsee Tanimoto from the
16 Emerging Fuels and Technology Office of the Fuels and
17 Transportation Division. This project was recommended
18 for funding on their solicitation PON-11-602, which
19 provides funding for the infrastructure of electric
20 charging stations and accommodates a growing number of
21 plug-in electric vehicles. To date, there are over
22 20,000 registered PEVs in California.

23 This grant to Green Charge Networks will
24 provide funding for the installation on the network of
25 smart-grid fast chargers with energy storage. Green

1 Charge Networks is partnering with 7-Eleven that has over
2 1,200 convenience stores in California.

3 The purpose of this project is to demonstrate
4 the utilization of energy storage to dampen the demand
5 peaks and save on the upfront capital investment and
6 ongoing operating and maintenance costs. Fast chargers
7 will be available 24 hours a day, seven days a week, with
8 unlimited public access. The energy storage system will
9 minimize the storage demand charges by receiving from the
10 grid during off-peak hours, and storing electricity for
11 later use to charge a PEV upon arrival.

12 This concludes my presentation and staff
13 requests your approval for this grant. I have Mr. Vic
14 Shao, the CEO, and Brian Asparro, the CFO of Green Charge
15 Networks on the line, and he may want to say a few words
16 before we answer questions.

17 CHAIRMAN WEISENMILLER: That would be great.
18 Please go ahead.

19 MR. ASPARRO: Sure. This is Brian Asparro, the
20 CFO of Green Charge Networks. We're very sorry not being
21 able to be there in person today. We thank you very much
22 for the opportunity and we think this is a great project.

23 MR. TANIMOTO: I think Vic Shao was headed to
24 SFO for a flight to Texas. He's actually going to meet
25 with the 7-Eleven Corporate Office tomorrow to talk about

1 the partnership. Oh, one thing I wanted to mention --
2 Brian, could you talk about the New York demonstration
3 you guys are currently doing with the U.S. DOE funding?

4 MR. ASPARRO: Sure. So we had won an award in
5 2009 to work with the Department of Energy and Con Edison
6 of New York to develop smart-grid enabled energy storage,
7 which we have installed two stations, systems at 7-
8 Elevens. We're happy to report that these stations have
9 mitigated the demand charges and the potential expensive
10 upgrades and infrastructure and 7-Eleven is very
11 interested in this program in California as a way to
12 offer electric vehicle charging to the public.

13 CHAIRMAN WEISENMILLER: Thank you.
14 Commissioners, any questions or comments?

15 COMMISSIONER MCALLISTER: You know, I'd just
16 point out that, you know, we're building a new
17 infrastructure here for a whole new way to fuel our
18 transportation options, so this is a huge endeavor and,
19 even though I think, well, relative to other sources of
20 funding, I think the AB 118 funding is kind of a go-to,
21 it's a principal place for this funding, but still
22 relative to the overall need, it's just a drop in the
23 bucket, and so this particular project, opening up
24 corridors, you know, taking the urban centers that are
25 relatively serviced by charging infrastructure, and now

1 working on the corridors to enable people to go and take
2 longer trips and stuff with their plug-ins, I think is
3 the next logical step, it really helps build the market,
4 helps sort of get around the chicken and egg problem,
5 cars vs. infrastructure, and we need both. So I think
6 this is a really good project for that long term vision.
7 So I will -- if there are no other comments, I'll move
8 Item 42.

9 COMMISSIONER DOUGLAS: Second.

10 CHAIRMAN WEISENMILLER: All those in favor?

11 (Ayes.) Item 42 passes unanimously. Thank
12 you.

13 CHAIRMAN WEISENMILLER: Let's go on to Item 43.

14 Alternative and Renewable Fuel Vehicle Buy-Down
15 Incentives. This is \$500,000. This is also ARFVTP
16 funding. And Andre Freeman, please.

17 MR. FREEMAN: Thank you, Commissioners. Today
18 I'd like to seek approval of the latest batch of
19 incentive reservations for propane vehicles that will be
20 funded through the Alternative and Renewable Fuel and
21 Vehicle Technology Program. As you know, the Energy
22 Commission's Natural Gas and Propane Vehicle Buy-Down
23 Program is designed to promote the purchase of
24 alternative fuel vehicles to replace the aging gasoline
25 and diesel fleets in California.

1 This program provides incentives for consumers
2 to adopt technologies which improve air quality, reduce
3 petroleum usage, and help boost California's economy.
4 This batch of reservations will provide incentives for
5 the purchase of 25 propane powered school buses that will
6 operate in California at least 90 percent of the time.
7 With that, I would like to thank you for your
8 consideration and I am available to answer any questions
9 you may have.

10 COMMISSIONER HOCHSCHILD: School buses are
11 typically diesel? So these are displacing what otherwise
12 would be a diesel? Is that correct?

13 MR. FREEMAN: Normally diesels, sometimes there
14 are gasoline-powered ones for the smaller school buses,
15 it all depends on the size and the duty cycles.

16 COMMISSIONER HOCHSCHILD: Okay.

17 CHAIRMAN WEISENMILLER: Yeah, one of the things
18 in the 118 program is that, going forward, we sort of
19 scaled down and scaled out the sort of propane and,
20 again, part of the question is that we're trying to use
21 the 118 to really develop technologies that have tangible
22 air quality benefits and also greenhouse gas benefits,
23 and we're seeing a convincing case here, although I'm
24 sure we'll hear more from the propane industry next year
25 as we go forward.

1 COMMISSIONER SCOTT: I'll move this item.

2 COMMISSIONER DOUGLAS: Second.

3 CHAIRMAN WEISENMILLER: All those in favor?

4 (Ayes.) This item also passes unanimously.

5 Thank you.

6 MR. FREEMAN: Thank you.

7 CHAIRMAN WEISENMILLER: Let's go on to Item 44,

8 which are the Minutes for April 30th.

9 COMMISSIONER DOUGLAS: Move approval of the
10 Minutes.

11 COMMISSIONER HOCHSCHILD: I'll second.

12 CHAIRMAN WEISENMILLER: No, you have to

13 abstain.

14 COMMISSIONER HOCHSCHILD: Oh, sorry. I

15 abstain.

16 COMMISSIONER MCALLISTER: I'll second.

17 CHAIRMAN WEISENMILLER: All those in favor?

18 (Ayes.) Abstain?

19 COMMISSIONER HOCHSCHILD: I abstain.

20 CHAIRMAN WEISENMILLER: Okay, thanks. That

21 passes unanimously.

22 Let's go on to Item 45. Lead Commissioner or

23 Presiding Member Reports.

24 COMMISSIONER DOUGLAS: So colleagues, I'm very

25 delinquent in making a certain very important report, and

1 that is that it's May. And that means that it's Bike
2 Month, and so with all of the hoopla surrounding
3 alternative fuel vehicles and natural gas, you know,
4 biofuel, actually one of the most important zero carbon
5 ways of transporting one's self to work, and home, and on
6 errands, and for fun is the bicycle. And Sacramento
7 Region every May celebrates May is Bike Month. The
8 Energy Commission has put in a tremendously strong
9 showing for many years in May is Bike Month, we have won
10 the Small Employer category the year before last, we
11 edged out REI and won it, last year REI edged out us,
12 edged out the Energy Commission, but, you know, we do
13 pretty well. We have a lot of people who ride and
14 contribute to our Energy Commission May is Bike Month
15 team. So I have been a little more delinquent, although
16 I'm planning to register quickly for May is Bike Month,
17 and I am tracking my miles. I do have to say, though,
18 that we now have a real cyclist on the Energy Commission,
19 and I'm staring straight at Andrew, who has done some
20 rides that are probably more hard core than anything I
21 will ever attempt, so I thought I might ask you about
22 that and, you know, see how many miles you and I and the
23 rest of us on the Commission might want to pledge to help
24 Team CEC this May.

25 COMMISSIONER MCALLISTER: Oh, man. Put me on

1 the spot. Yeah, I will just -- for the record, I will
2 say, you know, I have a significant additional baggage of
3 carbon-based material that, when I was really riding a
4 lot, which means I used to weigh 165 and now I'm pushing
5 200, but May is Bike Month is just a fantastic
6 opportunity to remind ourselves and get back on our bikes
7 if we've been a little lax, and I'm fortunate in that I
8 only live a half mile from work now, so I have to kind of
9 go out of my way to get in some miles on my commute, but
10 you know, bicycles are lovely devices, they inspire
11 poetry, they have really -- yeah, I won't wax poetic
12 about it, but I will say that this is a really good time
13 of year here in the Sacramento to get out on your bike
14 and put in some miles and enjoy our terrific outdoors,
15 and it's really something I think the Commission should
16 be promoting. You know, there's a lot of heavy-duty
17 technology that we really need to be in place, we've been
18 funding a lot of it here today, but simplicity is often
19 something we tend to forget about, and I think the Bike
20 Month is a great opportunity to kind of get active again.
21 So thanks for the reminder. I'm not going to go for a
22 specific pledge on the record right now. I have to think
23 about that one. But, thanks, Commissioner Douglas for
24 your leadership. Ever since I've gotten here, the staff
25 clearly takes up the challenge because of your leadership

1 here, and we log literally I think tens of thousands of
2 miles in May, and it's a great testament to, really, our
3 mission here and the staff that we have. They live their
4 values, as well, as do you. So I really appreciate that.

5 CHAIRMAN WEISENMILLER: Any other reports?

6 COMMISSIONER HOCHSCHILD: I have a few updates.
7 By the way, I like the peer pressure here. So as many of
8 you know, one of the things I'm focused on is trying to
9 bring in some guest speakers. We had a very good first
10 guest speaker from Solar Mosaic, which is the first
11 effort to do crowd funding of solar projects, that came
12 in two weeks ago; our next one I'd like to invite
13 everyone to is the Executive Director of Sierra Club is
14 coming in, in this room 1:00 on May 23rd, and is going to
15 give the overview of the very successful fight to defeat
16 over 150 proposed coal plants around the country. Sierra
17 Club sought \$50 million from Mike Bloomberg in New York
18 and got it, and so they have been putting those resources
19 into a very intense legal effort to defeat new coal and
20 they're now turning their policy muscle towards promoting
21 renewables. He'll be talking about that, he's a terrific
22 speaker, so I encourage everyone to come. We have 130
23 people already who have RSVP'd to that.

24 I also want to express my gratitude to a number
25 of utilities and other entities who have taken myself and

1 a number of staff on site visit, I've been doing a lot of
2 site visits around -- I've been to the largest geothermal
3 power plant, largest solar thermal power plant, the
4 largest PV power plant in the world in the last six
5 weeks, and they're all in California, and so I'm
6 particularly grateful to First Solar, BrightSource, NTPA,
7 ADF and a number of others. We'll be going to Diablo
8 Canyon with PG&E in a few weeks, their pump storage, and
9 visit to a hydro facility of SMUD, as well. But one of
10 the things we're trying to do on the Communications Team
11 is what I'm calling California Clean Energy Tour, to
12 basically highlight the 10 biggest clean energy success
13 stories happening in California, and help people
14 understand the scale and the jobs and the pollution
15 benefits that are happening because it is amazing, you
16 know, going to Ivanpah and there's 2,200 people working
17 there now, and it's colossal and really exciting, and I
18 think we need to help get that story out. So that
19 website is underway now, it's about half-way done, and
20 that was the media team yesterday, and I really want to
21 thank them for all their hard work, and Rob and Drew for
22 supporting that. And I'll keep everyone posted when it's
23 up.

24 CHAIRMAN WEISENMILLER: I was going to mention
25 two things, one, for those who even watch the TV show,

1 Andrew and I both went to the CFEE Conference, and Rob,
2 and the usual -- as most people know, there's a lot of
3 new Legislators, so this was focused on providing a very
4 broad background on energy. A couple of videos were run
5 by IEP on power and one by the ISO that, you know, you
6 always struggle with the videos, but I think the IEP one
7 was about 10 minutes, but again for sort of Energy 101,
8 you know, it struck me as a decent introductory one.

9 And the other thing I did was I went to Davis
10 -- U.C. Merced is really trying to become the center for
11 California on solar research, and when they obviously
12 bring in a new school, so when they were setting up they
13 hired a gentleman who used to be the head of the Physics
14 Department at University of Chicago, which again is sort
15 of one of the premier Physics Departments in the country,
16 I mean, certainly for me it was there, you know, a number
17 of people came from there, and he has really helped set
18 that up. When I first came on board, it was recommended
19 by both Art Rosenfeld and by my thesis advisor, Dean
20 Cerny, to go visit him in terms of, again, sort of a very
21 strong scientist. And so I caught not much of the full
22 day presentation, but it was very -- he's really focused
23 on solar thermal energy, and particularly high quality,
24 even with the diffuse light in the Central Valley, and is
25 making very good progress towards industrial applications

1 and cooling applications. So, again, one of the things
2 which we funded was some research basically on cooling,
3 which they're now rolling out in third world countries,
4 that solar thermal. And I think particularly if you look
5 at thermal applications in industry, again, I think
6 they're making real progress there, and certainly would
7 encourage people to go to U.C. Merced. But, again, it
8 was basically pulling together top research from around
9 all the U.C. campuses, which is now a consortium.

10 COMMISSIONER MCALLISTER: I'll definitely
11 concur that the CFEE Conference was a good opportunity to
12 get together with the new Legislators, it was a huge new
13 crop, newer than I think in my memory, at least, and
14 hungry to get involved in some of these issues and really
15 the 101 from IEP was great, and then the discussion just
16 showed very different backgrounds and levels of
17 understand and knowledge about the energy industry, but
18 certainly very engaged folks in the Legislature. And I
19 think the Commission can get together with the Governor's
20 Office, really use the newness, kind of take advantage of
21 the situation to build some consensus about some key
22 issues and provide the right kind of input to the
23 legislative process, you know, when we're asked to or
24 have something to say about those issues. So I'm excited
25 about that.

1 And then I wanted to just take a quick moment
2 to acknowledge a professor of mine at U.C. Berkeley who
3 is going to retire, Dick Norgaard. He was an Economist,
4 came over to ERG, to Energy and Resources Group from
5 Agricultural Resource Economics, and I think was a very
6 broad thinker, and is kind of a non-traditional Economist
7 and came over to ERG and really found his niche there and
8 has been a core piece of that department, a relatively
9 small department, for decades now, for a couple decades
10 now. And he's retiring and by node from ERG, and by no
11 means do I think he is going to stop working, but I just
12 wanted to express my appreciation for his guidance when I
13 was a grad student there and all the contributions that
14 he's made to sort of nurturing a couple of generations
15 now of free thinking engineers and some other odds and
16 ends, people with different kinds of backgrounds, but
17 largely ERG sees engineers who want to do more than
18 engineering, and I certainly fit in that category, and I
19 think that our state is much better off for having a man
20 like Dick Norgaard shaping our student population, our
21 inquisitive graduate students here at the U.C. system.
22 So I wanted to just thank him for all his service at U.C.

23 CHAIRMAN WEISENMILLER: Yeah, I need to second
24 that too. In the year I was taking the ERG classes,
25 after taking a traditional microeconomics class, Dave

1 Marcus and I signed up for his class in Ag Resource
2 Economics so we could understand some of the short
3 fallings of economics, so again certainly very
4 inspirational teacher.

5 COMMISSIONER SCOTT: I'll just add that
6 yesterday I got the chance to go to my very first IEPR
7 Workshop, and I have just, you know, for an observation
8 as the first time at one of those, I was really struck by
9 the level of expertise that we had around the table and
10 around the room, and the exchange of ideas, and also by
11 the fact that a lot of these innovative ideas it seems
12 often become sort of the seeds that grow some policies,
13 and continue to push California and all of us to push the
14 envelope on a lot of the different energy pieces that we
15 work on from all of us across the table and the folks
16 that were there, so that was just an observation that I
17 had from yesterday from my first IEPR Workshop. So I was
18 glad to be there.

19 I only live about 10 blocks away, so I don't
20 know how much I can help with the bike challenge, but if
21 we ever get a pedometer challenge, I'll be walking all
22 over the place.

23 COMMISSIONER DOUGLAS: Well, you know,
24 Commissioner Scott, it doesn't have to be -- you know,
25 you could run errands, you could shop on your bike, we

1 could go for a bike ride for fun, you could even ride to
2 visit me in Davis.

3 COMMISSIONER MCALLISTER: Last year I did a
4 spinning class, and I actually registered those miles.

5 CHAIRMAN WEISENMILLER: Okay, Chief Counsel's
6 Report.

7 MR. OGATA: Thank you, Chair Weisenmiller. The
8 Chief Counsel has nothing to report and we have no reason
9 for an Executive Session today.

10 CHAIRMAN WEISENMILLER: Great. Executive
11 Director's Report.

12 MR. OGLESBY: Nothing to add today, thank you.

13 CHAIRMAN WEISENMILLER: Public Advisor Report.

14 MR. OGATA: Yes, Chair Weisenmiller. This is
15 my third that that I'm wearing today, I'm standing in for
16 the Public Advisor, and I'm authorized to say that the
17 Public Advisor has no report today.

18 CHAIRMAN WEISENMILLER: Okay, thank you.
19 Public comments? This meeting is adjourned.

20 (Whereupon, at 3:21 a.m., the Business Meeting
21 was adjourned.)

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25