

BUSINESS MEETING
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

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

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

WEDNESDAY, APRIL 22, 2009

10:00 A.M.

Reported by:
John Cota
Contract Number: 150-07-001

COMMISSIONERS PRESENT

Karen Douglas, Chairman

James D. Boyd, Vice Chair

Jeffrey D. Byron

Julia Levin

Arthur H. Rosenfeld

STAFF and CONTRACTORS PRESENT

William Chamberlain, Chief Counsel

Mike Gravely

Christine Hammond

Debbie Jones

Melissa Jones, Executive Director

Harriet Kallemeyn, Secretariat

Eric Knight

Ken Koyama

Larry Smith

Mike Smith

Peter Ward

ALSO PRESENT

Jill M. Egbert, Pacific Gas and Electric Company

Maureen Gorsen, Attorney at Law
Alston & Bird, LLP
representing Rentech

Russell Teall, Biodiesel Industries

Todd Campbell, Clean Energy

Bonnie Holmes-Gen, American Lung Association of
California

Jack Kitowski, California Air Resources Board

Pete Price, California Natural Gas Vehicle
Coalition

Richard Lyon, CyberTran International, Inc.

Tim Carmichael, Coalition for Clean Air

Jeanne Trombly, Plug In America

Mark Aubry, Smith Electric Vehicles

John Shears, Center for Energy Efficiency and
Renewable Technologies (via telephone)

Ben Ovshinsky, Efficient Drivetrains, Inc.

Kristin Macey, California Department of Food and
Agriculture

Ross Metersky, BP Alternative Energy North
America, Inc.
representing Watson Cogeneration Company

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1 P R O C E E D I N G S

2 10:03 a.m.

3 CHAIRMAN DOUGLAS: Good morning,
4 everybody. Welcome to the Energy Commission
5 Business Meeting of April 22, 2009. Please join
6 me for the Pledge of Allegiance.

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

9 CHAIRMAN DOUGLAS: Starting with Item 1,
10 the Consent Calendar. Do we have a motion?

11 COMMISSIONER ROSENFELD: I move the
12 Consent Calendar.

13 COMMISSIONER LEVIN: I second it.

14 CHAIRMAN DOUGLAS: All in favor?

15 (Ayes.)

16 CHAIRMAN DOUGLAS: Before we go further
17 we have one change to the agenda. Item number 4
18 has been moved to the next Business Meeting of May
19 20th.

20 Item 2, Investment Plan for the
21 Alternative and Renewable Fuel and Vehicle
22 Technology Program. Mr. Smith.

23 MR. M. SMITH: Good morning,
24 Commissioners. My name is Mike Smith, I am the
25 deputy director for fuels and transportation here

1 at the Commission. And we are going to be seeking
2 your approval of the Investment Plan for the
3 Alternatives and Renewable Fuels and Vehicle
4 Technology Program, or AB 118 as, as well call it
5 for short.

6 But before I begin, Commissioners, if I
7 may, I would like to take a few moments to express
8 our sense for the loss of a pioneer in the world
9 of alternative fuels. Mr. Tom Alexander died last
10 week. He worked for more than 35 years at PG&E as
11 the senior program manager responsible for
12 construction, management and operation of the
13 company's natural gas infrastructure.

14 That, however, accurately describes his
15 day job. It seems, however, Mr. Alexander had
16 many avocations. One of them fortunately for us
17 was alternative fuels and in particular natural
18 gas. He worked many years, tirelessly for many
19 years. He was passionate about this avocation and
20 worked tirelessly for many years with fleet
21 operators, company customers, but especially
22 school districts in expanding the use of
23 alternative fuels, in particular natural gas.

24 In many ways because of his efforts we
25 all are beneficiaries of Mr. Alexander's tireless

1 work. And now more than ever when our state,
2 indeed our country, needs its best and brightest,
3 he will be sorely missed.

4 I would like to introduce two folks that
5 would like to make some brief remarks about
6 Mr. Alexander. First is Mr. Peter Ward who works
7 here at the Energy Commission and was a friend of
8 Mr. Alexander, and the other is Jill Egbert who
9 would like to provide some remarks from PG&E's
10 perspective.

11 CHAIRMAN DOUGLAS: Thank you. Please
12 come forward.

13 MR. WARD: Good morning, Commissioners.
14 We did lose a friend. A friend of mine for many
15 years as a matter of fact. Tom was a wonderful
16 guy. He always made his contribution with good
17 spirit and cheer. I don't know of any person in
18 this area that would have worked with him for many
19 years that did not like Tom immediately upon
20 meeting him.

21 I just returned from the National
22 Alternative Fuels and Vehicle Conference and Expo.
23 I learned about Tom's death on the way on
24 Saturday. And I have to say, there were at least
25 20 people that came up to me and expressed their

1 sorrow for Tom's passing. He meant a great deal
2 to the industry of alternative fuels in general
3 and to the Clean Cities conferences in particular.

4 But many friends have come forward and
5 they all appreciate what we will be doing here
6 today mentioning Tom. I would also like now to
7 call on Jill Egbert who is the manager of Clean
8 Air Transportation at Pacific Gas and Electric.
9 Known Tom for many years, a friend as well. Thank
10 you.

11 CHAIRMAN DOUGLAS: Thank you, Peter.

12 MS. EGBERT: Thank you, Peter, Mike,
13 Commissioners.

14 Tom would truly be honored with this. I
15 had the privilege of working with Tom for over 20
16 years. And as Mike said, he was so passionate
17 about his work.

18 California and PG&E have Tom to thank
19 for the 39 natural gas fueling stations that PG&E
20 owns and operates for our fleet and for our
21 customers. Tom was instrumental in the
22 construction and operation and maintenance of all
23 of those.

24 Also we have over 100 customers that
25 have their own natural gas fueling infrastructure.

1 And believe me, Tom was involved in every single
2 one of those.

3 He was also very, very involved with the
4 school bus industry. He wanted to help them
5 introduce natural gas technology into their fleets
6 so he worked very closely with them.

7 On behalf of PG&E -- Well let me just
8 say Tom will be so truly missed. And on behalf of
9 PG&E, his family, his friends and the whole
10 natural gas industry I would like to thank you for
11 this tribute and this opportunity. And let you
12 all know that all Californians will be breathing,
13 breathe a little cleaner air as a result of Tom
14 Alexander. Thank you.

15 CHAIRMAN DOUGLAS: Well thank you very
16 much. And I think it is was very appropriate to
17 have this tribute today at the Energy Commission,
18 especially as we adopt or consider the Investment
19 Plan for clean alternative fuels and vehicles.
20 Our work and the state's work in this area is
21 built upon the work and initiative of many such,
22 many pioneers such as Tom Alexander and we very
23 much want to recognize his contribution.

24 With that, could you move into your
25 presentation. Thank you.

1 MR. M. SMITH: Thank you, Commissioners.
2 I would like to present a brief overview of the
3 Investment Plan.

4 Essentially the program, the Alternative
5 and Renewable Fuel and Vehicle Technology Program
6 is a seven-and-a-half year program. It is funded
7 up to about \$120 million a year through a various
8 collection of fees.

9 For the first year we have \$75 million
10 in our budget and for fiscal year '09-10 there's
11 \$101 million that's available.

12 The statute is very generous with the
13 Energy Commission, providing us a great deal of
14 latitude in what we can spend these funds on in
15 terms of alternatives and renewable fuels and
16 vehicles.

17 The statute also had the foresight in
18 recognizing that it is not enough to put fuels in
19 the market and vehicles on the road but you need
20 trained and skilled high-quality labor to support
21 the infrastructure, to support this new system,
22 and to maintain and service the vehicles that will
23 be, that will be on our roads in the future.

24 We also have the authority to develop,
25 excuse me, to expend funds on education and

1 promotional programs. And lastly, on
2 environmental assessments, market and technology
3 assessments, that will keep the knowledge base for
4 this program up to date and vital. So the statute
5 was very comprehensive in that respect.

6 The purpose of the program. The primary
7 purpose of the program is to put these innovative
8 fuels and vehicles on the road to reduce
9 greenhouse gas emissions and achieve the state's
10 climate change targets.

11 In doing so, however, the statute also
12 recognizes and we certainly recognize that there
13 are other objectives within the state that
14 complement this climate change work, including the
15 state's efforts to reduce its petroleum dependence
16 to expand these alternative fuels and to increase
17 and build an industry in California for the
18 production of biofuels. So there are numerous
19 complementary objectives with which we developed
20 this program.

21 The statute tells us we have to develop
22 and adopt an Investment Plan. And what this plan
23 does is to determine the priorities and funding
24 opportunities for the program.

25 The statute also tells us that this plan

1 must describe how our investments that we make in
2 this program complement existing public and
3 private investments, so that we leverage our funds
4 in the most effective manner.

5 The statute further tells us, directs
6 the Energy Commission to convene an Advisory
7 Committee. And this Advisory Committee has helped
8 us develop the Investment Plan over the course of
9 the last eight months or so.

10 We have had a total of six Advisory
11 Committee meetings in the development of the
12 Investment Plan as you see it today.

13 In addition the statute tells us we must
14 conduct at least three public workshops on the
15 draft Investment Plan. And indeed we had four
16 public workshops throughout the state, two in Los
17 Angeles, one in San Jose and one in Fresno during
18 the month of February.

19 What we have prepared as a result of all
20 the analysis that went into this document, the
21 public input, the Advisory Committee input and a
22 very rich docket of material from stakeholders and
23 the public, we prepared an Investment Plan that
24 essentially has a goal-driven strategy with a
25 focus on achieving the 2020 target, which was set

1 out Assembly Bill 32, and the Governor's 2050
2 greenhouse gas reduction targets.

3 Now this plan covers the first two years
4 of the program. So current fiscal year FY '08-09
5 for the \$75 million and then next year, '09-10 for
6 the \$101 million. So a total of \$176 million is
7 focused in this plan.

8 This slide, I won't dwell on this. It's
9 essentially a summary of the plan and the funding
10 allocations by project category and technology or
11 fuel category.

12 And what you will notice at the bottom
13 is there is a category called non-GHG categories.
14 And that adds another \$27 million to the
15 allocation, bringing it up to a total of \$176
16 million. So there's approximately 150 or so
17 million allocated specifically to fuels and
18 technologies and the balance being allocated to
19 these non-GHG categories, which I will explain
20 later.

21 What I want to do now is just quickly
22 run through those categories and provide a little
23 bit of explanation about what our allocations are.

24 In the area of electric drive we have a
25 number of allocations that are being proposed in

1 the plan. The first is to convert a certain
2 number of existing Toyota Priuses to a plug-in
3 hybrid electric configuration.

4 We also have allocations to develop
5 medium- and heavy-duty hybrid vehicles. This
6 includes hybrid-electric as well as hybrid
7 technologies. And these would include vehicles
8 such as waste hauling trucks, utility work trucks,
9 bucket trucks, etc. So there's a growing, a
10 growing number of applications for this technology
11 and we find this to be a fairly strategic
12 opportunity to reduce greenhouse gases as well as
13 diesel fuel consumption.

14 We are recommending funds for a number
15 of non-road applications, particularly in the area
16 of the port applications and truck stop
17 electrification applications.

18 In order to meet the expected roll-out
19 of battery-electric and plug-in electric vehicles
20 in the next few years there is going to be a need
21 for a significant increase in the number of
22 electric charging stations. And we have allocated
23 funding in this category to not only upgrade
24 existing sites, so we can take advantage of past
25 investments, but also expand the number of sites

1 throughout the state.

2 We are also -- In this area we will also
3 be paying close attention to developing or
4 implementing charging stations, fast-charging
5 stations, which will hopefully provide a better
6 charging experience, if you will, for owners of
7 these vehicles so they don't have to wait the four
8 or five hours on a low voltage system and they can
9 charge their vehicles far more quickly.

10 We also are allocating a certain amount
11 of money for incentives for manufacturing
12 facilities here in the state. We would like to
13 find a way to provide incentives for companies to
14 locate their operations here in the state. Again
15 with the intent not only to create an industry for
16 low-carbon vehicles and fuels but also jobs and
17 economic development.

18 In the area of hydrogen we have one
19 allocation. And that is to, again to meet the
20 expected roll-out of light-duty vehicles, fuel
21 cell vehicles over the next several years. We
22 have allocated funds to begin installing, or
23 expand I should say, the number of hydrogen
24 fueling stations, primarily in the Los Angeles
25 area. But we will be looking at other sites

1 beyond Los Angeles but that is the area where we
2 are, we expect the automakers will be introducing
3 their vehicles.

4 Another aspect of this is to develop
5 these stations in a way that meets the requirement
6 in statute to develop hydrogen fueling systems
7 that are at least 33 percent renewable based. The
8 statute is required as a result of SB 1305. Two
9 years ago I believe, Senator Lowenthal's bill, to
10 encourage the use of state funding to expand
11 renewable energy and developing hydrogen systems.

12 In the area of ethanol we are expanding
13 the number of E-85 stations throughout the state.
14 And we are looking at ways of working with the
15 industry in studying and hopefully providing
16 incentive funding for new facilities, new ethanol
17 production facilities that would be based on waste
18 material in California as opposed to corn ethanol.

19 In the area of renewable diesel and
20 biodiesel. Similarly we are looking at ways to
21 provide incentives for the industry to move away
22 from what is now largely soy-based production
23 facilities in California to those that would use
24 waste feedstocks in California.

25 We also recognize that in order for

1 these fuels, renewable diesel and biodiesel fuels,
2 to effectively enter the market in California
3 there will be a need for additional terminal and
4 blending facilities. And we have provided some
5 funding to hopefully provide incentives in that
6 area.

7 In the area of natural gas. We are
8 recommending funding for light-duty as well as
9 medium- and heavy-duty vehicles. In the area of
10 medium- and heavy-duty vehicles we are looking
11 particularly at the ports and at school districts.
12 We are also expanding, want to expand the number
13 of fueling stations in California.

14 But we also -- With this, with this
15 allocation we would also like to pay attention to
16 existing fueling systems and stations in
17 California. Many of these have been around for a
18 number of years now and probably should --
19 consideration should be given to either upgrading
20 them, refurbishing them to, again, to protect the
21 existing investment and to expand the through-put
22 in California.

23 Lastly in the area of natural gas we are
24 allocating funding for the development of
25 biomethane production plants. And this is methane

1 that could be derived from landfills, from waste
2 treatment plants and other renewable sources. It
3 is through the introduction of this fuel into the
4 natural gas system that we would start to see the
5 very deep reductions in greenhouse gas emissions
6 that we would expect to carry us through the 2050
7 marker.

8 Propane. We have -- there are a number
9 of, several opportunities, several companies now
10 that have certified systems. Systems that have
11 been certified by the Air Resources Board for use
12 in light- and medium-duty applications. And so we
13 wanted to provide funding to support the
14 introduction of those systems into the marketplace
15 as well.

16 And the last category, which is no
17 longer called non-GHG Categories and I am proud to
18 say has a new title, Market and Program
19 Development.

20 VICE CHAIRMAN BOYD: Inside joke.

21 MR. M. SMITH: We have several areas
22 that are not directly related. In and of
23 themselves don't result in the direct reduction of
24 greenhouse gases. But the work conducted through
25 these activities are absolutely essential to an

1 alternative and renewable fuels market.

2 The first one is workforce training and
3 development. Again, we need skilled, high-quality
4 labor in the coming years in California in order
5 to sustain this new market.

6 Sustainability studies. This is an
7 area, again, the statute was wise. The authors of
8 the statute were wise in including a provision
9 that directed the Energy Commission to develop
10 sustainability goals.

11 Now when we first looked at that
12 provision we all puzzled over what that exactly
13 meant and what we were going to do to meet this
14 provision. But the more, the more we looked into
15 it and devoted resources to it and began
16 researching the issue and working with
17 stakeholders the more we have come to realize that
18 sustainability is going to be, in our estimation,
19 one of the landmarks or hallmarks of this program.

20 We are still understanding it. There is
21 a lot to learn about sustainability. It has
22 implications in the production and use of fuels,
23 not only here in California or nationally but also
24 internationally. So this is a very important area
25 that we are allocating funding for to continue

1 working on this area.

2 This also is an area that touches other
3 agencies such as the Air Resources Board in the
4 development of their Low-Carbon Fuel Standard and
5 other work that they are doing. So we are working
6 very closely, particularly with the Air Board in
7 this area.

8 Standards and certification. In this
9 area we are allocating funding specifically for
10 the Department of Food and Agriculture to conduct
11 work in developing standards or certifications for
12 hydrogen fueling systems and for biodiesel fuel
13 quality specifications greater than 20 percent.

14 We also are going to develop a public
15 outreach and education program. I might note here
16 that this effort will be preceded by a contract
17 that you folks will be seeing shortly. I'm sorry,
18 actually you have already approved it, I beg your
19 pardon. In which we will develop a plan to
20 develop an outreach program. So before we expend
21 any of these dollars we wanted to develop a plan
22 to look more carefully at how we would effectively
23 initiate and outreach and education program.

24 And then lastly we have funding
25 allocated to provide technical assistance to the

1 program and to allow us to conduct the
2 environmental technology and market assessment
3 studies that will be absolutely critical in the
4 evolution of this program.

5 Lastly, next steps. I am proud to say
6 today is something of a trifecta for the Energy
7 Commission. The first is our program regulations
8 are going to be published today by the Secretary
9 of State. We began that process about the same
10 time we began the development of the Investment
11 Plan last year. We finally have those in hand and
12 they will be published today.

13 We also are, will be approving
14 agreements -- rather you folks, the Energy
15 Commissioners, will be approving agreements to
16 provide our program support and technical
17 assistance. We will also involve agreements to
18 develop performance metrics for the program. And
19 as I mentioned earlier, preparing an outreach
20 plan.

21 We are also in the process of developing
22 several inter-agency agreements with the Air
23 Resources Board, with the Department of Food and
24 Agriculture, with the Employment Development
25 Department, community colleges and the Department

1 of General Services.

2 The Air Resources Board inter-agency
3 agreement will involve the development of the
4 hydrogen fueling infrastructure that was mentioned
5 earlier in my presentation.

6 The inter-agency agreement with the
7 Department of Food and Agriculture, of course, is
8 to develop the certification and standards program
9 that I mentioned.

10 Workforce. Our first venture into
11 workforce is through inter-agency agreements with
12 EDD and with the community colleges.

13 And we are working on an inter-agency
14 agreement with DGS to expand alternative fuel
15 vehicles in the state fleet.

16 We are also looking at other
17 opportunities for inter-agency agreements but
18 these are the ones that we are moving forward
19 affirmatively now.

20 We also today will be releasing a
21 Program Opportunity Notice that will announce the
22 use of the funds in this Investment Plan as a
23 potential match here for public and private
24 entities in California who wish to seek or wish to
25 submit proposals to the Department of Energy, to

1 the US EPA and to the Federal Transportation
2 Administration for federal economic stimulus
3 money. We have a workshop next Monday, this
4 coming Monday on the 27th, to discuss this PON and
5 how we can be most effective in supporting
6 proposals to the federal government.

7 And lastly, just when you thought it was
8 safe to go back in the water, we need to start
9 thinking about updating the Investment Plan. The
10 statute requires that the plan be updated
11 annually. This plan will cover the first two
12 years. But in order to have a plan, an Investment
13 Plan ready for fiscal year '10-11 we will later
14 this year need to start thinking about and
15 planning the process for updating this plan.

16 So that essentially covers my
17 presentation and gives you an overview of the plan
18 and the program and where we are at and where we
19 want to head. And I will be more than happy to
20 answer any questions that you have.

21 Oh one last thing. We also have for
22 approval today an Errata for the Investment Plan.
23 And this is an Errata to the last posted
24 Investment Plan, which was April 8th. So you
25 folks have a copy of it. It is mostly clarifying

1 language. There's one or two factual corrections
2 that we have made and some corrections to language
3 in the tables in the plan for your consideration.
4 Then lastly there's some clarifying language with
5 respect to the Department of Food and Agriculture
6 and the standards and certification.

7 VICE CHAIRMAN BOYD: Mr. Smith, you need
8 one more errata. You need to amend your errata to
9 incorporate your new title for the last program
10 category.

11 MR. M. SMITH: Well, I will trust --

12 VICE CHAIRMAN BOYD: So when we
13 hopefully move approval of this we will have
14 everything absolutely correct.

15 MR. M. SMITH: Okay, we will.

16 CHAIRMAN DOUGLAS: I have -- I don't
17 know if there are questions from the dais. I have
18 three blue cards. There may be others who are
19 interested in commenting. I see a lot of familiar
20 faces in the audience who I know have worked hard
21 on this plan with us. Would Commissioners like to
22 ask questions now or after public comment or both?

23 VICE CHAIRMAN BOYD: I reserve my
24 questions or comments until after the testimony.

25 CHAIRMAN DOUGLAS: Okay. All right, we

1 will, we will wait until after the testimony then
2 for Commissioner questions and comments.

3 The first blue card I have is from
4 Maureen Gorsen of Rentech.

5 MS. GORSEN: Happy Earth Day. Thank you
6 for allowing me to appear. I represent Rentech
7 and they are going to be a manufacturer of
8 renewable diesel.

9 And you have some great choices. I
10 mean, this is, this is a fun thing to do, to spend
11 the money to create a better future. And I just
12 wanted to raise a few arguments as to why
13 renewable diesel is more wonderful than the other
14 wonderful choices that you have.

15 I submitted a letter this morning and
16 there's a little, this is really kind of a key
17 exhibit. And the main reason we are here to spend
18 this money is to make a better future for
19 ourselves and hopefully survive global warming.

20 Renewable diesel has a 254 percent
21 carbon emissions reduction, which is greater than
22 all the other wonderful choices you have and
23 that's what this chart recommends. And the reason
24 is that we are using garbage from Los Angeles.
25 The plant is going to be located in Rialto; 255

1 jobs to construct the plant, 55 ongoing jobs. It
2 is going to take garbage from LA and create
3 synthetic diesel as well as electricity that will
4 run the plant. So there is no energy needed to
5 run the plant.

6 And then the synthetic diesel will also
7 be used to dilute conventional diesel so you are
8 kind of getting four gallons for each gallon of
9 synthetic diesel produced. And I kind of think of
10 it as using the Back to the Future technology to
11 prevent a Wall-E future. Because we are going to
12 use the garbage to make the energy.

13 So I, that's all I really wanted to say.
14 The Investment Plan only provides \$2 million out
15 of \$176 million for renewable diesel but the
16 environmental benefits are here and now. As well
17 as -- they are short-term, they are immediate, as
18 well as long-term. And so I would ask you to
19 consider putting more money into that category in
20 the Investment Plan.

21 VICE CHAIRMAN BOYD: No questions, just
22 a comment. Thank you, Ms. Gorsen, for your
23 comments. Let me assure -- and commendations to
24 your client. We are very conscious of the
25 benefits of renewable diesel. We are very

1 grateful that you have had a running start on this
2 subject. I would say, you know, watch this space
3 for the future.

4 And double commendations from me.
5 Because as I'll discuss more later, using our
6 waste stream for energy is my pet project I think
7 of everything I do here and that's exactly what
8 you are doing.

9 So we are very aware of your project.
10 We would like to help you cut the ribbon to
11 initiate your project. And as I say, we do
12 recognize the attributes and we have five and a
13 half more years to address this arena. Thank you.

14 MS. GORSEN: Okay. One last comment.
15 We also think that this may be the best way or one
16 of the key ways to meet the Air Board's low-carbon
17 fuel standards. These numbers that are in this
18 chart come from the Air Board's numbers that they
19 are coming out with tomorrow for the Low-Carbon
20 Fuel Standard.

21 CHAIRMAN DOUGLAS: Thank you.

22 MS. GORSEN: Thank you.

23 CHAIRMAN DOUGLAS: The next card I have
24 is for Russell Teall of Biodiesel Industries.

25 MR. TEALL: Good morning, it's a

1 pleasure to be here.

2 One addition for your Errata. On page
3 23 (sic), third paragraph, last sentence it says:

4 "The transesterification
5 process produces glycerol as a
6 byproduct which remains mixed in
7 with biodiesel."

8 It does not, it has to be removed in
9 order to meet the ASTM standards. I would just
10 delete from the word, which, on.

11 MR. M. SMITH: Okay.

12 MR. TEALL: I just had two basic
13 comments and it is an extension of the previous
14 speaker, in part. Which is, when you look at the
15 overall budget there are some imbalances there.
16 And then I would also like to look specifically at
17 the types of things that are being funded in the
18 renewable diesel or biodiesel portion.

19 When you look at the overall budget you
20 have got 26 percent going to the electric drive,
21 22.7 percent to hydrogen, almost 25 percent to
22 natural gas and 3.4 percent to renewable diesel or
23 biodiesel.

24 You know, when you look at the cost per
25 metric ton of reducing greenhouse gases and you

1 look at the impact of your expenditures, if you
2 look specifically at the natural gas expenditures,
3 there's \$25 million being spent to put in 6,300
4 new vehicles and 20 filling stations.

5 If you look at the diesel infrastructure
6 in the state of California you have got 1.1
7 million vehicles, diesel vehicles already on the
8 road, and 3.8 billion gallons a year being used.
9 And so being able to stimulate the existing
10 infrastructure would be a much more cost-effective
11 and fast track for meeting the greenhouse gas
12 goals set for tier end.

13 The other point is the actual
14 expenditures for biodiesel. The \$2 million for
15 waste products I think is a good allocation. And
16 I would urge that, you know, that sort of
17 expenditure in feedstock development within the
18 state be encouraged.

19 There's a lot of advanced work being
20 done in our industry with algae, for instance,
21 which can be produced in a very low-impact way on
22 wastelands. And there's over 80,000 acres in the
23 Central Valley for instance that's been removed
24 from food production because of selenium
25 contamination. That land, depending on the type

1 of algae production technology, could produce
2 anywhere from 80 million to 480 million gallons of
3 diesel fuel a year. So very cost-effective.

4 In the \$6 million that is allocated for
5 biodiesel there's \$4 million for bulk terminal
6 facilities to help with the importation of palm
7 oil. That to me is probably an inefficient use of
8 the funds in terms of stimulating biodiesel
9 production within the state of California.
10 There's lots of questions about palm oil. Even
11 though it is approved for importation into
12 California from the Round Table of Sustainability,
13 that is a business trade organization. And the
14 California Air Resources Board, of course with the
15 Low-Carbon Fuel Standard, will make a fuller
16 determination on it.

17 In terms of the type of infrastructure
18 we need. Instead of having the emphasis be on
19 bulk terminals at the ports. The blending
20 facilities that exist at the rack are much closer
21 to the consumer. And biodiesel can be inserted
22 there at the rack, keeping down the transportation
23 costs.

24 Of that \$4 million it says that it is to
25 be spent on a feasibility study for looking at

1 bulk terminal construction. And I would urge that
2 instead that that be used for blending facilities
3 at the rack for renewable diesel and biodiesel.

4 That concludes my remarks.

5 CHAIRMAN DOUGLAS: Thank you for that.

6 Now Mike, do you agree with the
7 amendment to the, the proposed change to the
8 Errata?

9 MR. M. SMITH: Yes, I believe I do.
10 I'll double-check with our staff but I think
11 that's a correct change.

12 CHAIRMAN DOUGLAS: Okay, thank you.

13 Thank you very much.

14 MR. TEALL: Thank you.

15 CHAIRMAN DOUGLAS: Next we have Todd
16 Campbell, Clean Energy.

17 MR. CAMPBELL: Thank you, Madame Chair
18 and members of the Board. My name is Todd
19 Campbell. I am the director of public policy for
20 Clean Energy, a fuel provider for not only natural
21 gas but also hydrogen and biomethane.

22 We strongly support the Investment Plan
23 before you today. The staff has done an
24 impeccable job in putting out workshops, taking in
25 input. We worked hand in hand with them for quite

1 some time and even were educated ourselves with
2 some of their suggestions.

3 We also think the advisory board served
4 a great role and we are very appreciative of the
5 feedback as well as the input that they have
6 provided.

7 We believe that this program will help
8 enable our industry to innovate, quite simply. We
9 are already invested in biomethane projects. For
10 example, we have a landfill that produces gasoline
11 gallon equivalents of biomethane today.

12 And the all-important part of that is
13 that it reduces greenhouse gases, according to the
14 Air Resources Board, by 88.1 percent in terms of
15 carbon emissions. The great part about that is
16 that means that the 2050 emission standard, right
17 there with that one fuel has been achieved.
18 Because the 2050 goal is approximately 80 percent
19 of carbon reductions.

20 We also see opportunities with hydrogen.
21 We are fueling hydrogen vehicles now. Not only in
22 natural gas blends but also in terms of dedicated
23 formats. And we are very happy and hopeful that
24 we continue along with those efforts.

25 We are also very excited about funding

1 for other programs outside of natural gas vehicles
2 such as the electric component. Because we are
3 very hopeful that one day we will see
4 hydroelectric platforms, plug-in hydroelectric
5 platforms matched with low-carbon fuels, whether
6 they be natural gas, hydrogen or other fuels. And
7 that's extremely important and we are very, very
8 glad to see that kind of funding go forward.

9 We also are appreciative of the funding
10 that you have given to our industry because it is
11 going to enable us to reach out to key companies,
12 OEMs like Mercedes Benz who has shown interest and
13 actually wants to meet with the Energy Commission.
14 And I would strongly encourage the board to have,
15 to engage those OEMs as they are very, very
16 interested, particularly as the national debate
17 moves forward, to get involved and produce more
18 product for low-carbon fuel vehicles.

19 One ask that I would make for the heavy-
20 duty portion of the funding under natural gas
21 vehicles is to have a strong consideration for the
22 full coverage of the incremental cost. And I ask
23 that because other programs that are aimed at
24 cleaning up diesels for heavy-duty trucks could
25 seem more competitive, not directly but could be.

1 If a truck company wants to go out and purchase a
2 new vehicle, if the diesel is cheaper than the
3 low-carbon fuel truck they are going to go with
4 the diesel unless there's more changes down the
5 pike. And that's one consideration I would ask
6 you to make and I'm sure staff would be
7 accommodative.

8 Finally, we plan to be here with bells
9 on on Monday to support the Energy Commission's
10 efforts to match these funds at the federal level.
11 We think it is extremely important. If there's
12 anything that Clean Energy or the natural gas
13 vehicle industry for that matter can help, we will
14 do that.

15 So with that, thank you very much. A
16 thank you to staff for an excellent plan. And we
17 look forward to supporting you in the future.

18 CHAIRMAN DOUGLAS: Thank you.

19 MR. CAMPBELL: Thank you.

20 CHAIRMAN DOUGLAS: Our next speaker is
21 Bonnie Holmes-Gen with the American Lung
22 Association of California.

23 MS. HOLMES-GEN: Madame Chair and
24 members, I am Bonnie Holmes-Gen with the American
25 Lung Association of California. I was pleased to

1 participate on the AB 118 Advisory Committee. It
2 was a very good process and we were pleased to
3 have a lot of input into the plan as it went
4 forward. And I am here to support the Investment
5 Plan and moving this program forward and getting
6 this funding out as soon as we can.

7 We are in agreement with the priorities
8 in the Investment Plan and we think that priority
9 allocations reflect the right balance between a
10 strong focus on 2050 and the long-term sustainable
11 technologies that are needed to get us to the 80
12 percent greenhouse gas reduction targets and the
13 technologies that are available today to move us
14 toward, move us away from petroleum and reach the
15 2020 targets. So we do think it is appropriate
16 that the largest chunk of the funding goes into
17 the electric drive and the hydrogen baskets, so to
18 speak, as you have included in the plan.

19 We also think there is an appropriate
20 level of flexibility built in to allow for
21 shifting of funding between categories to reflect
22 changing needs for technology advancement or just
23 changing the situation as we move forward.

24 We do think that as we move forward,
25 both here at the Energy Commission and at the Air

1 Resources Board with the Low-Carbon Fuel Standard,
2 that it is important to pay careful attention to
3 the air quality and public health impacts of these
4 new emerging fuels.

5 And that is a point that we have been
6 making many times, both in terms of the localized
7 impacts of fueling infrastructure that may be,
8 that may be placed in the state in order to meet
9 the standards of the Low-Carbon Fuel Standard and
10 to promote these new fuels, and in terms of the
11 statewide air quality public health impacts of
12 these fueling pathways. So we hope to work with
13 you as you move forward to make sure that we do
14 have careful review of those local and statewide
15 impacts.

16 I also just wanted to put in a plug for
17 a very small item in your plan but one that we
18 hope will be growing, which is the \$1 million for
19 public outreach and education. This is in the
20 non-GHG or the market program development
21 category.

22 We do think that this should, this
23 should be a growing area because it is so
24 important for state agencies to take leadership in
25 developing the kinds of messages and outreach

1 strategies to help really engage the public, to
2 help change social norms, and to help people make
3 those cleaner transportation choices to help
4 reduce their, their carbon footprint. You know,
5 hopefully those choices would not only involve
6 cleaner technologies but the choice to not drive
7 and to pursue more active transportation options,
8 bicycling, walking and other options.

9 So we hope that the Energy Commission
10 will be a strong leader in helping to educate the
11 public and lead the way in helping people
12 understanding their part in this whole picture of
13 reducing greenhouse gases from, from our
14 transportation choices.

15 Thank you for the time to comment.

16 CHAIRMAN DOUGLAS: Thank you.

17 VICE CHAIRMAN BOYD: Thank you.

18 CHAIRMAN DOUGLAS: And thank you for
19 your participation on the Advisory Committee. I
20 want to thank really all of the Advisory Committee
21 members who worked with us over a series of
22 meetings, phone calls, workshops, webcasts I
23 guess. Your input was very helpful and very
24 valuable.

25 The next card I have is for Jack

1 Kitowski with the Air Resources Board.

2 MR. KITOWSKI: Commissioners, good
3 morning. My name is Jack Kitowski with the
4 California Air Resources Board. My comments this
5 morning will be brief and positive.

6 I wanted to thank the staff for the work
7 in developing the Investment Plan. ARB has been a
8 partner through the development of the Investment
9 Plan, the quite exhaustive development of the
10 Investment Plan. But CEC has also been a partner
11 as we have developed our plan for implementing our
12 portion of AB 118 as well and we appreciate their
13 involvement there.

14 The bottom line, I think we have
15 coordinated well. And that the Investment Plan is
16 well-balanced and we are strongly supportive. And
17 we look forward to the next stage, which is
18 actually implementing this plan and getting the
19 projects out there and cleaning up the air.

20 Thank you.

21 CHAIRMAN DOUGLAS: Thank you. We
22 appreciate your involvement and we look forward to
23 working with you as well.

24 MR. M. SMITH: Commissioner, if I might,
25 if I might echo Jack's comments and just point out

1 that there's similarities in our respective pieces
2 of AB 118 that afford us the opportunity to
3 coordinate and the programs fund similar projects.

4 So we have been working very closely
5 with ARB, as Jack just said, in the areas. But
6 also in deciding how we, how we divide the statute
7 and who funds what. And I think we have come to a
8 fairly effective way of providing which agency
9 provides which incentives to which vehicles types
10 and so on. So we are very happy with the
11 cooperation and support and the coordination we
12 have had with our colleagues over at ARB.

13 So we look forward to working more
14 closely in the future. Particularly on economic
15 stimulus as well because that is a large
16 opportunity also.

17 CHAIRMAN DOUGLAS: Thank you, Mike.

18 The next card I have is Pete Price with
19 the California Natural Gas Vehicle Coalition.

20 MR. PRICE: Thank you, Madame Chair and
21 Commissioners. I am Pete Price with the Natural
22 Gas Vehicle Coalition.

23 I want to start off by, as others have
24 done, thanking the staff and the Commission. We
25 think it has been an excellent process. The staff

1 has reached out to us and sought our input and,
2 when given, have incorporated a number of the
3 suggestions we have made. So we very much
4 appreciate and we strongly support the final
5 product.

6 I do want to mention briefly there is
7 one more issue, Mike, in your Errata sheet where
8 you changed \$10 million to \$8 million for fueling
9 infrastructure. Your narrative still says that it
10 would provide \$8 million for 20 stations for an
11 average of \$500,000. That average doesn't work
12 out and I would suggest that you could fix that by
13 changing it back to \$10 million. That would be a
14 simple solution.

15 (Laughter.)

16 VICE CHAIRMAN BOYD: At whose expense?

17 MR. PRICE: I'd like to work with you on
18 that.

19 But we did make a number of other
20 suggestions that were incorporated in the latest
21 version of the plan which we very much appreciate.
22 And broadly speaking, they go to expanding the
23 available types of vehicles that could qualify for
24 funding in the light-duty sector. It is now
25 available for private fleets and individuals as

1 well public fleets.

2 You are also going to consider
3 retrofits, which we appreciate very much. That's
4 important in the light- and medium-duty sector.

5 And in the heavy-duty sector as well.
6 You are focusing on ports and school buses but
7 have now allowed other vehicles to be considered.
8 We think that's important.

9 I do want to follow up on something Todd
10 Campbell said regarding this incremental cost.
11 The plan says that the program will cover a
12 portion of the incremental cost in the heavy-duty
13 side. Now what portion is it? You know. It
14 could be 10 percent or 99 percent. We understand
15 that's a broad term but it is important.

16 And you guys have a challenge to kind of
17 thread the needle. You certainly don't want to
18 spend more money than is necessary on incentives.
19 On the other hand, if you make less available than
20 is necessary to incent the activity it's all for
21 naught. So when you are sitting down with those
22 folks and trying to convince them to go to an
23 alternative fuel vehicle, a natural gas vehicle as
24 opposed to a diesel in the heavy-duty sector, it
25 is important to provide them an incentive they

1 will actually respond to. And so we hope you will
2 take that into account.

3 And also the suggestion about OEMs. We
4 do think that there is some new interest among the
5 OEMs and we hope the Commission will reach out to
6 them and meet with them as available to see what
7 can be done, because that is obviously an
8 important issue for natural gas vehicles.

9 My last -- I have a question. You
10 mentioned a workshop as far as a next step. But
11 my question is, will there be guidelines issued on
12 the application process? Will there be a workshop
13 to make sure everyone understands the details of
14 that. I just don't know as far as applications --
15 and when will those, you know, be sought.

16 MR. M. SMITH: Very briefly. The
17 Program Opportunity Notice that is being released
18 today contains all that information.

19 MR. PRICE: Okay.

20 MR. M. SMITH: It will describe the
21 criteria that we will be using, the process that
22 we will be using and the criteria that we will be
23 applying in reviewing the applications.

24 MR. PRICE: Okay.

25 MR. M. SMITH: When you look at the PON

1 today, I'll just point out, the criteria is a two-
2 step process. There's a criteria for the final
3 application which is not, will not be in the PON
4 today but should be released, we are hoping no
5 later than Friday. So when you see that just
6 recognize we are still finalizing it. But it
7 should be released no later than Friday.

8 MR. PRICE: Great.

9 MR. M. SMITH: With that you will have a
10 complete picture of how we will work, reach out
11 and work with folks in the alternative fuels
12 community in supporting their applications to DOE.

13 MR. PRICE: Okay, thank you very much.
14 Well with that I'll close. I just want to
15 congratulate the staff again, it was a great job.
16 Thank you very much.

17 CHAIRMAN DOUGLAS: Thank you. And I do
18 appreciate all of the eagle eyes on the Errata
19 sheet, it's been very helpful.

20 The next card I have is Richard Lyon
21 with CyberTran International.

22 MR. LYON: Good morning, Richard Lyon,
23 CyberTran International. On the walk over here
24 this morning I realized that it has been almost a
25 year since I have engaged with the CEC with this

1 activity. It's been an astounding journey to say
2 the least.

3 I appreciate the staff's patience, the
4 Commission's patience in taking all my inputs. I
5 apologize for being a little bit late to this
6 meeting. Even though I have been driving up here
7 for the better part of a year it never astounds me
8 the amount of traffic, the congestion and things
9 of endeavor that you have to go through in order
10 to get to these meetings.

11 So along those lines I wanted to ask
12 again for one additional commentary and
13 consideration in the Errata that we have in front
14 of us this morning before it is voted on by the
15 Commission. And that is in the electric drive
16 category.

17 As the Commission and the CEC is aware,
18 we have shown the CyberTran technology can meet
19 and exceed the greenhouse gas reductions for 2020
20 and 2050. In the year that we have been
21 discussing these technologies I have seen numerous
22 presentations. There's very few technologies that
23 in and of themselves can address the 2020/2050
24 goals as a sole technology.

25 And I would like to ask for again a

1 little bit higher consideration for that in the
2 electric drive with a consideration for VMT. We
3 fit fairly well within the Errata that is in front
4 of us and some considerations. But again, one of
5 the key criteria Peter has presented over and over
6 and over again throughout this year is that VMT is
7 a critical component that I would like to have
8 considered, taken into a level of discussion and
9 provided a higher consideration by this award
10 process.

11 So with that I would like to ask the
12 Commission's comment. Can we take a VMT
13 consideration into the Errata for the electric
14 drive before we go ahead and ratify this document
15 today?

16 CHAIRMAN DOUGLAS: Appreciate your
17 comments. We did add some language, as you see,
18 on VMT. And we are also working with the PIER
19 program and the transportation division through
20 its land use unit or its energy VMT transportation
21 unit to look at what more we might do in this
22 area. The statute, however, does not, does not
23 provide us the guidance that would go I think as
24 far in the direction that you are proposing, as
25 you might like. So I think we have been following

1 the statute fairly carefully in this area.

2 MR. LYON: Okay, so is that basically a
3 yes or a no?

4 CHAIRMAN DOUGLAS: Well, look at what we
5 have in there.

6 VICE CHAIRMAN BOYD: Let me just add to
7 that.

8 MR. LYON: Sure.

9 VICE CHAIRMAN BOYD: What Commissioner
10 Douglas has said. One, I would salute you for
11 your dedication and perseverance on this subject.
12 As you have probably heard us, and me in
13 particular say--Lord has it been a year, anyway--
14 these many times, is we see there are three legs
15 to this transportation energy stool that we are
16 trying to fabricate.

17 The alternative vehicle technologies,
18 which includes vehicle efficiency, alternative
19 fuels and then the VMT mass movement of people,
20 proper land use and transportation planning,
21 integration, et cetera, et cetera leg, which has
22 always been the broken and or the weakest leg of
23 stools that have been tried to be fabricated in
24 the past.

25 You are right on, we recognize it very

1 much. We are wrestling with the wording of the
2 statute and its intent, perhaps a mild oversight.
3 And we are working vigorously as indicated with
4 those components of the state government that have
5 a role in this. We are working to educate people
6 on the importance of VMT reduction through any and
7 all means possible.

8 And as I said earlier, people shouldn't
9 take, and maybe I didn't say it clear enough.
10 Take this investment plan as this is it. These
11 are the tablets of stone. This is the way the
12 future will be, period. This is the first two
13 years, although it is difficult to call it two
14 years in this nearly second to the last month or
15 third to the last month of the current fiscal
16 year. Fortunately we have the money available.

17 We will begin work immediately on yet
18 the next Investment Plan for the, for the
19 following fiscal year. We are hopeful that for
20 that fiscal year the parties could be able to see
21 the wisdom of appropriating to us all the money
22 that we think the revenue sources do generate for
23 this program. We are falling short in these first
24 two years but we are lucky to have any in these
25 tough financial times.

1 And I am confident that all that you say
2 and technologies that would address all that you
3 address will become more and more apparent,
4 dominant in the thinking and the discussions that
5 policy leaders will hold in the future about how
6 to address this overall problem.

7 So I would just say I appreciate your
8 current patience. I urge you to continue that
9 patience and don't lose faith and keep coming
10 back.

11 CHAIRMAN DOUGLAS: I would also suggest
12 -- thank you for those comments. And I would also
13 suggest that to the extent that any projects have
14 an element of them that is built into a plan or a
15 proposal that would reduce VMT in some way, that
16 is something that I would encourage you to
17 highlight. It is something that is evidence of
18 project helping advance California's climate
19 goals. It is something that we are very cognizant
20 of in terms of its importance. So thank you.

21 MR. LYON: Thank you.

22 CHAIRMAN DOUGLAS: Tim Carmichael,
23 Coalition for Clean Air.

24 MR. CARMICHAEL: Good morning, Chair
25 Douglas and members of the Commission. Tim

1 Carmichael, Coalition for Clean Air.

2 First of all I want to say it's nice
3 that you are considering this matter today. There
4 are a couple of good things happening for the
5 environment today and this is one of them. So I
6 appreciate that and many environmentalists around
7 the state appreciate it, even those that don't
8 know that we are here.

9 Secondly I want to thank the members of
10 the Commission that led on this effort. It was a
11 pleasure to work with you. And a thank you to the
12 staff. A lot of hours went into this product.
13 There was a lot of good, critical input from
14 various sectors of the industry that I think made
15 the final product better than it was last summer
16 for sure.

17 And then as a environmentalist I am keen
18 to see this implemented tomorrow and want to help
19 in any way we can to get the money out the door as
20 quickly as possible. So please ask if we can be
21 of assistance in that.

22 And then as a public policy student I am
23 keen to see how this works. We know that not the
24 process so much as, you know, how right are we,
25 you know, when we look back on this in a couple of

1 years or five years.

2 I know we have put our best effort into
3 it and our best guesstimates of what an
4 appropriate allocation of these funds were. But I
5 think it is going to be really interesting to
6 watch because some of the things that we believe
7 are so promising today we know aren't going to pan
8 out as hoped for. And some of the things that we
9 are doubting today I think are going to deliver
10 more than any of us imagined.

11 So I am keen on many fronts. To get
12 going on the implementation and it was a pleasure
13 to be part of the process. Thank you.

14 CHAIRMAN DOUGLAS: Thank you.

15 The last card I have before I move on to
16 one commentor in the phone is Jeanne Trombly with
17 Plug In America. If anyone else in the room would
18 like to make a comment this would be a great time
19 to find and fill out a blue card or at least wave
20 your arms so that I can see you.

21 MS. TROMBLY: Good morning, Madame Chair
22 and Commission Members. Plug In America, I'm
23 Jeanne Trombly, managing director.

24 We fully support the plan and really
25 appreciate the modifications that you made in

1 increasing funding for plug-in electric drive. We
2 appreciate the urgency that you see in potentially
3 matching some of the federal funds.

4 On behalf of our 20,000 supporters who
5 belong to Plug In America and our 12 person
6 working board, they are thrilled that they have
7 got the infrastructure already in place
8 potentially, you know, in the garage and their
9 driveway and electricity.

10 But as far as, you know, the CEC's, the
11 Investment Plan, the funding allocated for public
12 electric vehicle charging stations. We just
13 wanted to make sure that -- we are strongly urging
14 the CEC for any public funding that is applied to
15 charging stations that you really insist that the
16 companies provide interconnectivity with the J1772
17 technologies. We don't want any kind of beta/VHS
18 problem. We have brought the industry together to
19 discuss this problem. We believe that everybody
20 is on board but we just wanted to make sure that
21 the CEC has this on record that we think this is
22 absolutely critical.

23 And we believe that the next ensuing
24 funding for charging stations, that CEC can play a
25 major role in accelerating the higher amperage,

1 the more rapid charging stations in ensuing
2 Investment Plans.

3 So in conclusion we, once again, we
4 really appreciate all the hard work that has gone
5 into the plan. We are thrilled that electric
6 drive is a major player, the plug-in version,
7 since all the OEMs are -- pretty much every OEM is
8 committing to putting cars out on the road within
9 the next 18 months. Thank you.

10 CHAIRMAN DOUGLAS: Thank you.

11 I see a hand. Do you have a public
12 comment? Please come forward.

13 MR. AUBRY: Good morning. I think you
14 should have a card up there.

15 CHAIRMAN DOUGLAS: I'm sorry.

16 MR. AUBRY: That's okay. This is Mark
17 Aubry from Smith Electric Vehicles. I see on the
18 funding allocation, on the electric drive side
19 that under the medium- and heavy-duty vehicle
20 section. Perhaps clarity, as Michael was running
21 through that. I don't see anything in there for
22 an all-electric commercial vehicle. So I don't
23 know. Possibly I wasn't listening. But at the
24 same point I see the total of \$46 million for the
25 electric drive. However, to that end there is

1 nothing specific to that particular type of
2 technology.

3 MR. M. SMITH: This touches on the
4 comment I made earlier in our coordination with
5 the Air Resources Board in determining sort of the
6 divisions of labor as to what vehicles we will
7 fund. And one of the decisions we made early on
8 was in the area of electric drive.

9 That since ARB has authority to fund,
10 provide incentives for vehicles, and they do not
11 have authority to provide incentives for
12 infrastructure and we do, we decided that ARB
13 would take on or provide incentives for the
14 battery-electric, plug-in electric vehicles as
15 they become available from the OEMs directly
16 through their AB 118 program and we would focus
17 more on the charging infrastructure.

18 MR. AUBRY: That's perfect. And indeed
19 the last comment that I'll make to that end.
20 Thank you very much, Michael, and I know Jack is
21 here. We spent a significant amount of time with
22 Jack and his team there.

23 I think one of the key comments that was
24 made by one of the transportation leaders here in
25 the US with one of the largest fleets across

1 America. I think a lot of people don't believe
2 really that large, electric commercial vehicles
3 can be a proven platform.

4 And I think one of the things that this
5 leader, industry leader made recently made
6 recently that is we are to shape our, reshape our
7 transportation industry the place to start is
8 short-haul commercial vehicles and that they need
9 to be electrified. That was a key industry leader
10 that has a number, their fleet demographics in the
11 state of California alone would be enough to help
12 shape the industry.

13 So to that end the last comment that I
14 would make is we certainly would like to have that
15 be part of this particular electric drive. We
16 understand that through the Air Resources Board
17 that that motion is to put it with them.

18 We really feel that with our products
19 that we have put into Europe over the past 90
20 years, the products we that we have currently
21 lined up here for the US and the total number of
22 national commercial fleets that have already
23 signed up to have vehicles delivered in January 1,
24 2009, that the beginnings of an industry are
25 shaped here. And specifically we have targeted

1 California as being one of those crucial markets
2 to begin in.

3 So we would certainly urge to add
4 something to this if that's a possibility. Again,
5 we appreciate the opportunity to be here and be a
6 part of the Investment Plan.

7 CHAIRMAN DOUGLAS: Thank you.

8 I see one more hand in the audience.

9 Please.

10 MR. OVSHINSKY: Thank you. Ben
11 Ovshinsky from Efficient Drivetrains,
12 Incorporated. We are a partnership with the
13 University of California. Purpose, to
14 commercialize the plug-in hybrid electric drive
15 technology developed there proprietarily at UC
16 Davis under Professor Andy Frank. This technology
17 is applicable across light-, medium-, heavy-duty.
18 Not just electric drive, even conventional
19 vehicles. We are based in Dixon, California,
20 currently employing about 16 people. We are an
21 early stage start-up.

22 My question is, we can't figure out if
23 and where we fit anywhere in the CEC or the CARB
24 end of things. We are not a lab phenomena, we are
25 not an R&D outfit. Our activities are focused on

1 development of pre-production to production of
2 prototypes. Our capabilities in this year at this
3 point as a start-up we can handle perhaps a half-
4 dozen to a dozen basis vehicles on that basis as a
5 pre-production prototype.

6 So the question is -- I'm just putting
7 it out there, I don't expect an answer. But who
8 we could talk to very explicitly to see, do we fit
9 under this year's Investment Plan. Can we
10 influence next year's if we don't have any fit,
11 which appears to be the case.

12 MR. M. SMITH: Ben, you definitely fit
13 under this year's Investment Plan. Under the
14 electric drive category the medium- and heavy-duty
15 hybrid vehicle research, also -- we are looking at
16 plug-in hybrid applications as well. So that very
17 much fits under that category. Particularly as
18 you describe development of prototypes and next-
19 generation up to commercial. And then once it's
20 commercial is when the ARB's program, their
21 incentive funding kicks in.

22 MR. OVSHINSKY: And is there a single
23 point? I am very impressed with CEC staff.
24 There's a lot of them and they are all very
25 impressive. But is there a single point of

1 contact we could work with in this year's program
2 to see about submitting proposals.

3 MR. M. SMITH: Absolutely. I would
4 suggest you either talk with Peter Ward or with
5 Tim Olson.

6 MR. OVSHINSKY: Okay, thank you. Thank
7 you very much.

8 CHAIRMAN DOUGLAS: Thank you.

9 We will now move to the phone. John
10 Shears of CEERT is on the phone. Are you still
11 there, John?

12 MR. SHEARS: I am still here,
13 Commissioner Douglas. Thanks for allowing me to
14 make some brief comments.

15 Again, I would like to, you know, thank
16 the Commission and commend the staff for all of
17 the fine work on the Investment Plan and the
18 associated regulations. Jim McKinney and his
19 staff, especially on the sustainability work that
20 is being developed to complement the Energy
21 Commission side of the program.

22 And I am very excited about the
23 potential for this program. This is our first run
24 at it and hopefully the Legislature will be happy
25 and supporting it for the next six and a half

1 years. We have a lot of things that we can do
2 with this program going forward and I look forward
3 to working with colleague organizations like Plug
4 In America and Energy Commission staff working on
5 Smart Grid issues under the load management
6 rulemaking. Individuals such as Gabe Taylor and
7 Mike Gravely.

8 So thank you for the fine work and for
9 the transparency and all of the availability in
10 allowing everyone to engage and work to craft,
11 define regulation in the Investment Plan.

12 CHAIRMAN DOUGLAS: Thank you very much.
13 Seeing no more public comment are there questions
14 or comments from the dais?

15 I'm sorry, there's a hand. Please come
16 forward.

17 MS. MACEY: Chairman Douglas, other
18 Commissioners. My name is Kristin Macey; I am the
19 assistant division director for the Division of
20 Measurement Standards.

21 On behalf of the California Department
22 of Food and Agriculture, and specifically the
23 Division of Measurement Standards, we want to give
24 our sincere gratitude and appreciation to this
25 effort. And more specifically to Mike Smith,

1 Peter Ward and the rest of their staff for their
2 recognition of the role that our division plays in
3 the market and program development. And also
4 appreciation for your last minute, eleventh hour
5 work in the further clarification of our projects
6 in your Errata.

7 We look forward to our inter-agency
8 agreement and we look forward to getting started
9 on our research projects and continuing those.
10 And we are excited about Monday's workshop and we
11 hope that we can leverage some of these funds for
12 the federal stimulus funding that will be
13 available to the Energy Commission so that we can
14 further flesh out our programs that include all
15 alternative fuels. So thank you so much.

16 CHAIRMAN DOUGLAS: Thank you, thank you
17 for coming forward. We appreciate having worked
18 so closely with you as well.

19 Now questions or comments from the dais?

20 VICE CHAIRMAN BOYD: No questions.

21 COMMISSIONER LEVIN: I do have a
22 question actually and thank you for the mention of
23 the stimulus money. Throughout the document there
24 is an assumption that we are going to leverage a
25 lot of these funds. And I was noticing

1 particularly in the biofuels area, the cogen
2 opportunity in Imperial Valley on sugar cane. It
3 seems like such a heavily impacted part of the
4 state on many levels, environmentally,
5 economically, everything. Is that an area where
6 we are looking at potential stimulus dollars to
7 match the state's contribution?

8 MR. M. SMITH: That is very definitely a
9 potential, potential area. We are hoping to see
10 proposals that touch on a number of areas that are
11 affected throughout the state, that are either
12 affected economically or through air quality
13 difficulties or challenges. And so we are trying
14 to, we would like to see proposals that address
15 those particular concerns. So yes, that is very
16 much something we hope to see.

17 And just to be clear, the PON will
18 basically make available the funding in this
19 Investment Plan for cost-share purposes in
20 submitting, for cost-sharing in submitting
21 proposals to DOE. So to the extent that
22 opportunities such as the sugar cane enterprise in
23 Imperial Valley or other similar biofuel
24 opportunities throughout the state can apply to
25 the appropriate -- using our funds as cost-share

1 can apply to the appropriate DOE program.

2 COMMISSIONER LEVIN: Thank you.

3 COMMISSIONER BYRON: If I may?

4 CHAIRMAN DOUGLAS: Please.

5 COMMISSIONER BYRON: No real question, I
6 think really just a comment. Maybe a little bit
7 different approach than a number of our public
8 commentors. I would like to point out that there
9 is not enough money in this plan. In fact,
10 reading from the Executive Summary, the funding
11 needed to transform California's transportation
12 system is far greater than what the program
13 provides. And of course I know the Commission
14 will leverage those funds.

15 And it is certainly a very bold step on
16 the part of the Legislature and I commend them.
17 In the original legislation I had a briefing from
18 the staff on this plan, I am very impressed with
19 it. I think it shows that it is thorough. And I
20 suspect sometimes it was an arduous effort on the
21 part of everyone to work through this in the last
22 year. So in that sense I think it is a tremendous
23 accomplishment.

24 But back to the, back to the note, the
25 comment that there's not enough funds here. Of

1 course that means that we need to allocate what we
2 have wisely. But that also means there is no
3 guarantee that we will allocate it wisely the
4 first time around.

5 So I see these funds as really a kick
6 start for a competition, if you will, for the best
7 technologies to meet California's ambitious goals.
8 I am counting on industry and the marketplace to
9 really help focus further funding allocations.
10 But more importantly, to transform the
11 transportation sector in California.

12 And I think it's going to take a lot
13 more than money but I think California is ready
14 for it. So my congratulations to the staff. And
15 particularly my Chairman and Vice Chairman for
16 their efforts this past year in overseeing all
17 this effort.

18 CHAIRMAN DOUGLAS: Thank you.

19 VICE CHAIRMAN BOYD: Comments?

20 CHAIRMAN DOUGLAS: Please.

21 VICE CHAIRMAN BOYD: Well first, Happy
22 Earth Day. I did consider wearing my 1990 green
23 T-shirt to work but I opted against it. It's from
24 a different era.

25 I want to add my congratulations. First

1 let me say it's great to see so many of you here
2 in the audience, some of whom we have worked with
3 at length and will into the future and hopefully
4 there will be new recruits in the future.

5 Definite thanks and kudos to the staff.

6 And those staff members and Advisory Committee
7 members will remember the beginning of this
8 difficult slog, and it was a difficult beginning.
9 And I think we are all extremely gratified for
10 where we have ended up. A lot of people have
11 learned an awful lot about this whole general
12 subject area and each other throughout this past
13 year. And so we have all of the staff, the
14 Advisory Committee members and our friends at ARB
15 to thank for their efforts and therefore this
16 plan.

17 I'll mention ARB again, not just because
18 I am a 20 year alumni of the organization. But
19 they have been and continue to be, in spite of the
20 thoughts of some staff members over time, our very
21 good and close friends on the subject of fuels.
22 Been joined at the hip for years, we will be even
23 more so in the future as it comes to fuels and
24 transportation and what have you.

25 I think Tom Friedman in his latest book,

1 Hot, Flat, and Crowded, coined the phrase, we are
2 in the energy-climate era and you cannot separate
3 energy from the climate change issue. After all,
4 the original genesis of concern was the production
5 and use of energy throughout the world. And it
6 happens to be the automobile's use of energy in
7 California that turned out to be public concern
8 number one.

9 This Investment Plan represents a major
10 milestone I think in the state of California's
11 multiple efforts to pursue an alternative fuel
12 future. And air quality historically, economic
13 health and now the great driver of climate change.

14 All of this is extremely meaningful to
15 me because I guess I have been involved, and maybe
16 a couple of others of you in the audience,
17 involved with every alternative fuels effort this
18 state has ever undertaken, at least since the
19 '70s. And that's when I think the majority of
20 them took place. And therefore long a champion of
21 a diversified portfolio of fuels. And a couple of
22 you today referenced that term in one way or
23 another as a way for us, for California to get at
24 air quality, to address energy security, and now
25 most importantly, for climate change.

1 And I don't think enough people really
2 understand how critical it is for this state if
3 not this country and others, certainly for our
4 economy, our environment, our well-being and maybe
5 the planet, to reduce our total dependence on
6 petroleum significantly in order to address
7 economic security and to be prepared for when
8 there will be the day when it just isn't there.
9 And I just don't think we have been prepared for
10 that enough.

11 Taking from my old friend Tim
12 Carmichael's comments. It suddenly dawned on me,
13 yes, the great race has begun. We have more
14 friends than we have had in years as a result of
15 having some money and being in the position to
16 provide others money. So for those of you who
17 wanted us to work with the OEMs, strangely enough
18 they have been calling us a lot. So I think we
19 certainly will be working with them.

20 You heard reference repeatedly to
21 flexibility. I appreciate Bonnie as a member of
22 the Advisory Committee, Bonnie Holmes-Gen, for
23 referencing flexibility. And we hope to exercise
24 flexibility but exercise it very judiciously,
25 let's say, when the opportunity presents itself.

1 For those of you who are concerned that
2 you didn't get enough of the pot, we have future
3 years for one, but we also have flexibility in
4 each and every year to take off-ramps and change
5 direction if some things don't pan out and other
6 things look exceptionally promising. And we
7 appreciate the good will and faith of the Advisory
8 Committee in recognizing that's a necessity in
9 this ever-advancing, ever-accelerating world in
10 which we work.

11 Commissioner Byron already pointed out
12 the dilemma of there just isn't enough money. I
13 hoped we would be sitting here doling out \$240
14 million not 176. But in today's financial
15 environment I am grateful we hung on to that which
16 was originally appropriated to us. The future
17 will look better.

18 And finally I just want to once again
19 give my biofuels lecture for folks. And that is,
20 I mean, we are really keen on biofuels. And I am
21 very disappointed in the press that constantly
22 brings up concerns about biofuels for instantly
23 equating biofuels with energy crops and therefore
24 food versus fuel.

25 And as California through its Biofuels

1 Action Plan, the Governor's Executive Order and
2 Lord knows how many lectures from this dais over
3 the years has tried to point out, we are really
4 keen on using California's waste stream to create
5 energy. Bioenergy is biofuels, biopower. Three
6 Commissioners sat here for part of all of
7 yesterday on an Integrated Energy Policy Report/
8 Renewables Committee workshop on biomass and
9 biopower. But you couldn't avoid talking about
10 biofuels because they are so connected, the
11 product streams can go in either direction.

12 So our big push is to use all that
13 cellulose, all that food processing waste, ag
14 waste, forest waste, urban waste, cow manure,
15 water treatment plant effluent, all to turn into
16 energy for the state, and it has nothing to do
17 with food versus fuel and energy crops. And so
18 hopefully that won't be an impediment for us in
19 the future.

20 With all that said, I am prepared to
21 make a motion but I will wait until others have
22 had a chance to, to say anything if they so
23 choose. But as Chair of the Transportation
24 Committee I will delight in taking that
25 opportunity in a moment.

1 CHAIRMAN DOUGLAS: Well I look forward
2 to your motion. I can't let this moment pass
3 without speaking myself as the Associate Member of
4 the Transportation Committee and Commissioner
5 Boyd's partner over a year-plus in helping develop
6 this program with staff.

7 I would like to start by thanking staff
8 very much for their hard work on this program.
9 Thanking the Advisory Committee, thanking the
10 public. We worked with you, we heard from you,
11 and we will continue to work with you. ARB and
12 other state agencies we have worked with. We
13 appreciate your input and your help on this. We
14 needed it, we will need it in the future. And so
15 I think we have really gotten started on the right
16 foot.

17 And I think, you know, in addition and
18 maybe more than anything I think thanking
19 Commissioner Boyd for his role not only in this,
20 in the development of this program but also his
21 longstanding and tireless dedication to this
22 issue. And I think it is highly appropriate that
23 we are sitting here on Earth Day watching some of
24 your efforts come to fruition in a way that we
25 might not have imagined possible a year or two

1 years ago. So thank you very much.

2 My comments will be brief in terms of
3 the substance of the program. I want to add to
4 the emphasis here that this is a new program. We
5 have, we from the very beginning understood and
6 underscored the importance of maintaining our
7 flexibility to adapt, to potentially shift funding
8 as needed in order to reflect changing
9 circumstances or quality of applications in
10 certain areas.

11 This was -- I don't want to endorse Tim
12 Carmichael's use of the word guesstimate but this
13 was our best effort at putting forward what we
14 thought a reasonable allocation would be for Year
15 1 and Year 2, understanding that things might
16 change. And over the course of the year in which
17 we have worked on this in fact things have
18 changed. When we began there was no financial
19 crisis. When we began there was no stimulus act.

20 And to partially address or respond to
21 Commissioner Levin's mention of the stimulus act:
22 We all, as we sat here three-quarters of the way
23 through the Investment Plan thinking about how on
24 earth we would mesh this with the stimulus act.
25 As the time lines in the stimulus act became

1 clear, the guidelines began to be released. We
2 thought, how do we enact or pursue this program,
3 not in isolation but in partnership with DOE and
4 leveraging and assisting the public in accessing
5 the stimulus act and competing for funds in the
6 transportation area.

7 I think the Program Opportunity Notice
8 that will come out today after adoption of the
9 plan is that effort and I think it is very
10 appropriate. I am very, very excited about it.
11 It is our way of providing applicants for federal
12 funds with an offer of a state match for projects
13 that meet our criteria and help implement the
14 Investment Plan.

15 We will eagerly await the workshop on
16 Monday and hearing from potential applicants about
17 what they are interested in doing. And once we
18 see how we fare with applications at DOE I think
19 that will be our first moment when we really look
20 at what we actually end up putting forward in
21 terms of match and where we have leveraged federal
22 funds. What we have left and where we need to
23 focus given, given the success of projects at DOE.

24 Again, it's a dynamic process but these
25 are dynamic times. I think staff has very much

1 risen to the occasion and I am very pleased with
2 that. And on that note I will ask Mike to please
3 assemble the staff who have worked on this
4 immediately after the Business Meeting so that we
5 can immediately get to work on the next steps.

6 (Laughter.)

7 COMMISSIONER ROSENFELD: I just want to
8 say I find this a wonderful way to celebrate Earth
9 Day. I get on the bandwagon and thank Mike Smith
10 and the staff and Jim Boyd for his career in this
11 crowning achievement and Commissioner Douglas. So
12 I hope somebody, I think we are about ready to
13 move.

14 CHAIRMAN DOUGLAS: I think we are.

15 VICE CHAIRMAN BOYD: Okay, it will give
16 me great pleasure and pride to make a motion to
17 approve the Investment Plan, including the Errata
18 as corrected to reflect some comments here today,
19 such as Mr. Teall's suggested edit, and the
20 suggestion that we reflect in that Errata the
21 changed name of the last category to Market and
22 Program Development. There has been a contest
23 around here to how to properly name that category.
24 I'm finally glad sometime late last night you came
25 up with a winner. That, that is my motion.

1 CHAIRMAN DOUGLAS: Is there a second?

2 COMMISSIONER ROSENFELD: Second.

3 CHAIRMAN DOUGLAS: All in favor?

4 (Ayes.)

5 CHAIRMAN DOUGLAS: That item is

6 approved.

7 MR. M. SMITH: Thank you very much.

8 CHAIRMAN DOUGLAS: Thank you.

9 (Applause.)

10 CHAIRMAN DOUGLAS: Item 3, the Watson

11 Cogeneration Steam and Electric Reliability

12 Project. Eric Knight presenting.

13 I think we are ready to get started with

14 Item 3.

15 MR. KNIGHT: Good morning, Chairman

16 Douglas and Commissioners. I am Eric Knight, the

17 manager of the Siting and Dockets Office. And

18 with me today is Christine Hammond, staff counsel.

19 On March 19 the Energy Commission

20 received an AFC from the Watson Cogeneration

21 Company. The Watson Cogeneration Steam and

22 Electric Reliability Project, docket 09-AFC-1, is

23 a proposed 85 megawatt expansion of a steam

24 electrical generating facility located in the city

25 of Carson in Los Angeles County.

1 The existing 385 megawatt Watson
2 cogeneration facility was licensed by the
3 Commission in 1986.

4 In staff's data adequacy review we found
5 the AFC inadequate in nine areas and we filed the
6 Executive Director's recommendation, data adequacy
7 recommendation, on April 17.

8 Alan Solomon, staff's project manager,
9 has been in contact with the applicant and
10 discussed the areas where more information is
11 needed to complete the AFC. Based their
12 conversation the applicant understands what
13 information is needed. Within 30 days of the
14 applicant docketing a supplement to the AFC staff
15 will be back before you with a new recommendation.

16 However, for today's meeting we ask that
17 you not accept the AFC until the additional
18 information identified in the staff's worksheets
19 is provided. Thank you.

20 CHAIRMAN DOUGLAS: Thank you.

21 Are there questions?

22 Is there a motion to find this project
23 data -- I'm sorry, could we hear from the
24 applicant.

25 MR. METERSKY: Thank you. We appreciate

1 your review thus far and working with Alan

2 THE REPORTER: Please identify yourself.

3 MR. METERSKY: Oh I'm sorry. I'm Ross
4 Metersky representing the Watson Cogeneration
5 Company. I am with the US Cogen group of BP North
6 America as business development.

7 We clearly understand the items that
8 Alan identified, Alan and the staff identified,
9 and understand what we need to do to become data
10 adequate. And we look forward to working with his
11 group.

12 CHAIRMAN DOUGLAS: Thank you.

13 COMMISSIONER BYRON: In that case I move
14 we accept the recommendation that the project is
15 not data adequate.

16 VICE CHAIRMAN BOYD: Second.

17 CHAIRMAN DOUGLAS: All in favor?

18 (Ayes.)

19 CHAIRMAN DOUGLAS: The motion is
20 approved, thank you.

21 We are on to Items 5 and 6. I
22 understand that they will be initially -- no, I'm
23 sorry, we are on Item 5. Andes Consulting, LLC.
24 Possible approval of Purchase Order 08-409.00-
25 001A.

1 MR. L. SMITH: Good morning Chairman and
2 Commissioners. My name is Larry Smith and I am
3 the chief information officer for the Energy
4 Commission. And I am seeking approval for the
5 Energy Commission to amend an existing purchase
6 order with Andes Consulting to provide technical
7 support, maintenance and development of new
8 baseline requirements to Energy Commission
9 administrative systems.

10 The administrative system work to be
11 accomplished would be to finalize the update to
12 the personnel office's roster system and to
13 develop an automated solution for reconciling our
14 program information management system or PIMS and
15 our budget systems to the Department of Finance's
16 CalSTARS system.

17 This original agreement -- There was in
18 an original agreement that \$250,000. It resulted
19 from a request to have offer made through the
20 Department of General Services Multiple Award
21 Schedule. And today I am requesting approval to
22 amend the purchase order with Andes Consulting in
23 the amount of \$25,000 for four months.

24 CHAIRMAN DOUGLAS: Thank you.

25 Questions?

1 VICE CHAIRMAN BOYD: Move approval.

2 COMMISSIONER ROSENFELD: Second.

3 CHAIRMAN DOUGLAS: All in favor?

4 (Ayes.)

5 CHAIRMAN DOUGLAS: The item is approved,
6 thank you.

7 Now we will move to Mike Gravely
8 presenting an introduction to Items 6 and 7
9 together.

10 MR. GRAVELY: In the interest of time I
11 was just going to -- the presentation is there.
12 I'll just summarize the presentation in one chart,
13 which actually is Chart 5. And that basically
14 indicates that the program has been around for
15 awhile. We have experienced almost 300 grants we
16 have awarded in the Small Grants Program. Those
17 grants were typically \$95,000 and less.

18 One of the signs of success in the early
19 research is that when it is done other people want
20 to continue the research, invest in the research.
21 We are happy to say that 45 percent of the
22 research projects that we award grants to are able
23 to obtain follow-on funding.

24 We typically get a ratio of about ten-
25 to-one, so for every dollar we invest we typically

1 have other people willing to invest up to \$10 in
2 that research. And also that we found that about
3 85 percent of the research projects are completed
4 by California firms or in California.

5 So it just gives you kind of an overview
6 of the program itself. It has been around about
7 eight years.

8 On the agenda today we have actually two
9 of the solicitations that we do. We typically
10 have four to five a year. So I'll cover the first
11 one, which is the electricity one, and Ken Koyama
12 will cover the transportation one. We added
13 transportation to the mixture of projects about
14 two years ago.

15 CHAIRMAN DOUGLAS: Thank you,
16 Mr. Gravely.

17 MR. GRAVELY: In the process, for
18 example --

19 CHAIRMAN DOUGLAS: I'm sorry, thank you,
20 Mr. Gravely. I'll just interject and say that
21 introduction was explaining and giving some
22 background on the programs for Items 6 and 7.

23 I believe Mr. Gravely will take up Item
24 6 now, that's the Energy Innovation Small Grants
25 Program. Possible approval of \$661,470 for seven

1 proposals from Solicitation 08-01 of the Energy
2 Innovations Small Grants Program.

3 MR. GRAVELY: Thank you, Madame
4 Chairman.

5 So this particular round of grants we
6 received 59 grant proposals. Those grants, they
7 go through a screening process first for admin
8 screening and 24 passed the initial screening.
9 They then go through an additional technical
10 screening. Of those 18 passed the technical
11 screen and then we have detailed technical
12 evaluations and scoring of the remaining of those.

13 Of those 18 that were scored we are
14 bringing forth today seven proposals requesting,
15 for approval today. In that area as a quick
16 summary, the specific ones are listed in the
17 agenda here. Six of those are in the area of
18 renewable energy.

19 Of those six, five are feasibility
20 studies and one is actually a material science
21 demonstration and evaluation of a new technology.
22 The seventh proposal has to do with air
23 conditioning efficiency and an innovative ways to
24 make air conditioners more efficient and capture
25 some lost air conditioning in the air unit itself.

1 We are prepared to provide any specific
2 details we can on the projects. I request your
3 approval today to go forward with those grants.

4 VICE CHAIRMAN BOYD: I would note that
5 these items did come before the Research Committee
6 and were approved by the Committee so I would make
7 a motion to approve Item 6. And just further
8 comment, that I am extremely impressed with this
9 program. We have spent a lot of time together
10 looking at its course of activity and its
11 successes and I would commend the staff for really
12 a program that has prove to give us a lot of
13 successes to point to as we explain to people what
14 the PIER program is all about.

15 COMMISSIONER LEVIN: Could I just ask a
16 quick question? I don't have a research
17 background so I don't know what a 25 percent
18 follow-on funding investment is. Is that a good
19 track record, is that track record improving over
20 time in terms of the follow-on investment?

21 MR. GRAVELY: It's actually 20 to 1 and
22 it's a very good record in general. You know, for
23 example, in the investment community, I come from
24 that, that's my personal background in other
25 areas, ten-to-one or five-to-one is what people --

1 when they invest in new technologies they are
2 lucky if one out of five or one out of ten will
3 continue forward.

4 So what happens in this area. Of course
5 we focus just on energy-related technologies. So
6 we consider this certainly above the average in
7 industry and a very successful one. So what it
8 does for us is it provides the PIER program an
9 incubation of good technologies that both industry
10 and the Department of Energy see as having a lot
11 of promise. So it's kind of a screening process
12 for us.

13 Also for innovators out there who have a
14 desire to get some investment and prove their
15 product, it helps them. Because many of the ones
16 that have gotten this government grant can take
17 that grant to private investors and show them that
18 they have made that first step and the Commission
19 and other people have accepted their criteria.

20 And so I would say that we have a very
21 successful program. I have personal experience in
22 the military with the small grant program they
23 have and we are trying to actually take some
24 lessons learned from that. But I would say that
25 they probably get half the success that we do here

1 in this program so it's a very successful program.
2 I think it also provides a huge value for the
3 state and the PIER program.

4 COMMISSIONER ROSENFELD: Mike, just to
5 clarify the numbers for Commissioner Levin. There
6 are two numbers floating around. One you just
7 said, when we invest a dollar it turns out that
8 \$10 or \$20 get invested all together.

9 The other number that I didn't, I didn't
10 catch. If you count per program, per award. For
11 ten awards or 100 awards that you have made in the
12 past how many actually got follow-on funding?

13 MR. GRAVELY: The average we are running
14 it's about, out of 100 about 45 of those 100 have
15 demonstrated the ability to do a product of such
16 interest that other people are willing to invest
17 in the next phase.

18 And as Mike just reminded you, in the
19 venture capital business if you get one winner in
20 five you are considered to be batting pretty well.
21 So 45 out of 100 is pretty darn impressive.

22 COMMISSIONER LEVIN: I thought you had
23 said 25 percent. So that's 45 percent. I'm
24 better at math than research.

25 MR. GRAVELY: The 45 percent number was

1 the number of proposals, 45 percent out of 100 or
2 45 out of 100. I'm sorry, I kind of went through
3 it pretty fast.

4 COMMISSIONER LEVIN: Okay. Well anyway
5 it sounds very impressive, thank you. I would
6 second the motion if there are no more questions.

7 CHAIRMAN DOUGLAS: Thank you. All in
8 favor?

9 (Ayes.)

10 CHAIRMAN DOUGLAS: This item is
11 approved, thank you.

12 Item 7, Energy Innovations Small Grants
13 Program, possible approval of \$361,577 for four
14 proposals from solicitation 08-01T of the Energy
15 Innovations Small Grants program. Mr. Koyama.

16 MR. KOYAMA: Thank you, Commissioners.
17 We are here today to ask for approval of these
18 four projects. These came from a solicitation
19 where 22 proposals were received. Eleven of them
20 passed pre-screening. And of those 11 we went
21 through a fairly lengthy review process, which
22 included FTD staff, Fuels and Transportation
23 Division staff. And we came to a consensus of
24 nine projects passing technical merit.

25 And we are proposing these four projects

1 because they scored considerably more than the
2 five projects that were below them. And these
3 projects in general were improving the efficiency
4 of hybrid vehicles, improving the battery storage
5 of lithium ion batteries, incorporating a flywheel
6 system onto an electric vehicle, and then finally
7 on a fuel cell vehicle to use platinum nanotubes.

8 These are very much research-oriented
9 projects and we would very much appreciate a yes
10 vote on these projects, thank you.

11 CHAIRMAN DOUGLAS: Questions, comments?

12 VICE CHAIRMAN BOYD: Again, these
13 proposals came before the Research Committee which
14 reviewed and approved them so I would make a
15 motion to approve Item number 7.

16 CHAIRMAN DOUGLAS: Commissioner Byron.

17 COMMISSIONER BYRON: Thank you, Madame
18 Chairman. It dawned on me that maybe I should
19 disclose this. I share my Commissioner's interest
20 in this subject area and think this is an
21 excellent program.

22 I was asked, the last time I was briefed
23 by the folks at the San Diego Research Foundation,
24 to participate in the next project technical
25 review board and I accepted the invitation. So I

1 am going to go spend a day and dig down a little
2 deeper into this proposal process. I find it
3 extremely satisfying. One of the, one of the
4 better things, one of the many good things we do
5 here at the Energy Commission.

6 So I would like to second these proposal
7 items as well, these grant, Small Grant Program
8 selections as well.

9 COMMISSIONER ROSENFELD: And I would
10 like to say bless you for taking an interest and
11 for volunteering to be on the selection committee.

12 COMMISSIONER BYRON: Yes. I think all
13 of us have an interest in the R&D. We just, we
14 don't all have the time to participate. So I made
15 that commitment at least this one time.

16 CHAIRMAN DOUGLAS: Very good. All in
17 favor?

18 (Ayes.)

19 CHAIRMAN DOUGLAS: That item is
20 approved.

21 Item number 8, Minutes. Approval of the
22 April 8, 2009 Business Meeting Minutes.

23 VICE CHAIRMAN BOYD: Move approval.

24 COMMISSIONER ROSENFELD: Second.

25 CHAIRMAN DOUGLAS: All in favor?

1 (Ayes.)

2 CHAIRMAN DOUGLAS: Item 8 is approved.

3 Item 9, Commission Committee

4 Presentations and Discussion. Are there any
5 committee presentations?

6 VICE CHAIRMAN BOYD: I would very
7 briefly mention --

8 COMMISSIONER ROSENFELD: Mike Shively --
9 I mean Mike Gravelly. I am going to bring up
10 something that concerns you yesterday. Can you
11 stay for a minute? And I'm sorry about the
12 Shively business. I have a friend who is Mike
13 Shively and I call him Mike Shively all the time,
14 he knows it.

15 VICE CHAIRMAN BOYD: Why don't you go
16 first, Commissioner.

17 COMMISSIONER ROSENFELD: I was at a
18 symposium, I guess it was called, yesterday at the
19 CPUC on Smart Grid. The DOE guidelines are out
20 now; they are extremely unfavorable to California.
21 I'll give you an example. In terms of nationally
22 the amount of money that is available to go to
23 Smart Grid, federal money, is about \$4 billion.
24 The revenues of the electric industries in the
25 United States are about \$200 billion. So the \$4

1 billion is a significant contribution, it's a two-
2 percent adder.

3 However, because they have lost track of
4 the giant utilities in California there is a
5 limitation of \$20 million per application. To a
6 huge utility like PG&E or Edison, \$20 million is
7 .2 percent, not 2 percent of their revenues. It's
8 fine for Roseville or Pasadena or even SMUD. No,
9 even SMUD it's not fair to. The proposal is just
10 not thought out for California.

11 So we have to get together with the PUC
12 and submit pretty virulent comments. And I just
13 wanted to say, Mike, I talked to Commissioner
14 Byron and we agreed that we are going to call the
15 PUC today and offer to collaborate on prompt
16 comments. So I just wanted to say that that's in
17 the air. Thanks.

18 CHAIRMAN DOUGLAS: Thank you, thank you
19 for that report.

20 Commissioner Boyd.

21 VICE CHAIRMAN BOYD: Yes, very quick
22 comments. On Monday at UC San Diego's Scripps
23 Institute of Oceanography they hosted and we co-
24 hosted what I'll call a science symposium on
25 climate change research.

1 Specifically, the specific subject I
2 should say was the products and results of the
3 forty-some odd research papers that were done in
4 support of the Climate Action Team's activities
5 and reported on in the draft climate Action Team
6 Report that was issued several weeks ago when
7 Secretary Adams and I held a press advisory, a
8 press conference on the results of these efforts.

9 The Energy Commission funds and has
10 continually funded most of the climate change
11 research that is financed by the state of
12 California. And this was a fairly significant
13 event for the scientific community and I was very
14 pleased with the event.

15 There was a decent size audience and
16 then I understand, because it was done -- a
17 webinar which we facilitated, there were almost
18 twice as many people on the webinar as physically
19 present in the facility at Scripps, which is a
20 brand new facility opened just a couple of months
21 ago and it is one of the most spectacular and
22 beautiful settings I have ever seen when the
23 weather is really good, which it was.

24 I just want to thank Suzanne Garfield
25 and Adam for the work they did and the PIER staff

1 and Guido in particular. Guido and Dan Cayan of
2 Scripps have been the co-chairs of the scientific
3 research efforts that support the Climate Action
4 Team's most recent report.

5 So it was for the benefit primarily of
6 scientists and the scientific press and I have not
7 yet seen where it got much notoriety or not. But
8 it deserved -- the results of things deserved
9 notoriety. There was a very stimulating
10 conversation and dialogue that took place during
11 the day. So I think the Energy Commission can be
12 justly proud of the work that it continues to do.

13 CHAIRMAN DOUGLAS: Thank you,
14 Commissioner Boyd.

15 We are on to the Chief Counsel's Report.

16 MR. CHAMBERLAIN: Thank you, Madame
17 Chairman. At the last Commission Business Meeting
18 I missed the meeting because I was at the meetings
19 of the Western Interstate Energy Board and the
20 Committee on Regional Electric Power Cooperation
21 in San Diego. Those meetings were focused on the
22 improvements to the grid that will be necessary to
23 bring vast amounts of renewable energy that can be
24 generated in the west to the load centers. And I
25 just wanted to mention that I took fairly

1 extensive notes which I will circulate to you
2 within the next day or two. And I hope that --

3 I know some of this material will be
4 discussed in an IEPR workshop on May 4 on the
5 transmission investment plan, thanks to Grace
6 Anderson who participates in the Transmission
7 Expansion Planning Policy Committee of the Western
8 Electric Coordinating Council. I'll be
9 participating in that workshop as well.

10 And next week I will be at the WECC
11 annual meeting at which also we will be talking
12 about interconnection-wide transmission expansion
13 planning, which is a tremendous focus right now
14 both at DOE and in Congress. Primarily focused
15 again on bringing renewable energy to market.

16 CHAIRMAN DOUGLAS: Thank you for that
17 report.

18 Executive Director's Report.

19 MS. JONES: I wanted to give you a brief
20 sort of update on what we are doing with economic
21 stimulus activities here at the Commission.

22 First of all the Governor did establish
23 a task force to deal with the ARRA recovery funds
24 disbursement through the state. Cynthia Bryant is
25 the director of that task force. And we are

1 participating in weekly meetings to ensure that
2 there is adequate transparency and that we carry
3 out our fiduciary responsibilities. Pat Perez
4 participates in those.

5 I also wanted to let you know that we do
6 weekly e-blasts from the Commission on activities
7 that are ongoing. We send it to over 4500 people
8 each e-mail blast. So we have a lot of people who
9 are interested and we are reaching out to a great
10 number of people.

11 In terms of upcoming workshops, we have
12 a workshop on April 30 to discuss local government
13 funding mechanisms including bonds, AB 811-type
14 programs, other mechanisms that might be there.

15 We will also have a series of three
16 regional workshops to deal with the State Energy
17 Program, that's what we call the SEP program, as
18 well as the block grant funding. Those will be
19 held on May 4, 6 and 7. One workshop will be in
20 Los Angeles, we will have one in Fresno and we
21 will have one in Sacramento. They will be in the
22 evenings to help accommodate people who would like
23 to participate but can't take the time off of work
24 to come. So we are trying to be very inclusive
25 there.

1 In addition in the afternoon of the last
2 workshop we will be meeting and looking at the
3 application process timelines and developing
4 guidelines associated with the state energy plan
5 for energy efficiency and for our block grants.

6 COMMISSIONER ROSENFELD: Melissa, can I
7 interrupt you for a second here?

8 MS. JONES: Yes.

9 COMMISSIONER ROSENFELD: There seems to
10 be a day's difference of opinion between us.
11 Commissioner Levin and I are going to a meeting in
12 Berkeley on Friday and we have got a slide which
13 says there is going be an AB 811 workshop on the
14 29th and you just said the 30th. At least one of
15 us is wrong.

16 MS. KALLEMEYN: I believe it's the 29th.

17 MS. JONES: Okay, I will confirm that.
18 We will confirm and get back to you.

19 COMMISSIONER ROSENFELD: Could you?
20 It's essential that we know that this afternoon.

21 MS. JONES: Sure.

22 COMMISSIONER LEVIN: I have it on my
23 calendar as the 29th as well.

24 MS. JONES: Okay, I apologize then.

25 COMMISSIONER ROSENFELD: Thanks. It's

1 important to get that straight.

2 MS. JONES: Sure.

3 COMMISSIONER ROSENFELD: Thanks Melissa.

4 MS. JONES: Okay. You heard today about
5 the activities going on associated with AB 118,
6 trying to leverage our funds through some
7 competitive solicitations. As was mentioned just
8 earlier by Commissioner Rosenfeld we are working
9 with the PUC on going after Smart Grid funds and
10 several other competitive areas as DOE begins to
11 roll out those solicitations.

12 In addition, next week the Budget and
13 Management Committee will be meeting to provide
14 more specifics. We want to talk about the
15 development of guidelines, regulations, timing of
16 opening up an OII or OIR to address those kinds of
17 housekeeping things we have to do before we can
18 launch programs and grant monies. And so these
19 will primarily be focused on the SEP funds as well
20 as the block grants.

21 If you have any other questions I'd be
22 happy to answer them.

23 CHAIRMAN DOUGLAS: Are there other
24 questions?

25 COMMISSIONER LEVIN: I just have one

1 very general question. What is your sense of our
2 time line compared to the other state agencies?
3 Are we all on similar time lines, are some ready
4 to get money out the door sooner or later?

5 MS. JONES: I think right now we are a
6 little bit ahead of most of the other state
7 agencies. We have heard recently -- originally
8 some of the money was committed to come from DOE
9 on the SEP program. Ten percent of that would
10 have come in April.

11 DOE has now announced that no -- until
12 the states apply with a program plan and that is
13 reviewed by DOE, they have a 60 day window to
14 review that, once the plan is approved then the
15 money will start flowing into the state. We were
16 thinking we might be able to get money out earlier
17 if the money came in April but it looks like DOE
18 has, has delayed it somewhat.

19 COMMISSIONER LEVIN: Okay, thank you.

20 CHAIRMAN DOUGLAS: Thank you for that
21 update.

22 Legislative Director's Report.

23 MS. JONES: Oh, the Legislative --

24 CHAIRMAN DOUGLAS: There appears to
25 be --

1 MS. JONES: He had nothing to report
2 this morning.

3 CHAIRMAN DOUGLAS: Public Adviser's
4 Report.

5 MS. JONES: There was no report and
6 Elena had to go down to a siting case workshop.

7 CHAIRMAN DOUGLAS: Public Comment.

8 Seeing none the meeting is adjourned,
9 thank you.

10 (Whereupon, at 11:56 a.m. the
11 Business Meeting was adjourned.)

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CERTIFICATE OF REPORTER

I, JOHN COTA, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Business Meeting; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said meeting, nor in any way interested in outcome of said meeting.

IN WITNESS WHEREOF, I have hereunto set my hand this 7th day of May, 2009.

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