

BUSINESS MEETING
BEFORE THE
CALIFORNIA ENERGY COMMISSION

In the Matter of:)
Business Meeting)
_____)

DOCKET
BUS MTG
DATE 6.20.11
RECD. 7.6.11

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

MONDAY, JUNE 20, 2011

9:00 A.M.

Reported by:
Peter Petty

 ORIGINAL

Commissioners Present

Robert B. Weisenmiller, Chair
James D. Boyd, Vice Chair
Karen Douglas
Carla J. Peterman

Staff Present:

Rob Oglesby, Executive Director
Michael Levy, Chief Counsel
Jennifer Jennings, Public Advisor
Harriet Kallemeyn, Secretariat

Agenda Item

Samuel Lerman	2
Paula David	3
Michael Sokol	4
Prab Sethi	5
Tobias Muench	6
Matt Coldwell	7

Also Present

Interested Parties

Ed Heydorn, Air Products and Chemicals, Inc.

I N D E X

	Page
Proceedings	
Items	
1. CONSENT CALENDAR.	8
a. GOVERNOR'S OFFICE OF PLANNING AND RESEARCH. Possible approval of Contract 150-11-001 for \$45,000 with the Governor's Office of Planning and Research for writing and research services for planning and policy discussion documents regarding the State's energy-related issues. (ERPA funding.)	
b. NATURAL RESOURCES AGENCY. Possible approval of Contract 200-11-001 for \$465,000 with the Natural Resources Agency for three years of general policy oversight and climate change support. (ERPA funding.)	
c. CITY OF HAWAIIAN GARDENS. Possible approval of Amendment 1 to Agreement CBG-09-179 with the City of Hawaiian Gardens to change the scope of work to retrofit 20 exterior lighting fixtures at the City's gymnasium in lieu of installing computer power management software as one energy efficiency measure. There is no change to the total grant amount.	
2. COUNTY OF LOS ANGELES INTERNAL SERVICES DEPARTMENT. Possible approval of Amendment 1 to Contract 400-09-024 with the County of Los Angeles Internal Services Department to add \$1.2 million for marketing and workforce development. (ARRA funding.)	9
3. PROPROSE LLC. Possible approval of Contract 400-10-017 for \$149,301 with ProProse LLC to develop and translate Title 20 technical assistance materials and consumer information for the Appliance Efficiency Program. (ERPA funding.)	13

I N D E X

		Page
4.	AWS TRUEPOWER. Possible approval of Contract 500-10-057 for \$442,136 with AWS Truepower to develop, demonstrate, and validate an integrated forecasting system that can accurately predict solar photovoltaic plant production on timescales ranging from 15 minutes to 2 days ahead. (PIER electricity funding.)	17
5.	SATCON TECHNOLOGY CORPORATION. Possible approval of Contract 500-10-062 for \$1,994,509 with Satcon Technology Corporation and approval of the first phase of work for a research project to demonstrate high-bandwidth automatic voltage control, and develop electric energy storage components and a system designed to optimize grid-tied photovoltaic applications. (PIER electric funding.)	19
6.	AIR PRODUCTS AND CHEMICALS, INC. Possible approval of Agreement ARV-10-048 for a grant of \$11,231,733 to Air Products and Chemicals, Inc., to construct eight hydrogen fueling stations at existing retail gas facilities and a central fill system at its existing hydrogen plant. (ARFVT funding.)	22
7.	GAS TECHNOLOGY INSTITUTE. Possible approval of Contract 500-10-050 for \$480,000 with Gas Technology Institute to evaluate the current state of hardware, software, and processes being used in California to assess and monitor the safety and integrity of the natural gas pipeline network. (PIER natural gas funding.)	28
8.	EMPLOYMENT TRAINING PANEL. Possible approval of Amendment 1 to Contract 180-09-002 for approval to recapture \$929,412 from the Employment Training Panel for the Clean Energy Workforce Training Program. (ARRA funding.)	Postponed
9.	EMPLOYMENT DEVELOPMENT DEPARTMENT. Possible approval of Amendment 1 to Contract 180-09-001 with the Employment Development Department (EDD) to reallocate \$929,412 of recaptured funds from sub-grantees of the Employment Training Panel to the on the job training programs of four high performing sub-grantees of the EDD. (ARRA funding.)	Postponed

I N D E X

	Page
Items	
10. Minutes: Possible approval of the June 15, 2011, Business Meeting Minutes.	31
11. Commission Committee Presentations and Discussion.	32
12. Chief Counsel's Report:	39
a. California Communities Against Toxics et al v. South Coast Air Quality Management District (Los Angeles County Superior Court, BS124624);	
b. In the Matter of U.S. Department of Energy (High Level Waste Repository), (Atomic Safety Licensing Board, CAB-04, 63-001-HLW);	
c. Public Utilities Commission of California (Federal Energy Regulatory Commission, Docket No. EL10-64-000); and Southern California Edison Company, et al. (Federal Energy Regulatory Commission, Docket No. EL10 66 000);	
d. Western Riverside Council of Governments v. Department of General Services (Riverside County Superior Court RIC10005849); California Energy Commission v. Superior Court (WRCOG) (California Court of Appeal E052018);	
e. BNSF Railway Company v. US Department of Interior, California Energy Commission (U.S. District Court Central District of California-Riverside, CV 10-10057SVW (PJWx)).	
13. Executive Director's Report.	40
14. Public Adviser's Report.	40
15. Public Comment.	40
Adjourn	39
Certificate of Reporter	40

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

P R O C E E D I N G S

JUNE 20, 2011 9:05 a.m.

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

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

CHAIRMAN WEISENMILLER: Good morning. I'd like to start out the Business Meeting with two announcements. The first is that Items 8 and 9 are being moved to July 13th and, second, I wanted the opportunity to introduce to everyone today our new Executive Director, Rob Oglesby. Bob, would you like to say a few words?

MS. OGLESBY: Yes, thank you. Well, first, let me thank you all for making me the Executive Director and giving me this great opportunity. My service over the last several weeks as Chief Deputy Director has given me insights and the opportunity confirm what I already knew of the Energy Commission, and that is that we have an aggressive program, dedicated staff that works very hard. As we go forward, I will be looking at the efficiency of the operation; we're going to be operating -- we already are operating and will continue to operate below full staffing levels, rather significantly below staffing levels, and I want to work with you to focus the activities and gain some efficiencies within the

1 organization operationally. I also look forward to
2 adding a few items as informational items from time to
3 time and, when appropriate, to bring before you from
4 staff to the Board so the Board as a whole and the public
5 can benefit from hearing more detail on some subjects,
6 some of the more complicated subjects that are coming
7 forward as an entire Commission before it comes up as an
8 item for your consideration. So, I'll be making,
9 hopefully, some other changes and improvements as we go
10 forward, and I want to again thank you for this
11 tremendous opportunity.

12 CHAIR WEISENMILLER: Yes, we're very happy to
13 make you Executive Director and certainly one of the
14 things we'll be working together with you closely on is
15 resetting our relationship with the Legislature.

16 COMMISSIONER DOUGLAS: I just wanted to say
17 welcome aboard, Rob. It's been great to have you aboard,
18 but I'm looking forward to working with you in your new
19 capacity. You've brought a lot of expertise and
20 experience and perspective from working with the Air
21 Board, which is in some ways similar and in some ways
22 very different to us, and so I'm very pleased to have you
23 on board.

24 VICE CHAIR BOYD: I will add my congratulations
25 and my welcome. It's been good to work with you since

1 you joined the CEC in the not too distant past. It's
2 been great to get back together again, we shared career
3 paths together at the Air Board, and Rob, if you're
4 anything like me, you will accidentally say the word
5 "Board" -

6 MR. OGLESBY: Many times.

7 VICE CHAIR BOYD: -- many times, as I still to
8 this day slip the word "Board" in instead of "Commission"
9 unwittingly and unknowingly, which kind of shows that
10 we're joined at the hip, and I want to echo Commissioner
11 Douglas' comments about continuing to enhance the
12 relationship with the ARB so we're working together as
13 committed partners and looking for all the synergisms
14 that probably exist between the two programs, so in any
15 event, good luck to you in the future.

16 COMMISSIONER PETERMAN: I'll just echo all my
17 fellow Commissioners' sentiments and welcome you on Board
18 to our Commission, Rob, glad to have you here and looking
19 forward to working with you.

20 MR. OGLESBY: Thank you.

21 CHAIR WEISENMILLER: Great. The first item is
22 the Consent Calendar.

23 VICE CHAIR BOYD: I'll move the Consent
24 Calendar.

25 COMMISSIONER DOUGLAS: Second.

1 CHAIR WEISENMILLER: All in favor?

2 (Ayes.) This item passes unanimously.

3 Item 2. County Of Los Angeles Internal
4 Services Department. Samuel.

5 MR. LERMAN: Good morning, Commissioners. My
6 name is Sam Lerman from the Efficiency Division's
7 Building Standards Implementation Office. Item 2 is a
8 request for approval of Amendment 1 to Contract 400-09-
9 024 with the County of Los Angeles Internal Services
10 Department to reallocate funds among various tasks and
11 add new personnel in Retrofit LA which is a program that
12 promotes energy efficiency retrofits for single family
13 and multi-family homes in Los Angeles County.

14 The budget reallocation is necessitated by many
15 changes at the Federal and State Regulatory level such as
16 the disallowance of PACE Financing Programs and the delay
17 in implementation of the investor-owned utility rebate
18 program. Furthermore, now that program implementation is
19 underway, the contractor team has determined that small
20 refinements to various tasks are necessary to allow the
21 program to operate more effectively, such as the addition
22 of new personnel, shifting of funds into subcontractor
23 labor, and shifting of funds into program management.
24 One million dollars will also be added to the contract to
25 help increase homeowner and contractor participation in

9

1 the program. The additional money will help promote
2 grassroots outage campaigns in targeted communities and
3 allow the county to conduct field trainings and software
4 trainings for participating contractors.

5 In addition to this \$1 million, up to \$200,000
6 may be added for the county's media buy purchases. The
7 Commission does not yet have and has not allocated this
8 additional \$200,000 because these funds depend upon money
9 becoming available from the Commission's other ARRA
10 agreements. Thus, upon execution of this amendment, the
11 contractor will only have approval to spend \$9 million,
12 which is comprised of the original \$8 million budget,
13 plus \$1 million of the \$1.2 million authorized through
14 this amendment. None, part, or all of the remaining
15 \$200,000 will be reallocated in the future, depending
16 upon whether additional funds do become available. So, I
17 request approval of this item.

18 CHAIR WEISENMILLER: Thank you. Commissioners,
19 any questions or comments?

20 COMMISSIONER DOUGLAS: I just want to make a
21 brief comment. As the ARRA deadlines approach, we have
22 been undergoing an exercise in which staff have been
23 working with all of the contractors on doing critical
24 performance reviews and digging into the question of a)
25 are they going to meet the ARRA deadlines in order to

1 draw down money by the deadline, and b) if they had
2 additional money, how would they use it? Would they be
3 able to spend it in ways that enhance their program and
4 get more done on the ground? And so, we're doing this in
5 order to make sure that we don't leave a penny on the
6 table of ARRA money and make sure that the money is spent
7 out in the economy and helping Californians retrofit
8 their houses. So, we want to make sure that our programs
9 are, a) as effective as possible, and b) we don't leave
10 any money on the table. In this case, we have in Los
11 Angeles County a very strong program, this is a program
12 with one of the highest levels of local match, and L.A.
13 County has put a significant part of the Block Grant
14 funding that they got directly from the Federal
15 Government into this program. They're leading a very
16 coordinated, very strong effort, and what they asked for
17 was some additional marketing funding. In order to
18 really get this program's infrastructure, they've
19 developed out and in Los Angeles and, of course, Los
20 Angeles is one of the toughest markets to penetrate with
21 information about a new program, so it has been a
22 challenge for them, it's an area where we did not give
23 them, I think, sufficient funding, and it's good to see
24 that, with some of the additional resources that we
25 found, we're able to help them move this program to a

1 higher level. So, I wanted to just make these comments
2 on behalf of the ARRA Committee.

3 VICE CHAIR BOYD: Question. While I defer
4 heavily to the ARRA Committee, in reading this, I found
5 this to be a very positive, very desirable, very
6 consistent with what this Commission and Commissioners
7 and staff have been trying to do for quite some time.
8 It, of course, makes reference to the ill-fated PACE
9 Program and, although it doesn't reference really Energy
10 Upgrade California, it seems to me there is a high degree
11 of integration or similarity and presumably integration
12 between the activities proposed here and what this agency
13 has intended Energy Upgrade California to be and,
14 strangely, there are a lot of people who aren't that
15 enthusiastic about Energy Upgrade California, but who
16 probably would be enthusiastic based on the geographic
17 location of this program and, when you say L.A. with
18 regard to this program, you're really encompassing a huge
19 piece of real estate of all the related cities and
20 regions and what have you. So, to me, this is a very
21 positive program and I'm totally prepared to support it.
22 I hope in our marketing, both to the public and to
23 elected officials, they get the connection between what
24 it is that's going to happen here with the huge
25 involvement of this area and Southern California, and the

12

1 hard work of the Energy Commission in seeing that it's
2 carried forward, and it certainly addresses the
3 geographical distribution of funds, so I just wanted to
4 make that comment. Thank you.

5 COMMISSIONER DOUGLAS: So, thank you,
6 Commissioner Boyd, for those comments. I've been pleased
7 to watch the L.A. program, both L.A. and San Diego have
8 really dug in and moved pretty quickly on their programs,
9 or at least at this point really have gotten things
10 together. L.A. is absolutely on track to meet its
11 spending obligations and spending requirements, and this
12 additional funding will help them be more effective in
13 doing so. So, I would like to move Item 2.

14 COMMISSIONER PETERMAN: I'll second.

15 CHAIR WEISENMILLER: All in favor?

16 (Ayes.) This item passes unanimously.

17 Item 3. ProProse LLC. Paula.

18 MS. DAVID: Good morning, Commissioners and
19 that was correct pronunciation. I'm Paula David. I'm
20 the supervisor of the Title 20 Appliance Standards Unit.
21 I'm here today to ask your possible approval of a
22 contract to help the Title 20 Program with compliance
23 assistance. This contract was a low bid submitted by
24 ProProse LLC to actually help make our, in the long run,
25 will help make our operation more efficient, as well as

1 contribute to appliance efficiency efforts for the State.
2 The scope of work in this contract, it's only \$149,301 of
3 this current fiscal year 2011 ERPA funds and the number
4 one priority in the contract will be for the contractor
5 to take a look at the publications that are on our
6 website that help the manufacturers comply with the
7 requirements of the program. A lot of appliance
8 manufacturers still aren't aware that there is a Title 20
9 program and, so, we're going to take a look at our
10 instructions and help get the word out about the program
11 and also help the manufacturers, "Here's how you comply."
12 So that's the bulk of the contract, those are primarily
13 technical assistance documents. And we'll also have a
14 lot of them translated, which we've never done before. A
15 lot of our manufacturers are overseas and my staff spends
16 a lot of time doing technical assistance with folks who
17 don't speak English as first language, so this is the
18 first time we'll have Korean and Chinese and we think
19 that will help with staff efficiency as we're going to
20 actually lose 50 percent of our compliance team to
21 retirement this calendar year.

22 The second part of the contract will be for the
23 contractor to take a look at the retailers and
24 wholesalers in California, their responsibility under
25 Title 20 is that they are supposed to only sell or offer

1 for sale appliances that are certified to the Energy
2 Commission. And so we'll have a piece out there for them
3 to know that Title 20 exhibits, here's what your
4 responsibility is under the law, and information on how
5 we can help them.

6 The third piece will be a small piece for
7 consumers, to let them know that Title 20 exists and to
8 let them know where they can get more information about
9 the appliances that they buy, and so they know that the
10 Title 20 exists, as well.

11 The deliverables will be sent to us in
12 electronic format, there is no printing or distribution
13 in this contract, it'll be up to us to post them on our
14 website, which is the most cost-effective way for us to
15 get the word out, and also the templates will be able to
16 be updated by my own staff in the future as Title 20
17 regulations change. And does anyone have any questions
18 about the contract?

19 COMMISSIONER DOUGLAS: I'd just like to make a
20 brief comment from the perspective of the Efficiency
21 Committee. The expenditure of about \$149,301, very
22 precise, but this investment in actually helping
23 manufacturers comply with our Title 20 standards and
24 helping consumers understand that the standards exist and
25 that the Energy Commission has passed standards for

15

1 appliances in order to ensure that people don't
2 accidentally buy an appliance that isn't certified, that
3 ends up costing them a lot more money than they expect in
4 energy bills, is a very important part of our Title 20
5 program. It's the first step before we get to
6 enforcement, is actually helping people comply, and to be
7 able to do this in the first language of the areas where
8 much of the electronics manufacturing takes place is also
9 a big step forward, and an unprecedented step forward.
10 In my role on the Efficiency Committee, I've had the
11 experience of having workshops and having some of the
12 manufacturers from overseas send representatives or call
13 in and try to understand what we're doing, and what the
14 standards would require of them, so I think this is a
15 good way of meeting some of them half-way and helping
16 them comply with the standards. So, I would like to
17 recommend this for the support of the Commission.

18 COMMISSIONER PETERMAN: I would just also like
19 to say I think this is a great investment and I applaud
20 the work that you're doing in this area, particularly to
21 take the good work that we're doing here and make sure
22 it's well understood by suppliers and customers. I don't
23 know if that was a motion, Commissioner Douglas?

24 COMMISSIONER DOUGLAS: It was not, thank you.
25 I would like to move Item 3.

1 COMMISSIONER PETERMAN: And I am happy to
2 second it.

3 CHAIR WEISENMILLER: Okay, Commissioners, we
4 have a motion and it's been seconded. All those in
5 favor?

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

7 MS. DAVID: Thank you.

8 CHAIR WEISENMILLER: Item 4. AWS Truepower for
9 \$442,136. Michael.

10 MR. SOKOL: Good morning, Commissioners. I'm
11 Michael Sokol from the Research and Development Division.
12 This item is for the possible approval of a contract with
13 AWS Truepower to develop, demonstrate, and validate a
14 forecasting tool using three separate existing approaches
15 to get a best possible forecast for photovoltaic utility
16 scale plants.

17 The first of the three approaches will be a
18 ground-based sky imagery which will be integrated with a
19 satellite-based cloud vector analysis and a numerical
20 weather prediction model. The three approaches will be
21 integrated to one forecasting tool which will then be
22 compared to each individual approach over a 12-month time
23 span to validate the actual benefit. And this will be
24 employed at a utilities photovoltaic plant where it will
25 be validated.

1 CHAIR WEISENMILLER: Commissioners, any
2 questions or comments?

3 VICE CHAIR BOYD: No questions. If there are
4 none by my fellow Commissioners, I will just comment
5 that, when we discussed this project a while back in the
6 Research and Development Committee, it was quite
7 fascinating and quite timely in light of the very
8 significant interest in utility-scale photovoltaics that
9 is arising now, so the R&D Committee strongly recommended
10 this item be brought before the full Commission. And if
11 the Commissioners have no further questions, I'll move
12 its approval.

13 COMMISSIONER PETERMAN: I have one comment, as
14 well. I think this contract complements other contracts
15 that we approved at our last Business Meeting that will
16 also be looking at solar resource forecasting, and I'm
17 glad to see that all these contracts seem to have CAISO
18 as a partner. And I made the comment at the last
19 Business Meeting that I hope that we have the
20 Commissioner looking across these projects, to look at
21 lessons learned and see the complements across them and
22 the synergies, and not look at them in isolation, and I
23 was happy to hear back from staff that, indeed, they are
24 doing this, and so, again, I look forward to having these
25 conversations with you going forward, and I will second

1 Commissioner Boyd's motion.

2 CHAIR WEISENMILLER: The motion has been
3 seconded. All those in favor?

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

5 Item 5 is SATCON Technology Corporation. This
6 is for \$1,972,211. This is also PIER Electric Funding.
7 Prab.

8 MR. SETHI: Good morning, Chairman and
9 Commissioners. My name is Prab Sethi. I work in the
10 PIER Renewables Group as a Senior Mechanical Engineer.
11 And I am requesting possibly approval of Contract with
12 SATCON Technology Corporation for PIER Funding of
13 \$1,972,211, which is a reduction of about \$23,000 as
14 compared to the request in the proposal. The match
15 funding is about \$1.3 million on this project. The goal
16 of the project is to demonstrate how voltage control can
17 be applied to mitigate intermittency in power plant
18 output and reduce voltage and power fluctuations on
19 utility feeders. The project will develop and
20 demonstrate energy storage components and a system
21 optimized for Grid tied PV applications. The project
22 demonstration will include a full-scale hybrid electric
23 generation system composed of a 500 kilowatt PV array, a
24 500 kilowatt grid connected PV inverter, and integration
25 of 500 kilowatt hour lithium iron phosphate battery

1 system as part of SMUD's solar hybrid demonstration
2 project along Highway 50 in Sacramento.

3 The combined inverter and battery storage
4 system will mitigate intermittency and limit output power
5 ramp rates to levels that are compatible with the utility
6 generation.

7 This project will be performed in two phases:
8 engineering design and modeling will be performed in
9 Phase 1 and does not require CEQA approval. Hardware
10 fabrication, testing and project demonstration will be
11 completed during Phase 2. This project will be brought
12 back to the Energy Commission Business Meeting for Phase
13 2 approval after SMUD, as lead agency completes final
14 CEQA determination at a Board Meeting. So, it is
15 requested to approve the Phase 1 of this project. Thank
16 you very much.

17 CHAIR WEISENMILLER: Commissioners, any
18 questions or comments?

19 VICE CHAIR BOYD: I would just comment, then,
20 that, again, in the R&D Committee we had an interesting
21 discussion of this project. It certainly addresses
22 something that is becoming more and more critical to our
23 continue deployment of intermittent renewable resources
24 and thus the Committee felt strongly that it should be
25 brought forward to the whole Commission. I would note

1 that we've had quite a few programs in the last couple
2 weeks that have been presented to us that have involved
3 SMUD, and I would thank them for their aggressive and
4 active participation. I know that gives heartburn to
5 some people with regard to how we spend public goods
6 charged money and what kind of research we do, but when a
7 utility in California in a competitive process steps so
8 far forward with activities and interests, there is no
9 other, frankly, opportunity of greater need than the ones
10 that are put forth and, in that solicitation process, we
11 have winners and losers; this is an excellent project in
12 terms of what you all are going to need in the future to
13 continue to do battle with the problems of integrating
14 intermittent renewables, and not just dedicating
15 ourselves to, you know, a massive fleet of part-time use
16 gas plants. So, I am very supportive of this project and
17 prepared to move its approval -- and disappointed in the
18 citation to low levels of future renewables like biomass,
19 biogas and small hydro, but we'll keep trying.

20 COMMISSIONER PETERMAN: I will second that with
21 acknowledgement of the point just made by Commissioner
22 Boyd.

23 CHAIR WEISENMILLER: Okay, we have a motion,
24 it's been moved and seconded. All those in favor, please
25 say "aye."

1 (Ayes.) This item passes unanimously.

2 Item 6. Air Products and Chemicals, Inc. This
3 is for \$11,231,733, ARFVT funding. Tobias.

4 MR. MUENCH: Good morning, Commissioners, good
5 morning, Chairman. This is the last and largest project
6 that came out of the first AB 118 Alternative and
7 Renewable Fuels and Vehicle Technology Program funding.
8 Staff is proposing to fund this project to the Commission
9 today. The project would allow Air Products to construct
10 six new hydrogen fueling stations and upgrade two
11 stations -- it says eight new stations in the description
12 here on the agenda, it really is six new stations and two
13 upgrades, but the upgrades are significant
14 reconstructions, just for clarification.

15 Each of the stations will provide 180 kilograms
16 per day capacity, which is enough to fuel approximately
17 180 fuel cell vehicles per day. Also included in the
18 project is a central fill system and a set of delivery
19 tube trailers to get the fuel to the stations.

20 About 1,200 fuel cell vehicles are expected in
21 the Los Angeles area by 2014, this is a number that comes
22 from the OEM Automakers Survey that we conducted. The
23 hurdles of the past for hydrogen fueling station
24 infrastructure were the large footprint of the stations
25 and the high cost, both of those have been addressed by

1 Air Products in their project design. They have
2 significantly been able to push the cost per station
3 below previous levels and the footprint is also much
4 smaller than before because some of the equipment is now
5 no longer located at the full court, but instead at the
6 central fill system, for example.

7 The project would provide \$11,231,733 of AB 118
8 funds, match funding is \$4,671,851. The benefits of the
9 project, the project would help build and expand the
10 hydrogen fueling station network in Southern California,
11 and help automakers to accelerate their roll-out and
12 deployment of fuel cell vehicles. Fuel cell vehicles
13 have zero tailpipe emissions. The lifecycle greenhouse
14 gas reduction is 44 percent compared to conventional
15 gasoline vehicles. The project will reduce greenhouse
16 gas emissions by 25,000 metric tons and displace 10
17 million gallons of gasoline.

18 On the economic side, 21 new jobs would be
19 created by this project, 20 jobs would be maintained, and
20 some additional temporary jobs would be created through
21 design, engineering and construction.

22 Another fact that is interesting is six newly
23 constructed stations will be either located at SINA Green
24 Fuel or Pearson Fuel, existing alternative fuel stations
25 in Southern California. We have Ed Heydorn from Air

1 Products here to answer any questions. You should have a
2 blue card from him, so, please, if you have any
3 questions.

4 CHAIR WEISENMILLER: Mr. Heydorn, do you want
5 to step up? Thank you. Do you want to say a few words?

6 MR. HEYDORN: Sure, thank you. Good morning,
7 Commissioners, good morning, Mr. Chairman. I am Ed
8 Heydorn, Business Development Manager from Air Products.
9 I'm pleased to be here today to answer any questions on
10 the proposed project. As Tobias mentioned, this project
11 is the roll-out of our latest fueling station technology
12 which drives down costs at the fueling stations and
13 hopefully breaks the paradigm going forward on hydrogen
14 infrastructure at retail locations. This type of station
15 technology is being evaluated in other parts of the U.S.
16 and also around the world, so it's important to get this
17 initial demonstration of the technology out in the
18 marketplace, to be able to build and learn how well the
19 systems work. We are pleased to continue to work with
20 the Commission and staff to meet the needs of automakers
21 as they approach the launch date for vehicles in the next
22 several years. So, again, I'm pleased to be here today
23 and would be glad to answer any questions you might have.

24 CHAIR WEISENMILLER: Commissioners, any
25 questions or comments?

1 VICE CHAIR BOYD: No questions for this
2 gentleman, I would just congratulate he and his firm. I
3 now we've spent many hours working this proposal over
4 quite a long period of time. So, thank you.

5 MR. HEYDORN: Thank you.

6 CHAIR WEISENMILLER: Certainly, thank you for
7 being here.

8 MR. HEYDORN: Oh, my pleasure.

9 COMMISSIONER PETERMAN: I have no questions,
10 but I do have a comment. If you're anything like me,
11 when you see \$11 million, you think, wow, that's a lot of
12 money because it is a fair bit of money, but I'm still
13 pleased to see this project because it does take a lot of
14 money to do these infrastructure projects and is a part
15 of AB 118 and one of our long term strategies, so we have
16 short term, medium term, and long term strategies, and
17 hydrogen is one of those. And so I'm glad that we are
18 able to have money available in order to support the
19 infrastructure development, and I look forward to seeing
20 some of these fuel cell vehicles on the road after 2014.

21 MR. HEYDORN: Great.

22 VICE CHAIR BOYD: I want to thank and
23 congratulate the staff. Much time has been invested in
24 this project. Many surveys, lots of vetting, lots of
25 differences of opinion that had to be reconciled. There

25

1 are many many stakeholders in this activity, certainly
2 the auto manufacturers as referenced, our friends down
3 the street, the ARB, the Fuel Cell Partnership that we
4 are a charter member of, that pursues objectives in this
5 arena, and particularly people like Air Products and
6 similar gaseous fuel providers who have stepped into this
7 arena because, for years and years and years, and it has
8 been years and years and years as we've worked on the
9 fuel cell RD&D activities, it's been hard to get energy
10 providers lined up to provide the fuels and the fueling
11 infrastructure, and people like Air Products have stepped
12 up to the plate and seen this as a viable business case
13 for the future, and we certainly appreciate that. Eleven
14 million is a substantial sum of money, but it's a major
15 down payment on a pathway to our diversified fuel future
16 in this state which, as Commissioner Peterman pointed
17 out, hydrogen is seen as one of the long term strategies
18 that we have to strive for, at least to play a
19 significant role in this. And, again, thanks and
20 congratulations to the staff with regard to being
21 persistent in pushing the subject that this fueling
22 infrastructure, both in terms of its footprint and its
23 cost can be reduced, and that certainly has proven to be
24 the case and will be the case with regard to these
25 stations that will be provided by way of this program

1 with Air Products. So, job well done by all, long long
2 process getting to where we are here today. But we're
3 here and we look forward to the future, not back. And
4 this, of course, the subject has been reviewed regularly
5 in the Transportation Committee, probably through
6 Commissioner Douglas and I when we were that Committee,
7 and now Commissioner Peterman and I, and Commissioner
8 Eggert on his frequent visits to this Commission, has
9 been involved, and we look forward to seeing him back
10 here again one of these days. But in any event, I'm
11 prepared to move approval of this item and hopefully
12 everybody appreciates the significance of this and the
13 Fuel Cell Partnership appreciates this investment.

14 COMMISSIONER DOUGLAS: Second.

15 CHAIR WEISENMILLER: We have a motion and it's
16 been seconded. All those in favor?

17 (Ayes.) This item passes unanimously. Thank
18 you.

19 MR. HEYDORN: Thank you.

20 CHAIR WEISENMILLER: Item 10. Minutes.

21 VICE CHAIR BOYD: Move approval. There aren't
22 any Minutes in my book -

23 COMMISSIONER DOUGLAS: I have May 18th.

24 CHAIR WEISENMILLER: Excuse me, Item 7.

25 COMMISSIONER PETERMAN: Lucky 7, come on up.

27

1 CHAIR WEISENMILLER: Okay, Item 7. Gas
2 Technology Institute. This item is for \$480,000 of PIER
3 Natural Gas funding. Matt.

4 MR. COLDWELL: Good morning, Commissioners. My
5 name is Matt Coldwell. I'm with the Electricity Analysis
6 Office, however, today I'm wearing my Energy Research and
7 Development hat to present this project.

8 This is a project with Gas Technology Institute
9 for \$480,000 as an 18-month contract. The purpose of
10 this project is the development of an implementation plan
11 for existing emerging technologies that can be used to
12 monitor the safety and integrity of California's natural
13 gas pipeline system infrastructure. This work is
14 absolutely critical to the public's interest because
15 California's extensive natural gas pipeline system is
16 aging and if it fails, the consequences can be
17 catastrophic. So it's imperative that we know, 1) how
18 the system's safety and integrity is currently monitored
19 and assessed, 2) what technologies currently exist that
20 can be used to improve the system monitoring, and 3) what
21 emerging technologies are in the pipeline or should be
22 explored to improve system monitoring, and that's exactly
23 what GTI is proposing in this contract.

24 GTI will take a three-stage approach with this
25 work, the first stage will be to develop a baseline of

1 technologies and processes that are currently used in
2 California; the second stage will be to identify
3 currently available technologies that could be used in
4 California, and the third is identifying new and emerging
5 technologies that can be developed and, just as a side
6 note, on this third stage, I brought forth a project
7 about a month ago, I believe, with the University of
8 California as a companion project to this work here, and
9 they're actually developing some new types of sensors and
10 monitoring equipment, and that's part of this emerging
11 technologies aspect of the overall effort here.

12 And so, the end product of this work will be a
13 technology implementation plan, and I'll stop short of
14 calling it a "research roadmap," but they will be
15 identifying research gaps for the PIER Program to explore
16 in the future, and so it will identify short, mid and
17 long term solutions to pipeline monitoring and also, like
18 I said, it will identify the research gaps that should be
19 addressed.

20 Part of this effort will be establishing
21 advisory committee that will consist of California
22 industry stakeholders, and they'll oversee and advise
23 both this contract and the work I just mentioned with the
24 University. So, GTI, they are very well qualified to do
25 this work, they have a long history in this type of work,

1 and have written many White Papers and done many research
2 projects, and so they are a great entity to be doing
3 this. I'll note that the project was approved by the R&D
4 Committee, and I request your approval. I'm happy to
5 answer any questions that you may have.

6 CHAIR WEISENMILLER: Commissioners, any
7 questions or comments?

8 VICE CHAIR BOYD: If no questions, I'll just
9 comment, as just mentioned, this effort and the
10 previously mentioned project with the University are part
11 of our contribution to the area of natural gas pipeline
12 integrity, safety, and what have you, certainly brought
13 to everyone's attention by the unfortunate situation that
14 occurred in San Bruno, and we are participating with
15 others, particularly our sister agency at the PUC, in
16 being concerned about that subject area and wanting to
17 dig more deeply -- bad pun, I guess -- into the issue of
18 natural gas pipeline integrity and what have you. So
19 this was reviewed and vetted in the R&D Committee, as
20 indicated, and I'm prepared to move its approval.

21 COMMISSIONER PETERMAN: I would just like to
22 comment that I was happy to see in the longer description
23 that it's not just an assessment of the existing
24 technologies, but also recommendations for further
25 research and perhaps which systems might be best going

30

1 forward because it sounds like there are a host of
2 different ones that might be employed, and we get to take
3 a fresh look and see of California should be doing
4 something different. So, if there are no other comments
5 or questions, I'll second the motion.

6 CHAIR WEISENMILLER: I have a motion, it's been
7 moved and seconded. All those in favor, please say
8 "aye."

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

11 MR. COLDWELL: Thank you.

12 CHAIR WEISENMILLER: We're now up to 10,
13 Minutes, which I don't think we have any at this stage.
14 [Whereupon, the Interim Secretariat explains that she
15 neglected to include any Minutes in their package.]

16 CHAIR WEISENMILLER: Okay, now we'll go to Item
17 11, Commission Committee Presentations and Discussions.
18 I wanted to mention a couple things, the first one I'll
19 mention is just that, on Friday, I was at 29 Palms, the
20 Marine Base in the desert where all the folks going out
21 to desert warfare are trained, it is a very large site,
22 very impressive. I was particularly viewing the
23 photovoltaic arrays they have, the cogeneration project,
24 and talking to them about ways we can work together on
25 stuff. And one of the things that was interesting was

1 that they talked about, as they also have a lot of LEED
2 buildings that are very advanced, and one of the
3 surprises for ex-Chair Pfannenstiel when she went to the
4 Navy, it was discovered that their requirements for their
5 buildings are more advanced than our Title 24, that she
6 had gone through the last round of adoptions here for
7 commercial buildings and had heard a lot of back and
8 forth about how difficult they were to meet. Well, in
9 fact, when she got to the Navy, she discovered that the
10 matter exceeded those as a matter of practice. But one
11 of the things they mentioned was, for that, and to some
12 extent the renewable projects, they need trained people
13 to really be able to maintain and operate those
14 buildings, and they're having difficulties finding those.
15 And I mentioned that, certainly, to the extent we try to
16 do a lot of training programs as part of ARRA for Green
17 Jobs, you know, there is always a question of the types
18 of jobs and the location of the training programs that,
19 you know, we should try to look at better. We also
20 talked about obviously the need for returning Veterans
21 who need jobs for this type of training. So, Senator
22 Fuller was there and obviously she's very familiar with
23 the education system in that area, so we talked a little
24 bit about the community colleges and the training
25 programs there. But, anyway, as we all look at the green

1 jobs and training, it's important to think about how to
2 target those around the military bases, where as I said,
3 are really becoming - well, actually, first, they're
4 certainly a key part of construction in Southern
5 California, where the construction has really gone on for
6 the last few years, it's really at the military bases.
7 And, as I say, with very high efficiency buildings and
8 renewables, that to the extent we're doing these training
9 programs, it would be good to target them there in some
10 fashion.

11 Also, the day before Mary Nichols had invited
12 me to go to El Monte and to see their test facilities
13 which were, of course, pretty impressive for automobiles
14 and fuel, so it was interesting. Anyone else? I have
15 one item after we're finished, too.

16 COMMISSIONER PETERMAN: My one item is that I
17 was very inspired after the last Business Meeting,
18 Commissioner Douglas reported on May is Bike Month, and
19 not everyone really got to hear that because it was
20 towards the end of the day, but I was so inspired, being
21 a very inexperienced bike rider, I rode six miles
22 yesterday on my bike, which is the most I've ever done,
23 and so it's a start, and so watch out, Anthony Eggert,
24 I'm on your tail for next year!

25 COMMISSIONER DOUGLAS: That's extremely

1 impressive, Commissioner. I'll have to remember that
2 we'll invite you to the party and maybe that'll be even
3 more -- that will be extra inspirational. Some of the
4 riders won, one breaking 1,000 miles, one breaking 500
5 miles in the month of May, were just extraordinarily
6 impressive.

7 I briefly wanted to report that on Thursday
8 last week, I went with Energy Commission staff and
9 stakeholders in the Desert Renewable Energy Conservation
10 Plan on a tour of potential areas for development in the
11 West Mojave. The Bureau of Land Management was present,
12 we had the wildlife agencies present, and we had quite a
13 large number of stakeholders. It was really a site to
14 see, this very long convoy of cars going through the
15 desert and stopping at various sites on both private and
16 public land. I thought it was very valuable, it really
17 helped make the exercise concrete to go out with
18 stakeholders and look at areas and really talk both as a
19 group and informally as we drove around, about the
20 broader issues we're trying to deal with in the DRECP and
21 also the specific landscape in front of us, and so I
22 thought it was -- I missed the second day of the tour
23 which went -- actually, I won't even try to say where it
24 went, but I missed the second day and I'll have to catch
25 up on that, but I thought it really gave us some good

1 momentum and it was a really good opportunity for the
2 stakeholders to talk. I spent a lot of the day going
3 from car to car in order to have a chance to talk with
4 some of the people there and, with the large group,
5 didn't really make it to all the cars by a long shot, but
6 I found it to be a very valuable use of time.

7 VICE CHAIR BOYD: Well, Commissioners, let me
8 report a couple of items, one of which is something I
9 didn't do last Thursday in deference to the concern about
10 the cost of travel to Government, in general, and to the
11 Energy Commission, I withdrew at the last second my
12 attendance in San Diego at the unveiling of the Ecotality
13 Nissan Leaf Program there; however, I noticed in the
14 Press clips over the weekend that my quote made it to the
15 newspaper and some people in reading it would think I was
16 there, so we scored half a point instead of a full point
17 -- a virtual point, right.

18 In any event, that is one of the major launches
19 of pure electric vehicle fleet use in California, "fleet"
20 meaning many individual people, a dedicated fleet
21 application per se, but again, another technology in our
22 diversified portfolio of future transportation
23 technologies and fuels that's been launched big time and
24 certainly a big feather in the cap of both companies,
25 Ecotality and Nissan, and certainly a good moment for the

35

1 folks in San Diego to be the host for this very
2 significant demonstration.

3 Part of the sacrifice of travel funds was also
4 to make sure that we did attend the Fuel Cell
5 Partnership's Board Meeting, which took place last week.
6 Tim Olson represented us, represented me at the Board
7 Meeting because it overlapped with the Commission
8 Meeting, and so Tim did attend and reported back to me on
9 some very good progress. But I'm going to give you all a
10 heads up of something that took place there and you're
11 going to be petitioned about, and that is the membership
12 dues significant reduction that we engaged in, the dues
13 or the membership, or the participation is in the \$80,000
14 a year frame and you'll recall we scraped together what
15 was left in the Transportation Division's dollars for a
16 \$33,000 and some odd weird number as our suggested
17 tithing to the Fuel Cell Partnership this year. That
18 activity necessitated bringing it before the Board of
19 Directors and I guess they have been asked to accept
20 that, but they're not accepting it at first, they're
21 going to be petitioning the full Commission here for
22 reconsideration. And I just tell you that as a heads up.
23 I think in our reply, we'll probably have to make mention
24 to the tens of millions of dollars that we have invested,
25 including the \$11 million we've just invested in hydrogen

1 infrastructure. And I would say further, because I can't
2 talk to you all other than this public meeting that, when
3 I arrived at this Commission years ago, we paid no dues.
4 We were a charter starting member, a government member,
5 we did manage for many years that the Fuel Cell Bus
6 Program that was taken as
7 -- and I think when the whole Fuel Cell Partnership
8 started, there was an initial dollar investment made by
9 the Commission -- but for years, our in-kind contribution
10 was through that program and we haven't been managing
11 that program for several years now, and when Dr. Lloyd
12 was Chair of the Air Board, he appealed to this agency to
13 please start paying some form of dues and what have you,
14 and we did for several years. We did freeze our dues at
15 a certain level a few years back while the rest of the
16 membership is participating in kind of a cost-of-living
17 adjustment, what have you. But, in any event, it's a
18 sizeable chunk of change, which is why we went through
19 the deliberations we did as a Commission and as we went
20 through the process of eliminating or reducing dues.
21 So, you'll be hearing more, but I'm sure we'll have to
22 respond to the concerns of the Board of Directors.
23 That's all I have. Thank you.

24 CHAIR WEISENMILLER: Okay, before we go to the
25 Chief Counsel's Report, I was reminded that, although I

37

1 announced Rob's appointment, I didn't provide the entire
2 legal foundation, so to do that I would say, pursuant to
3 Government Code Section 11125.2, the Commission met in
4 closed session during its Business Meeting on June 15th,
5 2001 [sic]. At that meeting, the Commission accepted my
6 recommendation, and the Governor's Office concurrence,
7 that we make Rob the Executive Director and also the
8 acceptance of Melissa's resignation as the Executive
9 Director, and that was approved unanimously. And we
10 certainly want to thank Melissa for her long long years
11 of service. I think all of you understand that she came
12 here as an intern and certainly has devoted her life to
13 this organization with considerable energy and
14 enthusiasm, and has contributed an awful lot. I
15 understand that she has sent out a note this morning
16 reminding people of her substantial contributions of the
17 last couple years.

18 COMMISSIONER DOUGLAS: I just wanted to add, in
19 addition to welcoming Rob in his new role, I would also
20 like to thank Melissa. We've gone through, as we've been
21 through a very tough time with extremely high workload in
22 the last three to three and a half years that she's been
23 Executive Director, the agency performed and performed
24 extremely well under very very tough circumstances,
25 whether it was the siting of the solar facilities, which

1 our staff had to just sacrifice weekends and birthdays
2 and everything they had to do to get the job done, to
3 allocating the ARRA money, and keeping the rest of our
4 work going, or going as best we could. So I think that -
5 - I just want to note that, as we move into this
6 transition, this change, I want to note my appreciation
7 for what has been achieved over the last couple years and
8 my thanks to Melissa for her hard work and her efforts
9 that helped contribute to this success.

10 CHAIR WEISENMILLER: Item 11. Chief Counsel's
11 Report.

12 MR. LEVY: Good morning, Commissioners. I have
13 no report today.

14 CHAIR WEISENMILLER: Item 12. Executive
15 Director Report.

16 MR. OGLESBY: Nothing further to add.

17 CHAIR WEISENMILLER: Item 13. Public Advisor
18 Report?

19 MS. JENNINGS: I have nothing to report. Thank
20 you.

21 CHAIR WEISENMILLER: Item 14. Public Comment?

22 This meeting is adjourned. Thank you.

23 (Whereupon, at 9:58 a.m., the business meeting was
24 adjourned.)

25

REPORTER'S CERTIFICATE

I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were reported by me, a certified electronic court reporter and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

And I further certify that I am not of counsel or attorney for either or any of the parties to said hearing nor in any way interested in the outcome of the cause named in said caption.

IN WITNESS WHEREOF,

I have hereunto set my hand this 21st day of June, 2011.

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

PETER PETTY
CER**D-493
Notary Public