

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
Lana McAllister, for Secretariat

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Amir Ehyai	2
Mary Lam	3
Martha Brook	4, 5
Pedro Gomez	6
Ruben Tavares	7
Mike Jaske	8
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John Hingtgen	10
Pablo Gutierrez	11, 12, 13
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Tobias Muench	15
Rhetta deMesa	16, 17, 18
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Joanne Vinton	20
Pilar Magana	21
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Also Present

Interested Parties

Jamie Levin, AC Transit	15
John Naab, Biostar Systems, LLC	16
Paul Relis, CR&R	17
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P R O C E E D I N G S

JUNE 29, 2011 10:06 a.m.

CHAIRMAN WEISENMILLER: Good morning. Let me call the meeting to order with the Pledge of Allegiance.

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

CHAIRMAN WEISENMILLER: Good morning. Let me first announce that Item 22 has been put off until probably July 13th. And at this point, looking at the Consent Calendar, we're going to split the Consent Calendar in two. Let's first deal with Item 1C, Lawrence Livermore National Laboratory.

COMMISSIONER PETERMAN: Chair, I'll have to recuse myself from this vote since I did work at Lawrence Berkeley National Lab through August of last year.

CHAIRMAN WEISENMILLER: Okay.

VICE CHAIR BOYD: Well, I'll move adoption of Consent Item 1C.

COMMISSIONER DOUGLAS: Second.

CHAIRMAN WEISENMILLER: All those in favor?

(Ayes.) Thank you, this item has been passed unanimously.

Let's now look at the rest of the Consent Calendar. And let me make one announcement on the rest of the Consent Calendar. Item 1E, the dollar amount is

1 slightly off, it is really \$34,974.00, so it is off by
2 \$26.00.

3 COMMISSIONER DOUGLAS: I'll move the rest of
4 the Consent Calendar.

5 VICE CHAIR BOYD: With that correction.

6 COMMISSIONER DOUGLAS: With that correction.

7 VICE CHAIR BOYD: I'll second.

8 CHAIRMAN WEISENMILLER: Okay, all those in
9 favor?

10 (Ayes.) This item also passes unanimously.

11 Let's look at Item 2.

12 VICE CHAIR BOYD: Mr. Chairman, if I might,
13 excuse the interruption, the last item on the Consent,
14 Mountain View, was another one of our greater efficiency
15 standards items that have now become a fairly routine
16 action by a local government and I am looking forward to
17 the resolution that we are now beginning to give these
18 people in terms of commendations for the action they've
19 taken, so I just wanted to note that for the record.
20 Nobody heard what I said? I will repeat what I just said
21 and that is just to note that, on Consent Item 1F, the
22 City of Mountain View, where we just gave approval to
23 their Building Energy Efficiency Standards, which are
24 greater efficiency standards than the State standards, so
25 to speak, we have seen so many of these they've become a

11

1 Consent item, but we would like to acknowledge the cities
2 for the actions they've taken and, when it is buried in
3 Consent, that doesn't happen, but I noted that the
4 practice of the Commission has come to following an
5 action like we've just taken, and the City will receive a
6 commendation resolution from the Commission for the
7 action that is taken. So, thank you.

8 CHAIRMAN WEISENMILLER: Yes. Thank you for
9 that statement, Commissioner Boyd. Let's look at Item 2,
10 City of Hayward. This is for a \$887,152 loan under ECAA.
11 Amir.

12 MR. EHYAI: Thank you. Thank you, Chairman.
13 Good morning, Commissioners. My name is Amir Ehyai. I
14 am with the Special Projects Office. If approved for
15 funding, the City of Hayward will use this loan to
16 upgrade the lighting at five City facilities and also to
17 install photovoltaic panels at two other facilities. The
18 lighting upgrades at three buildings will include high
19 performance T8 fluorescent fixtures and occupancy sensor
20 controls. At two parking garages, the city will upgrade
21 the lighting with new and, in my mind, exciting lighting
22 technologies. These are high performance, bi-level LED
23 and fluorescent fixtures, which will use wireless
24 controllers to dim or switch off the lights based on
25 photo sensor and motion sensor controls. These controls

1 are integrated into each fixture. The technologies have
2 been proven to substantially reduce energy use in parking
3 garage applications. Here, it is estimated that the
4 project will reduce existing energy use by 70 percent.

5 Both the bi-level lighting technology, as well
6 as the wireless controls, are successful products of the
7 Commission's PIER Research efforts. These technologies
8 have been widely field tested and demonstrated by the
9 California Lighting and Technology Center and, at the
10 moment, both technologies are eligible for handsome
11 rebates through the Energy Technology Assistance Program,
12 which is administered as part of the Energy Upgrade
13 California Initiative.

14 The Energy Commission loan will also be used to
15 install rooftop photovoltaic panels at two city
16 facilities. These PV systems will be sized to generate
17 approximately 70 percent of each building's electric
18 needs. In total, these projects will reduce the City's
19 annual energy use by 671,814 kilowatt hours of
20 electricity and reduce peak demand by 155 KW. Annual
21 energy cost savings is estimated at \$98,186.

22 Staff has determined that this loan request is
23 technically justified and meets eligibility requirements
24 for an Energy Commission loan under the Energy
25 Conservation Assistance Act. This item has been

1 previously approved by the Efficiency Committee. And I
2 am happy to answer any questions you may have.

3 CHAIRMAN WEISENMILLER: Thank you.

4 Commissioners, any questions or comments?

5 COMMISSIONER DOUGLAS: No questions or
6 comments, you know, by looking at the materials and
7 hearing the summary, this looks like a very good project
8 and with high amounts of savings. So I would be pleased
9 to move Item 2.

10 COMMISSIONER PETERMAN: I'll second.

11 CHAIRMAN WEISENMILLER: We have a motion and
12 it's been seconded. All those in favor?

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

14 MR. EHYAI: Thank you.

15 CHAIRMAN WEISENMILLER: Item 3 is Department of
16 Finance, Office of State Audits and Evaluations. This is
17 a contract for \$360,000 with RRTF funding. Mary.

18 MS. LAM: Hi, everyone. My name is Mary Lam
19 and I'm from the Budget Office as the Audit Coordinator.
20 This contract, if approved, will continue our service for
21 the Financial Statement Audit of the Renewable Trust Fund
22 annually that we have with the Department of Finance, and
23 it is also required by the Public Resource Code 25751,
24 Section G. And I will be happy to answer any questions.

25 CHAIRMAN WEISENMILLER: Thank you.

1 Commissioners, any questions or comments?

2 VICE CHAIR BOYD: No question. If no comments,
3 I'll move approval of the item.

4 COMMISSIONER PETERMAN: I'll second.

5 CHAIRMAN WEISENMILLER: Okay, all those in
6 favor?

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

8 COMMISSIONER PETERMAN: Chairman, if you
9 wouldn't mind, I did actually want to offer a comment, I
10 was trying to recall it, regarding the Contract No. 2,
11 City of Hayward.

12 CHAIRMAN WEISENMILLER: Sure.

13 COMMISSIONER PETERMAN: I think this is very
14 interesting that we are seeing these renewables on City
15 buildings, that's an initiative that the Commission -
16 putting renewables on State property is something that
17 we've been quite involved with in working with other
18 agencies as a way to demonstrate State leadership in this
19 area, and so I'm happy to see that the City of Hayward is
20 also demonstrating the value of renewables and being a
21 government entity doing that, and providing leadership
22 example to other cities. So, thank you for that example.

23 CHAIRMAN WEISENMILLER: Thank you. Item 4 is
24 with Bruce Wilcox, PE. It's a contract for \$1.2 million
25 of ERPA funding. Martha.

1 MS. BROOK: Hello, I'm Martha Brook with the
2 High Performance Buildings and Standards Development
3 Office. I'm pleased to bring this and the next agenda
4 item before you for approval. This contract is a result
5 of a competitive solicitation the Energy Commission held
6 to select a team of engineers, architects, scientists,
7 and software developers to provide consulting services
8 for the purpose of developing energy modeling algorithms
9 and application software to implement the Commission's
10 Residential Performance Standards.

11 The Wilcox team includes 21 organizations and
12 over 60 individuals, many with a long history of
13 standards development and energy modeling expertise.

14 This contract represents a paradigm shift for
15 the Energy Commission in the way we solicit for, develop,
16 and make available, Standards Compliance software. All
17 software developed under this contract will be available
18 to all interested parties through an Open Source License
19 Agreement.

20 Members of the Wilcox team include current
21 compliance software vendors, as well as a company
22 interested in providing compliance software in the
23 future.

24 This contract includes work scope to pilot the
25 residential compliance software modules to be developed

1 in these private vendor software tools with the intent of
2 facilitating these vendors to submit their compliance
3 software to the Commission for certification for the 2013
4 Standards. The Commission will also continue to provide
5 a public domain version of this compliance software as
6 mandated by the Warren Alquist Act.

7 This contract will continue a collaboration
8 between the Energy Commission and the Investor-owned
9 utilities in the development of the Residential Energy
10 Simulation Program that will be the foundation of the
11 compliance software. This simulation program named The
12 California Simulation Engine has been co-funded by the
13 utilities and the Commission, and also benefits greatly
14 from previous PIER funded algorithm development.

15 Finally, this contract work scope includes
16 several other model validation and software development
17 projects that will support our 2013 standards
18 implementation, including our photovoltaic energy
19 generation model, a new compliance forms generator, and a
20 new standards data repository, and future support for the
21 California utility allowance calculator for low-income
22 multi-family tax incentive calculations. So, it's a big
23 body of work and we'll be busy for the next few years,
24 and I would be glad to answer any questions you have.

25 COMMISSIONER WEISENMILLER: Thank you.

1 Commissioners, any questions or comments?

2 COMMISSIONER DOUGLAS: This is supporting some
3 of the core work in our standards work and, so, I
4 strongly support the effort. I would move Item 4.

5 VICE CHAIR BOYD: I'll second.

6 CHAIRMAN WEISENMILLER: Okay. All those in
7 favor of Item 4?

8 (Ayes.) This passes unanimously.

9 Item 5. Architectural Energy Corporation. This
10 is also for \$1.2 million of ERPA funding. And also
11 Martha.

12 MS. BROOK: This contract is also the result of
13 a competitive solicitation the Energy Commission held to
14 select engineers, architects, scientists, and software
15 developers, this time to develop energy modeling
16 algorithms and application software for our Non-
17 residential Performance Standards.

18 The Architectural Energy Corporation team
19 includes 11 organizations and over 40 individuals, also
20 with history in Standards development and extensive
21 energy modeling experience. As with the residential
22 building energy science contract, this contract will also
23 result in software code and products made available
24 through Open Source licensing. Similarly, this work
25 scope includes piloting the nonresidential compliance

1 software modules in private vendor software tools, again
2 with the intent of facilitating these vendors coming back
3 to the Commission for certification of their compliance
4 software.

5 One key difference for these nonresidential
6 building vendors is that they really are working in the
7 domain of energy analysis software tools, so they provide
8 services to mechanical engineers who are designing
9 complex heating, ventilation, air-conditioning systems
10 for commercial buildings, and this work will allow our
11 compliance software modules to be included in their
12 energy design tools and make more seamless an energy
13 designer's ability to understand code compliance along
14 with going through the steps of building and designing
15 his energy systems in these buildings.

16 The Commission will also continue to provide a
17 public domain version of this compliance software as
18 mandated under the Warren Alquist Act.

19 The work to be completed through this Technical
20 Support Agreement will leverage three PIER funded
21 projects focused on building energy system design
22 software and standards-related software applications.
23 The work also represents a continued partnership with the
24 U.S. Department of Energy in developing and making
25 available energy analysis software that can interpret a

1 set of design constraints such as the performance
2 compliance rules included in the Commission's Non-
3 residential Performance Standards.

4 I'd be glad to answer any questions that you
5 have.

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

8 COMMISSIONER DOUGLAS: I would move Item 5.

9 COMMISSIONER PETERMAN: I'll second.

10 CHAIRMAN WEISENMILLER: Okay, all those in
11 favor?

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

14 MS. BROOK: Thank you very much.

15 CHAIRMAN WEISENMILLER: Item 6 is the
16 California Institute for Energy and Environment.

17 COMMISSIONER PETERMAN: Chair, I'll have to
18 recuse myself because of previous employment with the
19 U.C. Energy Institute, which is organizationally related
20 to CIEE.

21 CHAIRMAN WEISENMILLER: Okay. This contract is
22 for \$2,522,048. And this is PIER funding. Pedro.

23 MR. GOMEZ: Good morning, Chair, Commissioners.
24 My name is Pedro Gomez and I am the Program Lead for the
25 Energy Technology Systems Integration Program. I'm here

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1 today requesting approval of this agreement with the
2 Regents of the University of California, California
3 Institute for Energy and Environment for 30 months, and
4 \$2,522,048. This item was reviewed and approved to be
5 heard at today's business meeting by the R&D Committee on
6 April 25th. This project builds upon proven results and
7 expertise developed over the last seven years in creating
8 technologies that enable Demand Response in Energy
9 Management Systems. This project will extend that work
10 into the Smart Grid arena where they will develop
11 technologies that support greater penetration of
12 renewable generation and integration of electric vehicles
13 onto the distribution system. More specifically, they
14 will develop low cost, high quality power monitoring
15 technologies, Smart devices for the distribution grid
16 that can help diagnose problems before those problems
17 actually cause power outages, game changing low cost
18 storage technologies to help mitigate intermittency of
19 renewable generation, and models and control algorithms
20 to enable greater renewable penetration onto the
21 distribution system.

22 I might want to point out that I received a
23 letter of support from PG&E for this project and I have a
24 copy of that letter with me this morning. With that
25 said, I seek your approval for this agreement and I would

1 like to answer any question that you may have.

2 CHAIRMAN WEISENMILLER: Thank you.

3 Commissioners, any questions or comments?

4 VICE CHAIR BOYD: No questions. If we're open
5 to comments, I would just comment, as Pedro has
6 indicated, that this project proposal was reviewed by the
7 R&D Committee consisting of the Chairman and myself, and
8 we did indeed recommend it for consideration by the full
9 Commission here today, and I'd like to move approval of
10 the project. It's a very good project, we believe, and
11 I'm glad to hear you have a letter of support from one of
12 our utilities because they will be the major beneficiary,
13 as will the electricity consumers of California if you
14 realize all of the results hoped for out of this effort.
15 So, I have moved approval.

16 COMMISSIONER DOUGLAS: Second.

17 CHAIRMAN WEISENMILLER: Okay. All those in
18 favor?

19 (Ayes.) This item passes unanimously. Thank
20 you, Pedro.

21 MR. GOMEZ: Thank you.

22 CHAIRMAN WEISENMILLER: Item 7 is Kenneth B.
23 Medlock III, and this is for \$100,000 and it is ERPA
24 funding. Ruben.

25 MR. TAVARES: Yes. Good morning,

1 Commissioners, Chairman. This is an amendment to an
2 existing \$46,000 contract that we currently have with Dr.
3 Medlock. The original contract that we have has been in
4 effect since December 2009, however, most of the work
5 under the current contract has been done in the last five
6 months, preparing ourselves for the 2011 IEPR.

7 The contract currently expires in March of next
8 year, 2012. The purpose of the original contract was to
9 modify the Rice University Natural Gas base case to which
10 we have access because of another separate agreement that
11 we have with the Baker Institute of Rice University. The
12 base case was already modified under the current contract
13 to accommodate the California needs, so we now have in
14 ourselves a reference case here in-house. This amendment
15 will add \$100,000 to the contract and also will extend
16 the termination of the contract for one more year.

17 The amendment will allow, in conjunction with
18 the staff and in conjunction with Dr. Medlock, to run
19 different scenarios for the 2011 IEPR on Natural Gas
20 including, for example, with the Commissions on nuclear
21 power plants, what will be the impact on natural gas the
22 amount for power gen, you know, that is one of the
23 possible scenarios that we are considering at this point.

24 The additional funds and the time extension
25 will also allow staff to make modifications to the model

1 that we have in-house so that, in the future, we don't
2 need his help or the assistance of any contractors to run
3 the model ourselves.

4 This item was presented to the Electricity and
5 Natural Gas Committee on May 19th and the Committee moved
6 it for approval. So we are requesting the full
7 Commission today to proceed with this amendment and
8 approval to proceed with this amendment to the contract.
9 And with that, if you have any questions, I will be happy
10 to answer.

11 CHAIRMAN WEISENMILLER: Thank you. I would
12 note that Dr. Medlock made it into a New York Times story
13 on Sunday, however, on Monday there was an Energy
14 Information Administration response to that and,
15 certainly, as part of that he posted the document that
16 was referred to in that study, he refers that also -
17 Cambridge Energy Research Associates, a number of people
18 responded to that and certainly their responses, I think,
19 would comfort anyone who is concerned about his role on
20 the shale gas stuff. So, with that, any questions or
21 comments?

22 MR. TAVARES: Actually, I would like to make
23 one more point. Dr. Medlock is going to be here next
24 week on Thursday, July 7, he is going to be here the
25 whole day with staff. We're going to be talking about

1 the reference case, possible scenarios, and also is
2 available and my understanding is that Commissioner
3 Peterman is going to join us for some time to discuss
4 some of the issues with natural gas.

5 COMMISSIONER WEISENMILLER: Great. Thanks.

6 VICE CHAIR BOYD: Comment if I might, Mr.
7 Chairman. Based on my longtime work on natural gas
8 demand and supply in California, and I served on -- I
9 chaired our Natural Gas Committee and served on our
10 Electricity Committee before we merged the two together
11 and, of course, all during the electricity crisis, one of
12 my main charges was natural gas. And I'm very pleased to
13 see the efforts that the Commission has made over time to
14 continue to improve our knowledge of and our ability to
15 deal with questions about demand and supply, and I'm very
16 familiar with the work that the Commission has done with
17 Dr. Medlock in the past and I was pleased to see this
18 item on the agenda because I think he has been
19 particularly helpful to the Commission and pleased to see
20 that the Electricity and Natural Gas Committee had
21 recommended this item, and I appreciate your comments
22 clearing the air a little bit on some of the recent
23 publicity on the subject area. So, I'm prepared to
24 support the item.

25 COMMISSIONER PETERMAN: I'll also just add a

25

1 comment that I have had the opportunity to work with
2 staff and discuss in depth this model and the scenarios,
3 particularly our working to make our scenarios realistic
4 and reflect some of the things that are happening on the
5 national level, as well as in the state, in order to make
6 our forecasts more realistic. And, so, thank you for the
7 work that you and your team are doing on that, and I look
8 forward to seeing the results in this year's IEPR. I
9 will make a motion to move Item 7.

10 VICE CHAIR BOYD: Second.

11 CHAIRMAN WEISENMILLER: All those in favor?

12 (Ayes.) This passes unanimously. Thank you,
13 Ruben.

14 MR. TAVARES: Thank you.

15 CHAIRMAN WEISENMILLER: Now we get to Item 8.
16 I am going to recuse myself on the next two items.

17 VICE CHAIR BOYD: Thank you, Mr. Chair. I will
18 take over for you temporarily. Item 8, California Air
19 Resources Board, and I would note for the record I worked
20 there for 20 years, but that was 15 years ago, so I don't
21 have to recuse myself anymore, I don't think. In any
22 event, possible approval of Contract 800-10-002 to accept
23 \$100,000 from the California Air Resources Board to
24 support technical analyses required to satisfy the
25 electricity reliability assessment elements of AB 1318.

1 Mr. Jaske.

2 DR. JASKE: Good morning, Vice Chair Boyd and
3 Commissioners. My name is Michael Jaske with the
4 Electricity Supply Analysis Division. The item before
5 you is an interagency agreement with ARB in the amount of
6 \$100,000. As you have noted, unlike most of the items
7 today, we are receiving money from ARB, not disbursing
8 it.

9 AB 1318 requires the ARB, in conjunction with
10 several named agencies, including Energy Commission,
11 assess electric system reliability in the South Coast Air
12 Basin. The idea is to determine the amount of needed
13 fossil capacity that has to be built there, after taking
14 into account the impacts of renewable development demand
15 side initiatives, etc., to then examine the offset
16 requirements of that fossil capacity development, the
17 availability of offsets, and any necessary regulatory or
18 permitting changes to allow that development to happen.

19 The issues raised by AB 1318 are very
20 complementary to those created by the State Water
21 Resource Control Board's once-through cooling mitigation
22 policy and, so, the interagency technical team that was
23 addressing OTC was in large to encompass ARB and to
24 address AB 1318 analyses.

25 ARB doesn't have expertise in this area, so it

27

1 is reliant upon the energy agencies, namely the Energy
2 Commission, PUC, and ISO, to conduct the reliability
3 analyses that are required. Our resources are limited
4 and only a portion of the capabilities that we have can
5 actually be devoted to the AB 1318 assessments,
6 therefore, ARB has agreed to provide some funding so that
7 we can augment our resources, our staff resources, that
8 is, to conduct the necessary work.

9 The monies that we will receive from ARB if you
10 approve this item will be used to fund a new work
11 authorization under our division's existing tech support
12 contract with Aspen Environmental Group. A new work
13 authorization will probably put the majority of the money
14 with Navigant Consulting because they are the expert on
15 power system modeling that is required in this particular
16 project. And what we're doing here is really trying to
17 translate renewable project development and especially
18 demand side program impacts down to the load bus level so
19 that we can understand the differential impacts on power
20 flow and the extent to which that does or does not
21 relieve the need for power plants in specific locations
22 to support local reliability.

23 If you approve this agreement, then staff will
24 immediately put forth the new work authorization into the
25 approval process and we will try to get the work going as

1 quickly as possible. This work has been discussed with
2 the Electricity and Natural Gas Committee several times
3 this spring and they are aware of the direction we're
4 heading. Are there any questions?

5 VICE CHAIR BOYD: Thank you, Dr. Jaske. Any
6 questions?

7 COMMISSIONER DOUGLAS: No questions, but a
8 brief comment if I might. I've been watching this work
9 with great interest for something like two years; it may
10 have not been quite two years. I think that this
11 analysis is really important and called for, particularly
12 as California moves towards meeting its climate and
13 renewable energy goals. As we go throughout the state in
14 siting processes, a question that often gets asked is,
15 you know, what is the particular role? What is the
16 localized importance of this power plant in this
17 location? And what about photovoltaics? And what about
18 energy efficiency? And what about Demand Response? And
19 how does this all fit together? And so, I think that the
20 work that's being done, although probably more difficult
21 than I had initially understood it to be, but I think the
22 work that is being done is going to be of real importance
23 in helping both the energy agencies, the Air Resources
24 Board, and ultimately the public, understand the
25 interrelationship between these different policies and

1 the role of natural gas, even in a scenario where we meet
2 all of our efficiency and Demand Response renewable
3 energy and distributed generation goals, particularly in
4 that scenario. So, I'm pleased to see this work continue
5 and pleased to support this contract. I'll see if there
6 are any other comments and move Item 9.

7 VICE CHAIR BOYD: I would just like to comment,
8 I would like to join you in your remarks about the item.
9 I, too, have been following this and I think all of us
10 know how complex this issue is that we're facing,
11 particularly in the South Coast Air Basin, but as a
12 precursor to broader based issues, so it's really nice to
13 see the ARB involved, it's even nicer to see their money,
14 and I look forward to it assisting all of us in
15 understanding and perhaps resolving this issue as a
16 precedent for other issues that we will face in the
17 future. So, thank you.

18 COMMISSIONER PETERMAN: I'll second.

19 VICE CHAIR BOYD: That wasn't a motion - there
20 isn't a motion --

21 COMMISSIONER DOUGLAS: I moved Item 8 and we
22 have a second.

23 VICE CHAIR BOYD: All right, we have a motion
24 and a second. All in favor?

25 (Ayes.) Opposed? None. It carries

1 unanimously, 3-0. Thank you.

2 DR. JASKE: Thank you.

3 VICE CHAIR BOYD: Item 9. Aspen Environmental
4 Group. Possible approval of Contract 800-10-001 for \$2.4
5 million with Aspen Environmental Group for technical
6 support and training for the Electricity Supply Analysis
7 Division. Ms. Bender.

8 MS. BENDER: Good morning, Commissioners. I'm
9 Sylvia Bender with the Electricity Supply Analysis
10 Division. This proposed contract was developed as a
11 single RFP, as the most efficient vehicle to provide
12 staff assistance in five separate work areas that support
13 our Division's work plans. The RFP was competitively bid
14 earlier this spring. This would be a three-year contract
15 with total possible spending authority of \$2.4 million.
16 The maximum funding available the first year is \$800,000.
17 If future funding is available, the contract could be
18 funded for an additional \$800,000 in each of the next two
19 years as part of our work planning process.

20 The term of the contract will run through March
21 2014. This is a Work Authorization contract. All work
22 proposed by staff will be developed through consultation
23 and approval by the Executive Office and the appropriate
24 policy committees.

25 Consistent with Commission policy, technical

1 support contractors are only used when work is highly
2 specialized and such expertise is not available here at
3 the Commission, work is intermittent in nature, and are
4 short-term and related to specific work, tasks or
5 projects, or the Commission's Legal Office approves the
6 work authorization through the standard protocol.

7 This contract will provide expert technical
8 assistance for projects that we have identified in the
9 2009 IEPR and the current work plans. It will support
10 work for the 2011, 2012 and 2013 IEPR cycles. For
11 example, we might use this contract to support Power Flow
12 Modeling, continuing much of what Mike Jaske described
13 previously, for our infrastructure assessment work, we
14 might also use it to provide expert assistance to
15 evaluate our demand forecasting modeling techniques,
16 especially in the area of efficiency quantification.

17 The contract is not a substitute for continuing
18 improvement in staff analytical capabilities. Extending,
19 enhancing and developing staff capabilities remain
20 primary goals in our Division. So, for these reasons, I
21 would urge you to approve this contract and I would be
22 happy to answer any questions you might have.

23 VICE CHAIR BOYD: Thank you, Sylvia. Any
24 questions from my fellow Commissioners? Any comments?

25 COMMISSIONER PETERMAN: I'll just thank Ms.

1 Bender again for her explanation for the contract and how
2 that fits in with our staffing and our resource needs
3 here. This work is very important for what we are doing
4 related to the electricity and natural gas
5 infrastructure, and I look forward to seeing some of the
6 results and some of the products we request going
7 forward.

8 VICE CHAIR BOYD: I would like to supplement
9 Commissioner Peterman's comments by first agreeing with
10 that which she said and, secondly, indicating that, being
11 a little more forceful and candid, that I have been
12 immensely pleased with the ability of this agency to face
13 a workload that far exceeds workloads seen by this agency
14 in years, if not decades, with far fewer people than it's
15 had in a long time, and the importance of being able to
16 have this type of technical support in accordance with
17 the criteria that is spelled out is critical to us all
18 being able to finish our work. So, I appreciate the fact
19 that we're considering this and I certainly am supportive
20 of that. So, do we have a motion?

21 COMMISSIONER PETERMAN: I'll move Item 9.

22 COMMISSIONER DOUGLAS: Second.

23 VICE CHAIR BOYD: We have a motion and a
24 second. All in favor?

25 (Ayes.) Opposed? None. It carries

1 unanimously 3-0. Thank you.

2 MS. BENDER: Thank you, Commissioners.

3 CHAIR WEISENMILLER: Okay, the next item is 10.
4 Layman Energy Associates, Inc. And this is a grant of
5 \$2,377,364 of GRDA funding. John.

6 MR. HINGTGEN: Good morning, Commissioners. My
7 name is John Hingtgen. I am with the Energy Generation
8 Research Office. This item and the next three items
9 result from the geothermal solicitation which we refer to
10 as GRDA, which is conducted about every two years, and
11 these are all recommended for awards, these four items.
12 I will cover the first one, then the next speaker will
13 cover the next three items.

14 The first item is an agreement for a three-year
15 cost share grant to drill and test an exploratory well in
16 the Geysers area. This grant would provide funding
17 toward drilling an 8,000-foot well and constructing the
18 necessary access road. The purpose of the project is to
19 confirm a new geothermal resource expected to be in the
20 range of 30-90 megawatt size in the southeast part of the
21 Geysers, which is a new area of exploration.

22 Success at this project could lead to
23 exploration of another area in the northwest part of the
24 Geysers that is similar geologically. This grant is
25 funded from Geothermal Resources Development Account

1 funds.

2 The recipient is Layman Energy Associates based
3 in San Luis Obispo, and they and their subcontractors are
4 providing the match funding of \$3.6 million. The total
5 budget for this project is \$5.9 million. In order to
6 meet CEQA requirements, this project will be done in two
7 phases, the first phase will be started upon approval of
8 this item; the second phase will be done after the
9 recipient obtains their final CEQA determination, which
10 will be from the County. Staff will return to the
11 Commission for approval to spend funds in Phase II after
12 that time if this is approved. And so, staff recommends
13 approval.

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

16 COMMISSIONER DOUGLAS: Just a brief comment. I
17 was pleased to see this item. Geothermal electricity is
18 important, it's particularly valuable as a baseload
19 resource, and obviously there is both great potential in
20 California and significant obstacles to moving forward
21 and further developing geothermal resources, so I'm
22 always pleased to see us doing what we can to move
23 forward in this area, and this looks like a great
24 project. All right, so I've lost my place in the agenda
25 -- so I'll move Item 10.

1 VICE CHAIR BOYD: Second.

2 CHAIRMAN WEISENMILLER: All those in favor?

3 (Ayes.) This item passes unanimously.

4 Let's look at Item 11, which is ImageAir, Inc.
5 and this is for \$672,234.00 and this is also GRDA
6 funding. Pablo.

7 MR. GUTIERREZ: Good morning, Mr. Commissioner
8 [sic] and Commissioners. My name is Pablo Gutierrez. I
9 am with the PIER Renewables Office and will be presenting
10 the next two items also.

11 I am here today to seek approval and agreement
12 with ImageAir, Inc. for \$672,234.00. This is a 21-month
13 GRDA grant with \$732,293.00 in match. The objective of
14 this project is to create the satellite based land survey
15 to detect surface information at sites of current and
16 planned geothermal plants in the Imperial Valley, using
17 remote sensing data from satellites and advanced
18 synthetic aperture radar techniques. The proposed
19 project will reveal in greater detail surface
20 informations over geothermal production zones. This will
21 assist in resource assessment, planning, and exploration
22 activities by providing tectonic deformation at
23 prospective geothermal sites, finding possible hidden
24 faults, and supplying estimates of tectonic string that
25 may assist in identifying drilling targets.

1 I hope for your approval of this item and I
2 would be happy to answer any questions.

3 CHAIRMAN WEISENMILLER: Thank you.
4 Commissioners, any questions or comments?

5 VICE CHAIR BOYD: A comment if I might. The
6 Imperial Valley, of course, is a liquid dominated
7 geothermal resource and the last item we approved, I
8 didn't comment, but was for exploration of liquid
9 potential in what heretofore has been a steam facility,
10 which I guess we should note for the record is very
11 promising, as Commissioner Douglas pointed out. So this
12 is for additional work in a liquid dominated field that I
13 think we know from being here a while shows great
14 additional potential, so this was, of course, reviewed in
15 the R&D Committee and, if my Commissioners have no other
16 questions, I will move approval of the item.

17 COMMISSIONER PETERMAN: I will second.

18 CHAIRMAN WEISENMILLER: Okay, all those in
19 favor?

20 (Ayes.) This item also passes unanimously.
21 Thank you.

22 So let's look at Item 12. Ronovitas, LLC, and
23 this is for \$1,492,722, and this is also GRDA funding and
24 also Pablo.

25 MR. GUTIERREZ: Thank you, Commissioner. For

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1 the record, my name is Pablo Gutierrez and I am with the
2 Renewables Office. I'm here today again to seek approval
3 for an agreement with Renovitas, LLC for \$1,492,722, with
4 approval of only Phase I of the proposed activities.
5 This is a 21-month GRDA grant with approximately \$2.2
6 million in match.

7 Phase I involves administrative activities,
8 pre-drilling geology work, geophysical programs, and
9 gathering subsurface information to better determine the
10 resource potential and locations for drilling temperature
11 gradient and exploratory wells. Phase II involves the
12 drilling of three to four temperature gradient wells and
13 two slim hole exploratory wells to ascertain if there is
14 significant geothermal potential to support the
15 development of a 50 megawatt power plant.

16 The project will conclude with an analysis of
17 all geophysical and geological information to determine
18 if further development of the resource is appropriate.
19 At a future business meeting, staff will request the
20 approval of Phase II after Commission staff has concluded
21 that the Grantee has made reasonable progress in securing
22 their CEQA permit from the appropriate lead regulatory
23 agency. I seek your approval of this item and would be
24 happy to answer any questions.

25 CHAIRMAN WEISENMILLER: Thank you.

1 Commissioners, any questions or comments?

2 COMMISSIONER PETERMAN: I'll make just a couple
3 comments. I was happy to see with this contract, as with
4 others with the GRDA funding, that we are expected to see
5 results midway before fully funding or continuing with
6 the project. It will be good to check in and see what
7 they've been able to do with the first phase and, also,
8 just for those who are not aware, GRDA requires 50
9 percent match in funding for all for profit businesses
10 and this project, for example, has a 60.1 percent match,
11 and so it is good to see industry stepping in and
12 providing funding and leveraging our funds, as well.

13 CHAIRMAN WEISENMILLER: Thank you. I was going
14 to note in terms of the geothermal that, in terms of the
15 Geysers, this was actually developed in the '50s, the
16 partnership between PG&E and Unocal while Imperial Valley
17 was actually really commercialized through a number of
18 demonstrations under the first Brown Administration, it
19 was certainly a high priority there that certainly has
20 had a lot of impact since then.

21 VICE CHAIR BOYD: If my fellow Commissioners
22 have no other comments, I would just note that, again,
23 this was reviewed and recommended by the R&D Committee
24 and I would move approval of the item.

25 COMMISSIONER PETERMAN: I'll second.

1 CHAIRMAN WEISENMILLER: Okay, all those in
2 favor?

3 (Ayes.) This item passes unanimously.

4 Item 13. Simbol, Inc., and this is for
5 \$949,545 and this is also GRDA funding. Pablo.

6 MR. GUTIERREZ: Thank you, Commissioner.
7 Again, for the record my name is Pablo Gutierrez and I am
8 with the PIER Renewables Office, seeking today your
9 approval for an agreement with Simbol, Inc. for \$949,545.
10 This is a 33-month GRDA Grant with approximately \$1.4
11 million in match. This proposed project will develop a
12 pilot scale potassium extraction process and convert the
13 recovered metal into a cost competitive and marketable
14 product from Salton Sea brines. The commercial
15 extraction of potassium will provide a value added
16 product which will increase the cash flow of geothermal
17 operators and accelerate the development of California's
18 vast geothermal resources. The commercial extraction of
19 potassium will provide a value added product -- okay,
20 that's it. I seek your approval for this.

21 CHAIRMAN WEISENMILLER: Thank you.

22 Commissioners, any questions or comments?

23 COMMISSIONER DOUGLAS: I have a brief question.

24 When the Salton Sea brines are processed, where does the
25 residual salt and other materials -- are they put back in

1 the sea? Or is there some other form of using or
2 disposing of that product?

3 MR. GUTIERREZ: Well, there's two different
4 methods for treating spent geothermal brines, one method
5 is using a clarifier reactor process. In that process,
6 the spent material is put into this large tank and, at a
7 certain period, this material then is trucked into a
8 Class 1 landfill. The second process is a PH
9 modification process which there is no residual from the
10 spent brine and the entire fluid is then re-injected back
11 through the injection well.

12 COMMISSIONER DOUGLAS: Thank you. I would just
13 note that there is, of course, an ongoing effort to
14 preserve the biological values around the Salton Sea and
15 particularly the extent to which the CEC supports the
16 fish population and the avian population dependent upon
17 the sea, so you know, I would note that, as this process
18 is developed, it would be helpful to let the local Salton
19 Sea Restoration Authority know about it and ensure that
20 we have local input and local kind of understanding of
21 the technology and its potential.

22 VICE CHAIR BOYD: Well, I would agree with
23 Commissioner Douglas that the local folks should
24 understand that, where you have a liquid, it is re-
25 injected back into the well area and facilitates

1 hopefully additional hot water production and, yes, does
2 not find its way into the Salton Sea, just as a disposal
3 site.

4 My other comment would be that we have
5 considered these -- we have reviewed and approved three
6 items, we're about ready to deal with the fourth all in
7 this area of geothermal and I would look to our Executive
8 Director, Mr. Oglesby, to hope that our Information
9 Office perhaps can facilitate some communication with the
10 public about this agency's hopefully somewhat aggressive
11 pursuit of additional resource potential from these two
12 areas, as well as an economic development component of
13 dealing with geothermal. This is baseload renewable
14 power, you know, California is somewhat uniquely blessed
15 with this type power, and we are trying to see if we can
16 develop it to its utmost as we pursue our 33 percent
17 Renewable Portfolio Standard. This is -- some people of
18 late have been saturated with solar predominantly and
19 some wind, but folks ought to know that there are other
20 renewable resources, geothermal being one of them, and
21 the beauty of it is non-intermittent power, it's baseload
22 power. So, I would then go on to say that this, again,
23 was reviewed by the R&D Committee and I would recommend
24 its approval, Item 13.

25 COMMISSIONER DOUGLAS: Second.

1 CHAIRMAN WEISENMILLER: Okay, all those in
2 favor?

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

5 MR. GUTIERREZ: Thank you.

6 CHAIRMAN WEISENMILLER: Item 14. Plexos
7 Solutions, LLC. This is for \$102,700 and it is ERPA
8 funding. Ivan

9 MR. RHYNE: Good morning, Chairman and
10 Commissioners. My name is Ivan Rhyne and I am the
11 Manager of the Electricity Analysis Office within the
12 Electricity Supply Analysis Division here at the Energy
13 Commission.

14 The Electricity Analysis Office is requesting
15 approval to spend \$102,700 for two products provided by
16 Plexos Solutions, LLC. This item was recommended by the
17 Electricity and Natural Gas Committee and reported to the
18 full Commission on June 7th.

19 The first product is a three user license for
20 the Plexos Production Cost Modeling software. This
21 software is used to study the electricity system dispatch
22 under various generation, transmission, and demand policy
23 scenarios. This software was selected last year as a
24 result of a review of competing products. Among the
25 reasons for selection of this particular model was the

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1 fact that both the California Independent System Operator
2 and the Western Electricity Coordinating Council used
3 this model to perform interconnection and regional
4 planning studies. The second product being purchased is
5 a customized database of generation and transmission
6 resources in the WECC interconnection area. The database
7 is a product of a year-long collaboration between CEC
8 staff and the Plexos Corporation to capture multiple
9 potential future generation build-out scenarios under
10 various policy assumptions. Thank you for your time and
11 I'm willing to answer any questions you may have.

12 CHAIRMAN WEISENMILLER: Thank you.

13 Commissioners, any questions or comments?

14 COMMISSIONER PETERMAN: Thank you. We reviewed
15 this item in committee and see the value in continuing
16 with this model and using it to identify where our
17 electricity needs are. So, thank you. So, I will make a
18 motion to move Item 14.

19 COMMISSIONER DOUGLAS: Second.

20 CHAIRMAN WEISENMILLER: All those in favor?

21 (Ayes.) This item passes unanimously. Thank
22 you, Ivan.

23 Now segueing into the 118 part of the agenda,
24 Item 15 is with the Alameda-Contra Costa Transit District
25 and this is for \$3 million of ARFVT funding. Tobias.

1 MR. MUENCH: Good morning, Commissioners, good
2 morning, Chairman. My name is Tobias Muench, I am the
3 Hydrogen Lead for the AB 118 program in the Emerging
4 Fuels Office. The contract we're bringing before you
5 this morning for possible approval would be with AC
6 Transit to design and construct a new hydrogen transit
7 bus fueling station in Oakland. The station would have
8 360 kilograms of capacity, which is enough to fuel 12
9 buses daily for 19-hour transit bus route cycle for each
10 of those buses.

11 The 12 buses are coming from the National Fuel
12 Cell Bus Program, a \$65 million program that involves
13 five transit agencies around the Bay Area. The program
14 is headed by AC Transit. Nine of those buses already are
15 running in daily transit service around the Bay today,
16 three more buses are expected by August. The station
17 would use the Linde system which allows for fast fueling,
18 uses cutting edge ionic compression, and the fuel would
19 be delivered in liquid form to the stations and then
20 vaporized on demand for dispensing. Together with an
21 equivalent size Emeryville station that is under
22 construction right now, this would be -- the Oakland
23 station would be the single largest hydrogen bus fueling
24 station in the U.S. If approved, the Energy Commission
25 will provide \$3 million in funding, AC Transit would

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1 match with \$2,663,175 in match funding.

2 The benefits include a 43 percent greenhouse
3 gas reduction compared to 2010 ARB certified compliance
4 diesel buses, using hydrogen reform for natural gas, 33.3
5 percent of the hydrogen will be renewably sourced, such
6 as mandated under SB 1505. The station is also powered
7 by renewable energy and so are AC Transit operations and
8 an electrolyzer. All of these components are part of a
9 larger project which the station is also part of, that
10 will expend \$14.5 million of various Federal, State, and
11 local sources. We have Jamie Levin here from AC Transit
12 who will speak to this a little bit after me.

13 Further benefits include that the project would
14 avoid 700 metric tons of greenhouse gas emissions per
15 year, displace of 100,000 gallons of total petroleum fuel
16 per year, this is in diesel gallon equivalents, and it
17 would create 20 temporary jobs during construction and
18 two permanent jobs for station maintenance and operation.
19 The station construction would begin January 2012 and the
20 completion is expected by the end of 2012. If you have
21 any questions, please.

22 CHAIRMAN WEISENMILLER: I understand we have
23 also a gentleman from AC Transit, do you want to say a
24 few words, too? Jamie?

25 MR. LEVIN: Thank you very much. Jamie Levin

1 from AC Transit. I direct the Alternative Fuels Program
2 and the Hydrogen Program for AC Transit, and I'm really
3 happy to be here. Your staff and members of your
4 Commission have been very supportive of our program in
5 the past and it is really a stellar program. You will
6 not be disappointed in this grant of money.

7 Basically, the significance of this project is
8 several, first, we will be demonstrating to our industry
9 that fuel cell buses can be fueled and handled through
10 the infrastructure that we are building, much as our
11 conventional diesel or conventional transmit bus;
12 secondly, this project will enable us to move towards
13 commercialization. The cost of this station for the next
14 generation of stations will be significantly less, we're
15 looking at, as far as the industry is concerned, at less
16 than \$3 million to put in a large fueling bus operation.
17 So, this project will move those two objectives forward.
18 Tobias mentioned the fact that we've been able to
19 leverage what you have committed to receive significant
20 grants from the Federal Government. We received the
21 TIGER II grant of \$6 million to install a stationary
22 solid oxide fuel cell on-site power generator, fueled
23 with directed biogas. We were also one of the last to
24 receive an SGIP rebate before the doors closed in
25 December. And we are moving forward with this

1 procurement right now. Tobias mentioned some of the
2 benefits of that, but overall for this site -- and we
3 would not have gotten this grant without this station as
4 part of the proposal. And for our site, which is our
5 largest operating division, equivalent to the largest
6 operating divisions at any transit system in the United
7 States or worldwide, we will be reducing our energy
8 consumption by over 9,000 million Btu a year, and we will
9 be reducing our carbon emissions by taking us off the
10 Grid for this entire division by over 1,500 metric tons
11 per year. So these are all these wonderful benefits.
12 Tobias mentioned the Emeryville station which is about to
13 come on line, we received another TIGER grant of over \$6
14 million, a Federal grant, to build a 700 kilowatt solar
15 installation that is going in right now, using Solyndra
16 solar panels as that installation.

17 And then, lastly, I would just point out to
18 you, there is -- you are probably aware of a major
19 conference, the APEC Conference of Transportation and
20 Energy Ministers here in San Francisco in September, and
21 it looks very likely that AC Transit will be transporting
22 these Ministers and the delegates to a number of
23 exhibitions on our fuel cell buses, and we hope Secretary
24 Chu will be one of those delegates on the buses, and to
25 see the technology actually does work here and now.

1 And one last point to that point, we have now
2 carried over a million people on these fuel cell buses.
3 They are proving their worth every day that we operate
4 service. Thanks for your time and your support. If you
5 have any questions, I am happy to answer.

6 CHAIRMAN WEISENMILLER: I certainly appreciate
7 your presence here today and your willingness to answer
8 questions. Commissioners, any questions or comments?

9 COMMISSIONER PETERMAN: I just wanted to make a
10 comment that, especially being on the transportation
11 committee, I share your enthusiasm, Mr. Levin, for this
12 project. In the almost six years that I've lived in the
13 East Bay, I rode AC Transit almost every day, and so the
14 only regret of taking this job is I don't have the
15 opportunity to ride your fuel cell buses, but I'll go
16 back for a visit. And thank you for your work on this
17 and staff's work on this, as well.

18 MR. LEVIN: Thank you.

19 COMMISSIONER DOUGLAS: I just have a brief
20 comment, as well. I appreciate your being here and
21 appreciate your enthusiasm for this and your ability to
22 bring such a significant amount of Federal matching money
23 into this project in the overall program. I saw one of
24 your fuel cell buses out here on the I-80, and I've got
25 to admit, that brought a smile on my face just seeing it,

1 so really pleased with your work.

2 MR. LEVIN: Well, I have to share a secret with
3 you. When we do on occasion for these purposes, last
4 week we were at CARB presenting the bus, I'm able to sit
5 at the back of the bus, plug into the AC outlet at the
6 back, and set up my office, go online, and handle my
7 phone calls, and literally not miss a beat with my
8 regular work schedule. And quite honestly, when the bus
9 is running on sections of the freeway, like in Fairfield
10 where they've completely repaved, it's like running on a
11 high-speed train, it's that smooth, it's that much of a
12 change in the entire experience, so that this technology
13 is more than about improving emissions and reducing
14 energy consumption, it's changing the entire image of
15 public transit for the better. And we're excited about
16 that.

17 VICE CHAIR BOYD: Mr. Chairman, a comment or
18 two. It might not be too too brief, first, I want to
19 thank -- well, you know me -- I want to thank Jamie Levin
20 for being here; Jamie and I go back a long long ways,
21 we've been slogging through the hydrogen trenches for
22 years and we both were at the ARB hearing last week, they
23 held a hearing on fuel cells and hydrogen, and Jamie has
24 been a solid proponent, a very animated and active
25 proponent, I would like to bottle him sometimes, his

1 enthusiasm, but Jamie has been there pushing this subject
2 like nobody I've seen. I do remember being at an event
3 with a former President and Jamie where the former
4 President labeled Jamie "the bus guy," he left a
5 significant impression, and I understand recently you
6 left an enthusiastic impression upon the U.S. Secretary
7 of Transportation, Ray LaHood, so Jamie is there when you
8 need him to push the subjects. So, I am pleased that we
9 were in a position to participate in this project and we
10 look forward to demonstrating to the public in the future
11 the role that hydrogen and fuel cells will play in our
12 diversified portfolio of transportation means and fuels
13 therefore, so it's good to see Jamie here receiving this
14 money and being enthusiastic about it. Both Jamie and
15 Tobias have hit the highlights of the item, but there was
16 a vague mention to the ionic liquid compression system as
17 being the system -- this is really a new proprietary
18 technology of the vendor and it's quite promising and
19 we'll see a good demonstration of it, it's not the first
20 place, but it's one of the earliest places. Furthermore,
21 Jamie mentioned the use of biogas in the solid oxide fuel
22 cell, but a third of the fuel will be derived from
23 electrolysis of water, which, again, is another goal of a
24 lot of folks with regard to the long-term future of where
25 we get our hydrogen from, so this is a very significant

1 demonstration and the point of the actual use of all the
2 technologies involved, and so I'm pleased to see it and I
3 would like to move approval of the item, which of course
4 was reviewed in the Commission's Transportation
5 Committee.

6 MR. LEVIN: Commissioner Boyd, if I could
7 respond? One, thank you very much for your kind words,
8 but I wanted to bring up two points. I take public
9 transit all the time, I was in Washington, D.C. taking
10 public transit and happened to sit next to someone from
11 DOE, and we got into a conversation and that led to
12 another small grant of \$28,000, but it's going towards
13 metering all of the component equipment at our Emeryville
14 site, including the ionic compressor, so that we can
15 actually measure energy efficiency beyond what the
16 manufacturers promise, to see what our per kilogram
17 production of efficiencies will be, so that's a nice
18 feature and it's a benefit of riding public transit. But
19 the other point I wanted to raise --

20 VICE CHAIR BOYD: The danger of sitting next to
21 Jamie anywhere!

22 MR. LEVIN: -- but the other point is that,
23 given the scale of this project, the Federal Government's
24 participation and the like, as well as the state, today a
25 letter is going from our General Manager to the President

1 of the United States asking -- inviting him to
2 participate in the fall, September or October, to
3 inaugurate this project, with the endorsement of the
4 Secretary of Transportation and also our Senators and our
5 four Congressional Representatives. You know, it's a
6 stretch, but one never knows. You certainly don't find
7 out if you don't ask. So, we hope maybe we will all
8 celebrate with our current President, which would be far
9 more enlightening for me, I must say.

10 VICE CHAIR BOYD: Okay, good luck to you and,
11 as you indicated, if you can get the Secretary of Energy
12 sitting there with all those folks, it might have a
13 positive impact.

14 COMMISSIONER PETERMAN: Perhaps the opportunity
15 to sit next to the President on the bus will increase our
16 ridership, so continue to take that public
17 transportation. So, I will second the motion.

18 CHAIRMAN WEISENMILLER: Commissioners, we have
19 a motion and it's been seconded. All those in favor?

20 (Ayes.) This passes unanimously. Thank you,
21 Tobias.

22 MR. MUENCH: Thank you.

23 VICE CHAIR BOYD: Congratulations.

24 CHAIRMAN WEISENMILLER: Item 16, Biostar
25 Systems. This is for \$3,372,314, and this is also ARFVT

1 funding. Rhetta.

2 MS. DEMESA: Good morning, Chairman and
3 Commissioners. My name is Rhetta deMesa and I'm with the
4 Emerging Fuels and Technologies Office. I will be
5 presenting for your approval today three projects under
6 the Alternative and Renewable Fuel and Vehicle Technology
7 Program.

8 The first project, Item 16 on the agenda, is
9 titled Sonoma County Biomethane for Transportation Fuel.
10 This project was one of 14 projects selected under PON-
11 09-604 Biofuel Plants, which provided \$19 million in
12 funding to increase statewide biofuel production. The
13 Applicant, Biostar Systems, is partnering with Sonoma
14 County Water Agency and Sonoma County Transit to produce
15 240,000 cubic feet of biogas per day, using a waste
16 reception and blending facility, high temperature
17 anaerobic digestion, at a biogas conditioning compression
18 facility. This project will use a combination of animal
19 manure and food waste to produce 148,000 cubic feet of
20 pipeline quality biomethane that will be used in the
21 Sonoma County Transit fleet. It is estimated that this
22 will produce enough fuel to fuel 33 of Sonoma County's 45
23 transit buses.

24 The biomethane produced by the digestion of the
25 waste will reduce greenhouse gases by approximately

1 35,000 tons per year and create an estimated 94 jobs over
2 the life of the project, including a combination of
3 manufacturing and construction jobs. This will also be
4 the only thermophilic digester producing biogas for
5 transportation in Northern California. This project is a
6 part of the County of Sonoma's effort to implement a
7 regional climate change program which aims to produce GHG
8 emissions 25 percent below 1990 levels by 2015. The
9 Energy Commission will provide \$3,372,314 in Alternative
10 and Renewable Fuel and Vehicle Technology Program funds,
11 which will be matched equally by the Applicant.

12 This concludes my presentation, but we have
13 with us today John Naab of Biostar Systems, who would
14 like to speak on behalf of this project.

15 CHAIRMAN WEISENMILLER: Please come to the
16 podium.

17 MR. NAAB: Thank you, Commissioners, thank you,
18 Rhetta. We are very pleased to be here today. We call
19 our project "Farms to Fuel" and the farmers are the
20 biggest beneficiary, also, of this project, and they have
21 a need to correct their waste management practices and
22 were able to do that, at the same time provide a fuel and
23 CNG gases for transportation, and they will also be able
24 to use it in their trucks to get the eggs from farm to
25 market. And with all of that, I'd like to say thank you.

1 Any questions?

2 CHAIRMAN WEISENMILLER: Well, we'd like to
3 thank you for coming today and being available to answer
4 our questions. Commissioners, any questions or comments
5 for this gentleman?

6 VICE CHAIR BOYD: No questions. I'd just like
7 to commend these folks for their activity and I like the
8 "Farms to Fuel" concept. I find myself of late spending
9 an awful lot of time with our new Secretary of
10 Agriculture here in California on this very subject area.
11 You are going to become a poster child for us -

12 MR. NAAB: I hope so.

13 VICE CHAIR BOYD: -- as we continue to push
14 this subject, so this pleases me immensely to see this
15 item before this Commission. I see Commissioner Douglas
16 is smiling as she is the second longest serving veteran
17 to see my passion about bioenergy, biofuels, biopower,
18 etc. So, I'll reserve a motion until we hear from other
19 Commissioners if they have questions or comments.

20 COMMISSIONER DOUGLAS: Just briefly, I second
21 Commissioner Boyd's enthusiasm for this project and for
22 the potential of this technology to help us produce
23 energy, to help us produce potentially baseload, and a
24 very very valuable energy for our system. I don't think
25 I can match Commissioner Boyd's enthusiasm, but not for

1 lack of trying, or lack of having enthusiasm, but his
2 leadership in this area has been almost unsurpassed in my
3 view, so in any case, I'm in strong support of this.

4 MR. NAAB: I appreciate that.

5 COMMISSIONER PETERMAN: I'll just echo those
6 sentiments. I'm particularly pleased to hear about the
7 use of the fuel on-site and providing that opportunity
8 and that product to the farmers that are initially
9 providing that feedstock, so thank you, that's a good
10 idea.

11 MR. NAAB: Thank you.

12 VICE CHAIR BOYD: So if there are no other
13 questions, do you have any other witnesses, Mr. Chair? I
14 will make a motion to approve this item which was, of
15 course, reviewed and recommended by the Transportation
16 and Fuels Committee. And I would further note that this
17 is a two-step process not only with making biomethane,
18 but it's ending up in the transportation sector which
19 makes for an incredible demonstration, so I will move
20 approval.

21 COMMISSIONER PETERMAN: I will second.

22 CHAIRMAN WEISENMILLER: All those in favor?

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

24 MR. NAAB: Thank you.

25 CHAIRMAN WEISENMILLER: Item 17, which is CR&R,

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1 Inc., and this is for \$4,520,501, and this is also ARFVT
2 funding, and also Rhetta, please.

3 MS. DEMESA: Thank you. The CR&R project was
4 one of five projects selected under PON-09-003,
5 Biomethane Production for Transportation, which provided
6 \$26 million in funding to produce renewable and natural
7 gas for transportation use.

8 CR&R is a large waste recycling firm that will
9 construct, own, and operate a 50,000 ton per year
10 facility to be located at the Paris Material Recovery and
11 Transfer Station in Riverside County. The proposed
12 facility will receive mixed municipal solid waste that
13 will have already been sorted for recyclables from Orange
14 County, and will process the waste, the anaerobic
15 digestion, to produce biogas.

16 Purac technology will be used to clean the
17 biogas, which will then be injected into the natural gas
18 pipeline, or converted on-site to a transportation fuel.
19 Originally, the project would have produced electricity,
20 earning a Federal tax credit, however, California Energy
21 Commission funds were being pursued to change that end
22 use to biomethane for transportation use. Byproducts
23 will include the recovery of recyclables and digestate
24 product and CR&R estimates that the project will produce
25 120 Btus annually, displacing 865,000 diesel gallon

1 equivalents, which is enough to fuel roughly 60-80 heavy-
2 duty trash trucks. The project will also reduce 58,000
3 tons of carbon dioxide between 2013 and 2020, and will
4 create 100 construction jobs and eight permanent jobs.

5 The Energy Commission will provide \$4,520,501
6 in Alternative and Renewable Fuel and Vehicle Technology
7 Program funds, and the project team will provide
8 \$18,166,460 in match funds. Again, we have a
9 representative from CR&R who would like to speak on
10 behalf of this project.

11 CHAIRMAN WEISENMILLER: Please come forward.

12 MR. RELIS: Commissioners, my name is Paul
13 Relis. I'm with CR&R, I'm Vice President of the company.
14 We've been on the march for anaerobic digestion from
15 municipal waste source for a good number of years now and
16 we're delighted to have been considered by you for this
17 grant. It's a crucial piece of making our first project
18 -- what we hope will be just a first project of many
19 viable -- in tapping the municipal waste stream, of which
20 we ourselves control about 5,000 tons a day of waste, so
21 just putting it in perspective, the first project is
22 50,000 tons of material over a year.

23 So, I would just like to add that CR&R has had
24 a long history in the transportation sector of
25 alternative fuels. We currently operate about 150

1 alternative fuel vehicles, so the fueling side and the
2 transportation side are very well understood by the
3 company, the financing is lined up, it's non-subsidized
4 financing through our banking consortium. We think that
5 the co-location of a facility like this next to an
6 existing material recovery transfer station is a very
7 solid linkage, reducing transportation costs and
8 maximizing the environmental benefits. That's basically
9 all I'd like to do by way of a summary. If you have any
10 questions, happy to take them.

11 CHAIRMAN WEISENMILLER: Again, thank you for
12 your participation and willingness to answer questions.
13 Commissioners, do you have questions or comments? We
14 also have another speaker, too.

15 VICE CHAIR BOYD: I would just comment that
16 I've known Mr. Relis for a long time and he's been
17 another one, even more so than I, who has been out in
18 front of the parade in this area. And for the record, I
19 should note that he is a former Integrated Waste
20 Management Board member and so has been at this subject
21 for quite some time. I would just note a couple of
22 positive nuances, this is pre- -- this is not landfill
23 gas, this is using material pre-landfilling, which is
24 among the many objectives we have in using, of course,
25 landfill gas, but getting to the materials before they

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1 end up in the landfill, so it's post-recycling, etc.,
2 pre-landfilling, and it is utilizing anaerobic digestion
3 that has been mentioned more than once, which is a
4 technology that all stakeholders in this arena, and we've
5 discovered many of late, are in total support of as a
6 technology to be applied, so while we've heard some
7 interesting discussions of late about landfill municipal
8 solid waste and use for energy, this is one that
9 everybody agrees they want to see, so we as an agency, I
10 think, are quite pleased to be able to participate in
11 this and moving this subject forward. So, Paul, thank
12 you for being here, appreciate it. I have no questions.

13 COMMISSIONER PETERMAN: I'll just also offer a
14 comment. The history of this project highlights the
15 connection and synergies between our renewable
16 transportation fuels and our renewables for electricity,
17 and I think that the work you're doing here, as well as
18 with the other biogas projects that we're discussing
19 today, will have positive spillovers in the electricity
20 sector in terms of identifying how to better produce
21 pipeline biomethane. And so I am also very supportive of
22 this project.

23 COMMISSIONER DOUGLAS: And I'm also in support.
24 I have a brief question. We always like to see these
25 projects come before us and we always like to think about

1 the next step, and how does this technology get to scale.

2 MR. RELIS: Yeah --

3 COMMISSIONER DOUGLAS: And what is the
4 potential? And what does it take to get to scale? And I
5 was hoping you could share some perspective on that.

6 MR. RELIS: I'll be glad to offer my
7 perspective. Scale is a function of the relationship
8 currently between the cost of landfill and the cost of
9 the technology, so in Southern California, at least, it's
10 going to be varied in the way where the economic line-up
11 is best. Our focus has been to deal with the Southern
12 California relatively low priced landfill, so the key is
13 to bring technology costs down and to maximize the value
14 of the fuel because the fuel component is very
15 significant. We see a way to increase the fuel numbers
16 from what were quoted here today, and that will be a very
17 important parameter in scale-up. We also feel, once we
18 have the pipeline intertie, which is one of the complex
19 aspects of the project, worked out and there is more
20 familiarity with this, the pipeline will be in, which is
21 the costly piece of the project, and the clean-up system.
22 We're going to get some synergies there as we scale
23 ahead. First, though, is to make it work and that's what
24 this project is all about, and prove it, and I think the
25 scaling up will take care of itself. It also ties back

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1 to the whole public policy factor regarding landfills and
2 organics in landfills, and we know that the CalRecycle
3 has a 50 percent goal of reducing the amount of organics
4 going into landfill. If that process continues, it will
5 be a driver in the development of this market, this kind
6 of project.

7 COMMISSIONER DOUGLAS: Great. Well, thank you,
8 and good luck with the project.

9 MR. RELIS: Thank you very much.

10 COMMISSIONER PETERMAN: I just want to offer
11 one other final comment following on your comments, that
12 this project, like the others, utilizes resources within
13 the state and I think what's great about this is not only
14 is it renewable, what we're dealing with, waste
15 challenges we have here, and so it's good to see that and
16 also using so many different sources, as well.

17 MR. RELIS: I appreciate that point because, as
18 a former Board member of the ex -- or the old Waste
19 Management Board, market development was always a
20 critical factor in dealing with recyclables; well, by
21 converting a portion of the organic fraction of the
22 municipal waste to pipeline fuel, that's a local market,
23 domestic, California, Southern California, we don't have
24 to worry about what is going on overseas, say, that China
25 buys our paper, we hope they will continue doing that,

1 but I think this is a real solid domestic homegrown type
2 of market.

3 CHAIRMAN WEISENMILLER: Okay, thank you. I
4 believe also we have a representative of CalRecycle here
5 to speak.

6 MR. WILLIAMS: Good morning, Commissioners. I
7 appreciate the opportunity to be here. My name is Clark
8 Williams, I'm here on behalf of CalRecycle. CalRecycle
9 has adopted a series of strategic directives, one of
10 which is to reduce the amount of organic waste we dispose
11 of in landfills by 50 percent. To help achieve this
12 strategic directive, CalRecycle has adopted a anaerobic
13 digestion initiative which is a comprehensive program to
14 foster the development of anaerobic digestion facilities.
15 This initiative formalizes CalRecycle's policy and
16 establishes a series of discrete actions we will take to
17 implement the policy. It is a policy of CalRecycle to
18 encourage the development of anaerobic digestion
19 facilities as an alternative to landfill disposal of
20 organic waste. Specifically, we will encourage the
21 establishment of in-vessel digesters located at existing
22 or new solid waste facilities in areas zoned for
23 industrial or solid waste handling activities.

24 The project before you is consistent with
25 CalRecycle policy and our anaerobic digestion initiative.

1 I would add that, last week, CalRecycle certified an
2 anaerobic digestion final program Environmental Impact
3 Report and associative document to inform future policy
4 considerations related to anaerobic digestion facilities
5 and to provide background information on technologies,
6 potential impacts, mitigation measures, to aid in
7 permitting these type of facilities.

8 I would also like to acknowledge your staff for
9 their ongoing work on AB 118 and that CalRecycle looks
10 forward to continuing to collaborate with you on these
11 efforts. Thank you.

12 CHAIRMAN WEISENMILLER: Thank you. Thank you
13 for coming. Commissioner, any questions or comments?

14 VICE CHAIR BOYD: A comment. I'd like to
15 commend CalRecycle for the work they've done, the sister
16 agency they are, the work they've done in this subject
17 area, and also congratulate and thank them for the
18 comment that was just made about the programmatic EIR
19 that they've been working on for some time, that is a
20 component, has been for a long time, of the Bioenergy
21 Interagency Working Groups, Bioenergy Action Plan that
22 this Commission reviewed and approved some time ago, and
23 this is another positive step forward in this area
24 getting a programmatic EIR just like we did with the
25 Waste Board, the original Waste Board, in a different

1 subject with regard to dairy digesters. So, thanks for
2 finishing that project, I think it will help everything
3 fall in line better in the future for these type
4 projects.

5 CHAIRMAN WEISENMILLER: Any other questions or
6 comments for this gentleman or for staff? Thank you.

7 MR. WILLIAMS: Thank you.

8 VICE CHAIR BOYD: Well, if my fellow
9 Commissioners have no further comments or questions, I
10 would like to move approval of this item, an item that,
11 as we discussed, moves the ball down the field boldly, I
12 think, and successfully for us. So, I will move
13 approval.

14 COMMISSIONER PETERMAN: I will second.

15 CHAIRMAN WEISENMILLER: All those in favor?

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

18 VICE CHAIR BOYD: Thanks to everybody.

19 CHAIRMAN WEISENMILLER: The next item is 18
20 which is Pixley Biogas, LLC. And this is for a grant of
21 \$4,672,798. This is also ARFVT funding. Rhetta.

22 MS. DEMESA: Thank you. This project was also
23 selected under PON-09003 which was the biomethane
24 production for transportation solicitation. It provided
25 \$26 million in funding to produce renewable natural gas

1 for transportation.

2 The Applicant, Pixley Biogas, will build an
3 anaerobic digestion facility that will be located
4 adjacent to the existing Calgren Renewable Fuels
5 Biorefinery in Pixley, California. The biogas facility
6 will process over 36 million gallons of manure from three
7 nearby dairies and supply the resultant biogas to the
8 Calgren facility. Calgren, which is a 55 million gallon
9 pure ethanol production facility, will use the biogas in
10 their boiler. The biogas facility is expected to produce
11 266 million Btus of biogas daily, access to a local
12 supply of biogas, combined with improved operational
13 efficiencies, will reduce Calgren's natural gas
14 consumption by 402 million Btus per day, the equivalent
15 of 13 percent of their natural gas use. The carbon
16 dioxide reductions of reduced natural gas consumption,
17 combined with the avoided manure emissions are estimated
18 to be removing over 31,000 metric tons of emissions per
19 year, the rough equivalent of removing 6,300 vehicles
20 from the road. As a result of this effort, the carbon
21 intensity of the ethanol produced will drop from about 52
22 grams of carbon dioxide per megajoule to 49 grams of
23 carbon dioxide per megajoule, which represents about a 6
24 percent decrease. Pixley Biogas also estimates that 23
25 construction jobs and two permanent jobs will result from

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1 this project.

2 The Energy Commission is providing \$4,672,798
3 in Alternative and Renewable Fuel and Vehicle Technology
4 Program funds, and that will be matched with \$4,910,925
5 from the Applicant. And we have with us today Darryl
6 Maas, who would like to speak on behalf of this project.

7 CHAIRMAN WEISENMILLER: Please come forward.

8 MR. MAAS: Good morning, Mr. Commissioners,
9 members of the Commission. Thank you for hearing me. My
10 name is Darryl Maas, I am the Project Manager for Pixley
11 Biogas and I also operate and own two digester facilities
12 in Washington and I have others in construction in the
13 State of Oregon. The particular project for Pixley
14 Biogas is to be constructed next to Calgren Renewable
15 Fuels, which for most of 2010 was California's only
16 operational ethanol facility with all the rest of the
17 ethanol being imported from out of state to be able to
18 supply the mandates. Currently, there are more in
19 operation now, but Calgren still supplies approximately
20 five percent of the State's ethanol needs.

21 Calgren is a very efficient facility as the
22 numbers just stated because it runs on a combined heat
23 and power natural gas turbine to provide its electricity
24 and its steam. What Calgren wants to do with this
25 particular project is to supplement that natural gas and

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1 being producing some of its own energy from biogas from
2 cows, after all, it's located in Tulare County, the
3 largest dairy county not only in California, but in the
4 country. The goal was to reduce in the immediate future
5 their carbon intensity by about six percent in the
6 ethanol and their overall fossil fuel consumption by 13
7 percent. There is a lot of potential for expanding and
8 doing greater production of biogas in the future. These
9 reductions would be in addition to and separate from
10 their obligations to reduce carbon intensity under the
11 California Ethanol Producer Incentive Program.

12 Currently, the project is in the CEQA review
13 process. The Tulare Planning Commission is lead agency.
14 The project has been recommended for approval by staff
15 with no significant impacts to the environment; however,
16 at previous hearings, there was some responses from the
17 neighbors with concerns about odor and other things, so
18 Calgren has voluntarily removed the project from the
19 agenda until we can meet with our neighbors, that is
20 happening yesterday, today, last week, and will continue
21 to occur. The project will not go to construction until
22 we've resolved those concerns and the County has voted
23 for complete CEQA and Conditional Use Permit. That's all
24 the comments I have on the project, but I would be happy
25 to take any other concerns or questions about the thing.

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1 I would also like to thank the Commission for the ability
2 to build this facility. We think that there is
3 tremendous potential for anaerobic digestion, especially
4 in the Central Valley where water quality and air quality
5 concerns will be very much helped by digesters, and we
6 think it would be great to get one of these put in Tulare
7 County, and many more. So we appreciate your support.

8 CHAIRMAN WEISENMILLER: Great, thank you.
9 Thanks for being here. Commissioners, any questions or
10 comments?

11 COMMISSIONER DOUGLAS: No.

12 VICE CHAIR BOYD: Is this our last witness, Mr.
13 Chair? Then I would just say that this proposal packages
14 a lot of positive attributes to get just the whole
15 anaerobic digestion approach, the production of biogas,
16 the integration of CHP, this entire package is quite
17 forward looking and, therefore, we as an agency have been
18 very pleased to see the proponents willing to step out
19 and move out in this particular direction and to utilize
20 waste resources to produce other resources for
21 California. So I would commend the proponents of the
22 project and the applicant here. And I, for one, am
23 fairly familiar with the concerns of local citizens that
24 hit our local newspaper even here quite recently, and I
25 appreciate the efforts that you've detailed to us here

1 today that you're making to address local folks' concern.
2 It's kind of agriculture bordering upon agriculture and
3 would hope that, in the family, you can work things out.
4 Again, as I said earlier, from my many meetings with
5 Secretary Karen Ross of California Department of Food and
6 Agriculture, I know there is very keen interest on the
7 part of those folks in doing things like you are
8 proposing to do here with this project, so I for one am
9 quite pleased to see this and, of course, it was reviewed
10 by and recommended by the Fuels and Transportation
11 Division. So, if there are -- well, I'll make a motion
12 to approve the item and others can have comments, or what
13 have you, if they so choose. Thank you.

14 COMMISSIONER DOUGLAS: I'll second the item.

15 CHAIRMAN WEISENMILLER: The item has been moved
16 and seconded. Commissioners, all in favor, say "aye."

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

19 VICE CHAIR BOYD: Thank you and good luck.

20 CHAIRMAN WEISENMILLER: Item 19. USA Waste of
21 California, Inc. And this is for \$489,040. And this is
22 also ARFVT funding. Jonah, thanks.

23 MR. MARGOLIS: Thank you, Commissioners. Good
24 morning. I would like to present for your possible
25 approval an expansion of an LNG station owned by USA

1 Waste of California. The upgrade will double the
2 capacity of the LNG storage and add the capability to
3 store and dispense CNG. This station is also being
4 designed with the intention of utilizing bio LNG from
5 waste management landfills such as the one at the
6 Altamont Landfill in Livermore.

7 The station that this will be upgrading is
8 located in the City of Corona in the County of Riverside
9 and is strategically located one mile southeast of the
10 intersection of Interstate 15 and California State Route
11 91. The region has ongoing air quality issues due to the
12 high level of ground level ozone and diesel particulates.

13 Waste Management currently fuels 71 heavy-duty
14 vehicles at the station and expects to increase the fleet
15 size by 50 percent by 2014. The project will increase
16 the throughput of the station by an estimated 300,000
17 diesel gallon equivalents annually. The cost of this
18 station will exceed \$1.5 million, they are requesting
19 \$489,040 from the CEC and expect the project to be
20 completed with construction within 13 months of
21 execution. We have a representative, Chuck White, here
22 from Waste Management to speak on their behalf.

23 CHAIRMAN WEISENMILLER: Please come forward.

24 MR. WHITE: Thank you, Mr. Chair, members of
25 the Commission. Chuck White with Waste Management. USA

1 Waste of California is a wholly owned subsidiary of Waste
2 Management and we really appreciate the opportunity to be
3 considered for this grant. This grant will certainly
4 allow us to really expand our natural gas fueling
5 capabilities, particularly in Corona where this facility
6 is going to be located. It's going to be a new and
7 improved facility that will allow us to do also CNG
8 fueling and, as Jonah mentioned, renewable natural gas
9 that we'll be producing not only at our existing Altamont
10 facility, but hopefully at a future one that you will be
11 considering in a moment or two at our Simi Valley
12 Landfill in Southern California.

13 So, I just appreciate the opportunity to be
14 here. As I've testified previously before this
15 Commission, one of the biggest barriers to expanding
16 natural gas to get away from the reliance on imported
17 petroleum is the cost of the natural gas fueling
18 infrastructure, and these sorts of grants to help defray
19 the cost of the fueling infrastructure in making the
20 transition from diesel to natural gas is a huge help, and
21 will greatly facilitate this transition away from
22 petroleum to natural gas as a transportation fuel. So, I
23 thank you for your support, hopefully you will approve
24 the project and we can move forward. Thank you. And, of
25 course, I'm here to answer any questions you may have.

1 CHAIRMAN WEISENMILLER: Thank you for being
2 here. Commissioners, any questions or comments?

3 VICE CHAIR BOYD: A quick comment. Thank you,
4 Mr. White, for being here. He is another of the veteran
5 ranks in this arena, Chuck has been in this room many
6 many times down through the years I've been here, and we
7 knew each other from before, so appreciate seeing this
8 type of activity move forward.

9 I do have one strange question to ask you. Is
10 Corona considered in Western Riverside County?

11 MR. WHITE: That's a good question. I believe
12 it is, yes.

13 VICE CHAIR BOYD: Oh, then I think I, for one,
14 any maybe others, would like to be available for any
15 dedication you may have.

16 MR. WHITE: Consider yourself invited.

17 VICE CHAIR BOYD: Thank you.

18 MR. WHITE: We'll make that point. Also --

19 VICE CHAIR BOYD: Someone from our staff will
20 understand and appreciate the dialogue that we just
21 engaged in, but thank you.

22 MR. WHITE: I also wanted to express
23 appreciation for the great staff work that's been done to
24 help bring this project along to where it is, Jim
25 McKinney and Jonah have done a great -- been great

1 advocates of bringing this thing forward and we certainly
2 appreciate their help and support, thank you very much.

3 VICE CHAIR BOYD: Well, thank you on behalf of
4 the staff, I'm sure they appreciate hearing that and we
5 appreciate hearing that about our staff, so thank you.

6 CHAIRMAN WEISENMILLER: Yes, thank you.

7 VICE CHAIR BOYD: If there are no other
8 questions or comments, I will move approval of this item.

9 COMMISSIONER PETERMAN: I'll second.

10 CHAIRMAN WEISENMILLER: We have a motion and
11 it's been seconded. All those in favor?

12 (Ayes.) This also passes unanimously. Thank
13 you, Jonah.

14 MR. MARGOLIS: Thank you.

15 CHAIRMAN WEISENMILLER: Item 20 is High
16 Mountain Fuels, LLC, and this is for \$11,020,419, and
17 this is also ARFVT funding, and Joanne.

18 MS. VINTON: Good morning, Commissioners. My
19 name is Joanne Vinton. I am in the Emerging Fuels and
20 Technologies Office. High Mountain Fuels submitted their
21 proposal in response to PON-09003 Biomethane Production
22 for Transportation, part of the AB 118 Program. High
23 Mountain Fuels is a joint venture between Waste
24 Management, Inc. and the Linde Group. If this project is
25 approved, the company plans to produce liquefied natural

1 gas from landfill gas at the Simi Valley Landfill in
2 Ventura County. They plan to demonstrate an improved gas
3 separation technology by evaluating new combinations of
4 materials. Their goal is better power efficiency and
5 higher methane recovery than at their Altamont Landfill
6 facility in Livermore.

7 The project will product nearly six million
8 gallons of liquefied natural gas per year, displace 3.4
9 million gallons of diesel fuel per year, reduce
10 greenhouse gas emissions by more than 36,000 metric tons
11 per year, and create or save up to 300 jobs in
12 construction, engineering, management, and
13 transportation. The company will use the liquefied
14 natural gas to fuel their waste hauling trucks.

15 The company is requesting \$11,020,419 out of a
16 total \$26 million funding for this solicitation. Their
17 match is the same as their request. And Chuck White is
18 here to talk about this project, too.

19 CHAIRMAN WEISENMILLER: Please come forward,
20 Mr. White.

21 MR. WHITE: Thank you again. Chuck White with
22 Waste Management. I'm here again just to briefly speak
23 in support of this. We do hope you will fund this
24 project, it is going to be, as Joanne mentioned, a
25 greatly improved version of the existing facility that we

1 have at Altamont that is currently producing among the
2 lowest carbon fuels currently available in California.
3 This will be a greatly improved version, an expanded
4 version providing low carbon renewable natural gas to the
5 Southern California market directly. This kind of
6 project simply would not be possible without this kind of
7 assistance because of the relatively low price of fossil
8 natural gas, and we really need to have this support.
9 Hopefully down the road, once the programs like the RFS2
10 and the Low Carbon Fuel Standard are up and running, and
11 are predictable, are workable, and are fungible, then
12 maybe these grants will be less necessary. But for right
13 now, these projects are simply not possible without this
14 kind of assistance and we greatly appreciate your support
15 and hopefully your positive determination on this. And,
16 as the previous item, again, I have to just give
17 incredible support and thanks to the staff that has
18 worked here diligently to support this, Joanne, and Jim
19 McKinney, as well. I've even talked to Jim McKinney at
20 the Whole Earth Festival in Davis about this project when
21 we run into each other, so it's really been great working
22 with everybody and we look forward to moving this forward
23 and other projects down the road that we think will
24 greatly provide the ability to use renewable fuels from
25 the waste stream in a greatly expanded fashion. Thank

1 you.

2 CHAIRMAN WEISENMILLER: Thank you.

3 Commissioners, any questions or comments?

4 VICE CHAIR BOYD: Hearing none, I'll move
5 approval of the item.

6 COMMISSIONER PETERMAN: I'll second.

7 CHAIRMAN WEISENMILLER: All those in favor?

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

10 MS. VINTON: Thank you.

11 CHAIRMAN WEISENMILLER: Item 21 is South Coast
12 Air Quality Management District. And this is for \$2.6
13 million, also of ARFVT funding. Pilar?

14 MS. MAGANA: Yes. Good morning, Chairman and
15 Commissioners. My name is Pilar Magana and I am also
16 with the Emerging Fuels and Technologies Office. And
17 this morning I am presenting to you possible approval for
18 a grant with the South Coast Air Quality Management
19 District. This is one of seven projects selected under
20 PON-09006, the Alternative and Renewable Fuel
21 Infrastructure Solicitation, which is providing \$5.6
22 million in funding for natural gas fueling
23 infrastructure.

24 The South Coast Air Quality Management District
25 will be partnering with several entities to install and

1 upgrade 11 compressed natural gas and liquefied natural
2 gas fueling stations throughout Southern California.
3 Three of the stations will be liquefied natural gas
4 stations and the remaining eight will be compressed
5 natural gas stations. Seven of the 11 stations will be
6 new stations with the remaining four being station
7 upgrades to existing stations in order to support growing
8 natural gas fleets.

9 Several fleets have already committed to using
10 these stations, including shuttle service companies, taxi
11 companies, public transit agencies, school districts,
12 waste hauling companies, city fleets, and utility fleets.
13 Additionally, several of the stations will be located
14 along key goods movement corridors that currently lack a
15 sufficient amount of natural gas infrastructure to
16 support the increasing number of natural gas goods
17 movement vehicles in Southern California.

18 The estimated throughput for these 11 stations
19 is expected to exceed 1.5 million gasoline gallon
20 equivalents in the first few years, and it is anticipated
21 that over 100 green jobs will be created or sustained
22 through this project. If approved, the Energy Commission
23 will provide \$2.6 million in alternative and renewable
24 fuels and vehicle technology program funds with project
25 partners providing approximately \$7.3 million in match

1 funding.

2 I believe we have on the phone Larry Watkins to
3 speak on behalf of the South Coast Air Quality Management
4 District.

5 CHAIRMAN WEISENMILLER: As I understand, we do.
6 Mr. Watkins, do you want to speak?

7 MR. WATKINS: I am a Program Supervisor with
8 the South Coast AQMD and my primary responsibilities have
9 to do with developing alternative fuel infrastructure. I
10 am very happy to speak on behalf of the district to the
11 Commission and only wish that we could have been present
12 to thank you in person for your consideration. We
13 believe your funding of our proposed projects represent
14 an appropriate and cost-effective use of public funds as
15 it promotes and expands the use of alternative fuels to
16 reduce the emissions of toxic air pollutants generated by
17 heavy-duty diesel vehicles. And in recognition of the
18 relatively high cost associated with the construction of
19 CNG and LNG and LCNG fueling stations, your funding is
20 absolutely necessary to promote and facilitate these
21 stations' development. In addition, the use of LNG and
22 CNG natural gas, which is domestically abundant, lessens
23 our dependence on imported fossil fuel supply.

24 In addition to the significant reductions of
25 the greenhouse gases and many harmful air contaminants,

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1 the use of these alternative fuels as a transportation
2 fuel also results in a lower fuel cost as compared to the
3 diesel counterpart. Basically, it turns out that the
4 final infrastructure link is along the Interstate Clean
5 Transportation Corridor and it helps our goods movement
6 and supply throughout the area. Moreover, all the
7 stations that you will be funding will be made accessible
8 for public access to other heavy-duty fleet operators, as
9 well as many other stations for the private vehicles,
10 increasing the energy and air quality benefits resulting
11 from the project.

12 I do want to say, it's been a pleasure working
13 with Pilar and Mr. McKinney and everybody on staff there,
14 whether or not you choose to fund these projects. Thank
15 you.

16 CHAIRMAN WEISENMILLER: Thank you for calling
17 in. Just for the Court Reporter's purposes, do you need
18 him to repeat his name? Fine, great. Commissioners, any
19 questions or comments for this gentleman?

20 VICE CHAIR BOYD: Well, I just want to thank
21 the South Coast for participating with us. It's indeed a
22 pleasure to partner with the South Coast District and to
23 continue to reinforce the developing stronger partnership
24 between this agency and the South Coast District in the
25 transportation and transportation fuels area. It reminds

1 me of long ago when there was an incredible relationship
2 and bond between our two agencies and the ARB in
3 fostering alternative fuels programs in the state, and
4 it's good to see us still at that. The gentleman
5 mentioned the Interstate Transportation Corridor, which
6 reminds me this is something that has been pursued for
7 years now as it has developed, it is a natural gas heavy-
8 duty vehicle corridor between Los Angeles, Las Vegas,
9 Salt Lake City, Sacramento, and down, and infrastructure
10 has been provided over time to make it more appealing to
11 long-haul heavy-duty truck folks. And providing the
12 infrastructure here really facilitates the potential long
13 term value of renewable natural gas because, while some
14 people differentiate between biogas, biomethane, and
15 natural gas, it's all methane, and it all helps support
16 an alternative to the petroleum that we've been working
17 to achieve and is, for now, a very clean bridge to some
18 future. So, thanks again to the South Coast. And thank
19 you for the positive comments about working with our
20 staff. We and they need all the strokes we can get these
21 days, right? Thank you, Mr. Chair.

22 CHAIRMAN WEISENMILLER: Well, does anyone else
23 have questions or comments?

24 VICE CHAIR BOYD: I will move approval of the
25 item, Mr. Chairman, thank you.

1 COMMISSIONER PETERMAN: I'll second.

2 CHAIRMAN WEISENMILLER: All those in favor?

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

5 VICE CHAIR BOYD: Mr. Chairman, if I might make
6 a comment here, and we'll close out this item. With the
7 action we've just taken, approval of seven Alternative
8 Renewable Fuel and Vehicle Technology Program grants and
9 agreements, that totaled almost \$30 million today, \$29.6
10 million to be exact, this is a major milestone for the
11 program and I just want to point that out, it means we
12 have encumbered all \$175 million from the first two years
13 of this funding source, plus \$14 million from the 2010-
14 2011 funding package, so we have made some progress, good
15 progress, and I think we're going to need to use some of
16 the statistics from today and perhaps some of the good
17 comments that we've received from others in the
18 Sacramento arena because we still consistently hear an
19 occasional comment about, you know, what's wrong with
20 this program, why is it so slow, etc. etc., and I think
21 we need to point out that it has moved along spritely.
22 So we're up to \$189.4 million in contracts, so I think
23 that's pretty significant. Our goal is not just to spend
24 money, however, it is to generate good projects that meet
25 all the goals and objectives of the state, and I think

1 you've heard the synergisms that have resulted, that I
2 think have done just that. So, hopefully our Information
3 Office might take note of today's milestone and provide
4 appropriate educational material to the public. Thank
5 you.

6 COMMISSIONER DOUGLAS: Well, I might have saved
7 this comment for later, but since Commissioner Boyd
8 opened the door, I'd also like to thank staff and the
9 Transportation Committee. As a former member of the
10 Transportation Committee, I have some insight into the
11 mountain they had to climb to get to this point, and so
12 I'd like to thank both staff and the committee.

13 CHAIRMAN WEISENMILLER: Our next item is 23,
14 which is Clean Energy Partnership Academy. It's an Order
15 Instituting Rulemaking. Craig.

16 MR. HOELLWARTH: Mr. Chairman, Commissioners,
17 I'm Craig Hoellwarth from the High Performance Buildings
18 and Standards Development Office. According to Senate
19 Bill 1X1, staff is requesting approval to initiate an
20 informal proceeding to develop and adopt guidelines for
21 the Superintendent of Public Instruction.

22 The purpose is to ensure that school programs
23 receiving Clean Energy Partnership Academy grants reflect
24 State energy policies and priorities, and provide skills
25 and education linked to the current needs of clean energy

1 industries. The CEC is developing guidelines in
2 partnership with the Superintendent of Public Education
3 [sic] and the Department of Education -- I'm sorry --
4 monitor program performance, we must provide technical
5 support, identify and fill gaps in the program, prepare
6 an Annual Report to the Legislature, and participate in
7 an annual conference for the academies. SB 1X1 requires
8 the Commission to develop the guidelines no later than 60
9 days after the effective date of the bill and before SBI
10 issues a request for grant applications.

11 Staff plans to hold a public scoping workshop
12 to review initial staff guidelines in July, receive input
13 from key stakeholders to refine the guidelines, hold a
14 Commission Energy Efficiency Committee Workshop to
15 receive public comments, publish the guidelines, and then
16 have the guidelines adopted at a CEC Business Meeting in
17 late September or early October.

18 Upon Commission adoption, staff will work with
19 Superintendent of Public Instruction to prepare the
20 request for applications to be funded, select Academy
21 programs, and provide technical assistance to support
22 program development, and guideline updates. The Clean
23 Energy Partnership Academy presents a unique opportunity
24 for the State to create an unprecedented partnership
25 between the Commission and the Department of Education.

1 This partnership will develop a technical education
2 program that provides career options for California
3 youth, while supporting the State's environmental and
4 clean energy mandates, and the development of a clean
5 energy economy. Any questions from the Commission?

6 CHAIRMAN WEISENMILLER: Thank you. I would
7 like to start out with a comment that, obviously, this is
8 a very important program that we need to implement in a
9 very thoughtful way, but certainly to give it a very high
10 priority and remind everyone that obviously when the
11 Governor talked about energy last year in his campaign,
12 he talked about it as a jobs program, and certainly I can
13 say, talking with the Legislature, particularly the Pro
14 Temps Office, that this bill is very important to them
15 and represents a real opportunity to deal with the
16 mismatch. I think as I was up for confirmation, the
17 *Washington Post* that day ran a story about Fresno, which
18 has very high unemployment rates, but it also has lots of
19 jobs that are going without applicants, or without
20 skilled applicants, and the difficult is that a lot of
21 the unemployed are -- I want to say -- it was probably
22 from the construction industry and a lot of the jobs that
23 were there were for things like hospital, require much
24 different training or different skills than the folks
25 had. So, I think it's very important to provide that

1 skill set. I know when I was in 29 Palms, they were
2 saying that one of the issues they're facing is, now on
3 the military bases they're building lots of LED buildings
4 and also lots of renewables, and they're finding it
5 challenging to find skilled workers who actually know how
6 to operate and maintain those facilities. And certainly,
7 that type of training, again, it's not our Smart Grid
8 electrical engineers, but certainly skill sets that we're
9 hoping a lot of the disadvantaged youths can take
10 advantage of. So, again, this is part of the staff
11 moving forward on this in a timely fashion and, again,
12 it's a very high priority to do this well.

13 COMMISSIONER DOUGLAS: I'd just like to make a
14 brief comment to add on to what Chairman Weisenmiller has
15 said. I've been a strong supporter of workforce training
16 in the energy area, and it is essential that we ensure
17 that Californians are qualified and able to step into
18 these sectors and to get jobs in these sectors. The
19 career partnership academies will target kids who are in
20 school and really help set them on to a pathway in which
21 they'll be prepared and enabled to enter this field, so
22 I'm a strong supporter of moving forward with this. I'll
23 also note that it's probably a good thing that we have
24 experience doing important rulemakings in short time
25 periods because that's exactly the challenge before staff

1 and the committee in implementing this law.

2 CHAIRMAN WEISENMILLER: Great, thank you.

3 COMMISSIONER DOUGLAS: Seeing no other
4 comments, I'll move Item 23.

5 COMMISSIONER PETERMAN: I'll second.

6 CHAIRMAN WEISENMILLER: All those in favor?

7 (Ayes.) This passes unanimously. Thanks,
8 Craig.

9 MR. HOELLWARTH: Thank you.

10 CHAIRMAN WEISENMILLER: The next item is the
11 Minutes for June 20th.

12 VICE CHAIR BOYD: Move approval.

13 COMMISSIONER DOUGLAS: Second.

14 CHAIRMAN WEISENMILLER: All those in favor?

15 (Ayes.)

16 Next item is 25, Commission Committee
17 Presentations and Discussions.

18 VICE CHAIR BOYD: I would note, I've already
19 made reference to it, however, last week I represented
20 the Commission at an ARB hearing on the subject of fuel
21 cells and hydrogen both in mobile and stationary
22 applications. It was scheduled as a two-hour information
23 item at the front end of their regularly scheduled
24 meeting, it ran in excess of three hours, I finally had
25 to abandon them to come back here, of very interesting

1 testimony and lots of questions, and lots of information
2 provided on the status of this whole subject area and, of
3 course, this agency down through the years has done quite
4 a bit of work in the research arena in both research on
5 development and demonstration of stationary applications
6 of fuel cells, and that got quite a bit of interest on
7 the part of folks, even though the Board tends to focus
8 on mobile sources and they had a whole display in their
9 front yard of all the mobile source applications of
10 hydrogen fuel cells. A lot of information was imported
11 by not only this agency, but by other folks about what is
12 going on in the stationary area, and it's fairly
13 significant and it's moving along perhaps more sprightly
14 than some of us thought, and some of that success is
15 attributable to the R&D work that was done in this agency
16 quite some time ago. So, I was pleased that we were
17 invited to participate in this effort and pleased that we
18 could report on the activities that we have underway and
19 our contribution and, of course, our AB 118 program is a
20 big contributor as you heard today to the mobile
21 applications of hydrogen and fuel cells. Anyway, I
22 thought it was a good experience for the folks there and
23 for this agency. That's all I have.

24 COMMISSIONER DOUGLAS: I have a brief report.
25 Last week, the Desert Renewable Energy Conservation Plan

1 (DRECP) team provided a presentation to the L.A. County
2 Planning Commission on our work in the Desert Renewable
3 Energy Conservation Plan. I attended that presentation
4 and some follow-up meetings with one Planning
5 Commissioner and with Planning Commission staff, and so I
6 was really pleased with their interest and their
7 receptivity towards working with us on DRECP and on
8 renewable energy planning, so I will look forward to
9 following up with them and obviously this is just one in
10 a series of meetings that I've participated in, and that
11 we'll continue having with local governments in the DRECP
12 area.

13 CHAIRMAN WEISENMILLER: Actually, I represented
14 the Commission on a number of things over the last three
15 days, so I will give people a very brief report on that.
16 On Friday, I was one of the speakers at the Silicon
17 Valley Energy Summit. Jim Sweeney, most of us in the
18 PIER Program know that Jim has been a very strong advisor
19 and supporter of PIER, and we had an unusual format of
20 Mary Nichols and I did a joint presentation, we had a
21 consolidated stack of slides, marched through those, and
22 on each slide either we would both take turns talking
23 about it, or it might be a slide of hers, or a slide of
24 mine, so in terms of really emphasizing the coordination
25 in close workmanship of our agencies. I think we got the

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1 message across very clearly how closely we're working,
2 and people seemed happy and impressed that we were that
3 coordinated.

4 On Sunday night, I went down to San Diego. I
5 spent all day Monday with Rear Admiral Bill French,
6 started out in the morning and went through the Navy
7 facilities and looked at their energy efficiency and
8 renewable facilities. In terms of basic take home
9 message, the Military in terms of their construction
10 activities, maybe and Marine, in Southern California are
11 about \$3.5 billion a year, so in terms of really
12 sustaining the economy in Southern California, they have
13 sort of a remarkable role and that comes from the unique
14 capabilities they have for training bases there, so,
15 again, it's sort of really vital to the California
16 economy to continue to deepen those relationships. And
17 particularly, as I said, their very very strong
18 commitments under Assistant Secretary Pfannenstiel's
19 direction, actually, under her boss' direction to really
20 move the needle on renewables, energy efficiency, and
21 alternate fuels, it's very impressive. I mean, they have
22 very good monitoring systems and you could see that
23 they're really tracking down every way they can find to
24 reduce waste there, so, again, trying to continue doing
25 partnerships. We talked about putting in place an MOU

1 with them, where they would become a test bed for some of
2 our renewable and energy efficiency technologies coming
3 out of PIER. We went from that meeting, Rear Admiral
4 French and I, over to San Diego and had a really jam
5 packed day of seeing the various things they're doing
6 there in terms of with their Microgrid and, again,
7 advanced technologies, some of which were funded by PIER
8 activities, grants that have been very impressive. We
9 talked about maybe trying to do a Microgrid demonstration
10 down at the Navy Base there. And then we went off to
11 dinner with the Clean Tech Coalition in San Diego which
12 is, again, a key part of our supporters here, had a very
13 lively and informative dinner with them, talking about
14 opportunities for clean technology in California's
15 economy. The next day, I started out with a breakfast
16 meeting with Jessie Knight and the rest of Management at
17 Sempra, obviously, a very very impressive team. I've
18 known Mr. Knight now since when he was a PUC
19 Commissioner, so we have a longstanding relationship. We
20 had a very friendly discussion, covered a lot of topics,
21 obviously there were points where we agree, some points
22 where we disagree, and in some respects it was one of
23 those friendly but frank conversations. And I went from
24 there to the Center for Sustainable Energy, we had a
25 Press Conference with the Mayor of San Diego and got to

1 meet with that team. The Press Conference focused on the
2 Mayor's launching an energy independence activity down in
3 San Diego, and so it was myself, the head of the Center,
4 and SDG&E, and one of the things really emphasized was
5 Energy Upgrade California as part of that conversation.
6 And it was good to talk to the Center folks who were,
7 again, wore their boots on the ground for a lot of the
8 implementation of energy retrofit and renewables and to
9 talk about their experiences.

10 Also, you will be happy to hear, I did get to
11 walk by the Nissan Leaf collection at SDG&E, I guess they
12 have 10. And, as we were being shuttled around the
13 campus at U.C. San Diego, they had a couple of their
14 Nissan Leafs that I and Rear Admiral French took a ride
15 in, so, anyway, it was a pretty jam packed couple of
16 days, but I think quite successful. I mean, obviously,
17 San Diego is doing a lot of very innovative things, to
18 some extent the community is closed off from the rest of
19 the state, and so I think it's important to reach out to
20 them. But they seemed to be very happy with my
21 attendance at those events over the two days.

22 So with that, Chief Counsel's Report.

23 MR. LEVY: Yes, good afternoon, Commissioners.
24 I'd like to request a closed session on three items,
25 that's 26(a), 26(f) and also to discuss an adjudicatory

1 proceeding that has been initiated against the
2 Commission, that would be Communities for a Better
3 Environment, and Robert Sarvey vs. CPUC and California
4 Energy Commission.

5 CHAIRMAN WEISENMILLER: Executive Director?

6 MR. OGLESBY: Thank you, Mr. Chairman and
7 Commissioners. Very very briefly, I just wanted to
8 report on an activity that occurred yesterday. I'm happy
9 to be the Chair's Designated to serve on the Fish &
10 Wildlife Strategic Vision Executive Committee. The
11 Committee was created by Assemblyman Jared Huffman's AB
12 2376 and is charged with doing an assessment of the Fish
13 and Game Commission, the Department of Fish and Game, to
14 improve its governance and financing. We took action to
15 get organized, appoint a Blue Ribbon Committee, and
16 recruit members to serve on stakeholders and application
17 process for the public to serve on stakeholder advisory
18 group and basically had a kick-off meeting.

19 The statute requires the Report on
20 Recommendations to improve the programs by about this
21 time next year. The plan is to complete it early so it
22 can be of use to the Legislature and the Governor's
23 Office within the budget process and planning for next
24 year.

25 CHAIRMAN WEISENMILLER: Thank you. Item 28.

1 Public Advisor's Report.

2 MS. JENNINGS: I have nothing to report, thank
3 you.

4 CHAIRMAN WEISENMILLER: Any public comment?

5 Okay, this meeting is adjourned. We will go into
6 Executive Session, 15 minutes, my office.

7 (Whereupon, at 12:09 p.m., the business meeting was
8 adjourned.)

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REPORTER'S CERTIFICATE

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

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

IN WITNESS WHEREOF,

I have hereunto set my hand this 18th day of July, 2011.



PETER PETTY
CER**D-493
Notary Public