

BUSINESS MEETING
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:)
Business Meeting)
_____)

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CALIFORNIA ENERGY COMMISSION
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1516 NINTH STREET
SACRAMENTO, CALIFORNIA

WEDNESDAY, AUGUST 1, 2007

10:06 A.M.

ORIGINAL

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COMMISSIONERS PRESENT

James D. Boyd, Vice Chairperson

Arthur Rosenfeld

John L. Geesman

Jeffrey D. Byron

STAFF and CONTRACTORS PRESENT

Melissa Jones, Chief Deputy Director

William Chamberlain, Chief Counsel

Michael Smith, Legislative Director

Harriet Kallymeyn, Secretariat

Christopher Meyer

Donna Stone

Lance Shaw

Mary Dyas

Kerry Willis

Bill Pfanner

Arlene Ichien

Felicia Miller

Jared Babula

Joseph Wang

Virginia Lew

Rita Gass

Payam Narvand

Jane Heinz

Marla Mueller

STAFF PRESENT

Rajesh Kapoor

Kristy Chew

Joe O'Hagan

Susan Aaronhalt

Chris Scruton

Jason Orta

Sylvia Bender

PUBLIC ADVISER

Nicholas Bartsch

ALSO PRESENT

Scott Galati, Attorney
Galati and Blek, LLP

Tony Chapman (via teleconference)

Randall Hickok
Dynergy, Inc.

Timothy J. Miller, Attorney
California American Water

Carolyn Nielson

Madeleine Clark
Elkhorn Slough Coalition

John Buchanan
Chevron

Michael J. Carroll, Attorney
Latham and Watkins, LLP

Les Guliasi
Pacific Gas and Electric Company

I N D E X

	Page
Proceedings	1
Items	1
1 Consent Calendar	1
2 Gateway Generating Station Project	2
3 La Paloma Generating Station	8
4 Dynegy Moss Landing Power Plant Project	12
5 Russell City Energy Center	55
6 Chevron Richmond Power Plant Replacement Project	57
7 CPV Sentinel Energy Project Data Adequacy Recommendation and Possible Committee Appointment	63
8 Orange Grove Power Plant Project - Small Power Plant Exemption	67
9 Eastern Municipal Water District	69
10 City of Alhambra	72
11 Creatus, Inc.	76
12 Enterprise Networking Solutions, Inc.	77
13 DGS Contracted Fiscal Services	78
14 University of California, Riverside	81
15 Ekster & Associates	88
16 Lawrence Berkeley National Laboratory	91
17 Lawrence Berkeley National Laboratory	94
18 Lawrence Livermore National Laboratory	97
19 California State Controller's Office	100
20 John Maulbetsch	101

I N D E X

	Page
Items - continued	
21 Gas Technology Institute	104
22 Renewables Portfolio Standard 2005 Procurement Verification	106
23 Minutes	113
24 Commission Committee Presentations/ Discussion	113
25 Chief Counsel's Report	115
26 Executive Director's Report	116
27 Legislative Director's Report	117
28 Public Adviser's Report	118
29 Public Comment	118
Adjournment	118
Certificate of Reporter	119

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

2 10:06 a.m.

3 VICE CHAIRPERSON BOYD: I'd like to call
4 this meeting, the August 2nd (sic) meeting of the
5 Energy Commission to order. Chairwoman
6 Pfannenstiel is wisely on vacation. August 1st.
7 See, I'm trying to advance a day already.

8 Anyway, good morning, and please join me
9 in the Pledge to the flag.

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

12 VICE CHAIRPERSON BOYD: Well, with that
13 good start, thinking it's tomorrow already, let's
14 see if I can get us through the rest of the agenda
15 today.

16 Item number 1, consent calendar. Do I
17 have a motion?

18 COMMISSIONER BYRON: I'll move the item.

19 COMMISSIONER GEESMAN: Second.

20 VICE CHAIRPERSON BOYD: It's been moved
21 and seconded.

22 All in favor?

23 (Ayes.)

24 VICE CHAIRPERSON BOYD: Opposed? None.

25 The item passes.

1 And we'll call the second as
2 Commissioner Geesman; I think he slightly beat
3 Commissioner Rosenfeld, but I'm not sure.
4 Prerogative of the Chair.

5 Item number 2, Gateway Generating
6 Station Project, 00-AFC-1C. Possible approval of
7 Pacific Gas and Electric's petition to amend the
8 existing certificate to change from once-through
9 cooling to dry cooling, eliminating the use of San
10 Joaquin River water at the cooling water source;
11 and to complete associated project design changes.
12 Mr. Meyer.

13 MR. MEYER: Good morning, Commissioners.
14 As you gave a very good synopsis of it, there's
15 not a lot left for me to say.

16 Based on predominately Commissioner
17 Geesman's recommendations, when PG&E was added as
18 an owner, PG&E looked into additional -- or
19 alternate cooling technologies from the use of
20 river water. And came in December with the
21 petition to change to air cooled condenser.

22 Staff has reviewed the petition and
23 agreed that it was a good and beneficial change to
24 the environment. And staff has recommended
25 approval of the petition.

1 VICE CHAIRPERSON BOYD: Okay. This, for
2 some people's benefit, used to be known as Contra
3 Costa 8, just so the record is clear.

4 Any comments or questions from the dais?

5 COMMISSIONER GEESMAN: I guess I would
6 say that in my judgment PG&E's been a good
7 environmental steward here. I certainly
8 congratulate you for that. We took this up at the
9 Siting Committee and we recommend approval.

10 So, I would move approval of the staff
11 recommendation.

12 VICE CHAIRPERSON BOYD: Is there a
13 second?

14 COMMISSIONER BYRON: I'll second it.

15 VICE CHAIRPERSON BOYD: And I would note
16 I have no indication that anybody wants to
17 testify, except there is someone. All right.

18 So, might I hold your motion in abeyance
19 and -- so we have a Mr. Chapman on the phone who
20 wants to speak on this item. Mr. Chapman, are you
21 there? Give the Board Secretary a chance to get
22 back to her station and see if -- that usually
23 helps.

24 Mr. Chapman, are you there?

25 MR. CHAPMAN: Yes, I am here.

1 VICE CHAIRPERSON BOYD: Okay.

2 MR. CHAPMAN: Can you hear me?

3 VICE CHAIRPERSON BOYD: Yes, we hear you
4 loud and clear.

5 MR. CHAPMAN: Thank you.

6 VICE CHAIRPERSON BOYD: Would you like
7 to give us your presentation?

8 MR. CHAPMAN: Yes.

9 VICE CHAIRPERSON BOYD: We are on item
10 number 2.

11 MR. CHAPMAN: Okay, I'm -- comments and
12 questions regarding this. And the one that
13 continues to hang open is the change in the noise
14 level. And I spoke to Mr. Meyer last night
15 regarding this, and he was going to follow up on
16 that. And I would just like to hear where that's
17 at with regard to changing from a 3 db increase in
18 sound to a 5 being allowable.

19 MR. MEYER: Oh, yes. I checked with
20 technical staff on that and looked over the
21 record. And originally staff did the assessment,
22 was that usually an increase of up to 5 is not
23 significant. They looked at the local areas.

24 There are residences, or nonconforming
25 residences in the area. And in the original

1 decision the noise from increase allowable went
2 from 5 db down to 3.

3 Staff looked at that during this
4 petition process and determined that the increase
5 to 5 with the noisier air cooled condenser over
6 the once-through cooling was acceptable and a
7 nonsignificant impact.

8 VICE CHAIRPERSON BOYD: Mr. Chapman, do
9 you have a comment on that? I know I, for one,
10 and I trust other Commissioners have read the
11 change of correspondence between yourself and the
12 staff.

13 MR. CHAPMAN: Okay, thank you. There --
14 well, when the change was made from 5 to 3, you
15 know, it was due to a lot work in hand, evidence
16 presented that we're in a max'd out condition now.
17 And that condition still exists.

18 So, you know, the Commission recognized
19 that in the siting process. And I would just ask
20 them to continue to recognize that, that we're
21 capped out now on noise. And increasing that is
22 just going to be extreme. And I just want to say
23 that for the record, and hope that the Commission
24 continues to recognize our situation.

25 VICE CHAIRPERSON BOYD: Thank you, Mr.

1 Chapman. Any other comments? Mr. Chapman, I'm
2 sure you heard earlier, but we do have a motion
3 and a second pending here on this item. So we
4 held it in abeyance until you could testify.

5 Any other comments from the dais?

6 MR. CHAPMAN: Okay. I, you know, I
7 support the changes on hold. I just, you know,
8 details.

9 VICE CHAIRPERSON BOYD: Okay, thank you
10 for your testimony.

11 MR. CHAPMAN: Thank you.

12 VICE CHAIRPERSON BOYD: Well, we have a
13 motion.

14 All in favor?

15 (Ayes.)

16 VICE CHAIRPERSON BOYD: Opposed? None.

17 Motion carries; the staff recommendation is
18 approved with regard to the Gateway Generation
19 Station.

20 COMMISSIONER BYRON: Mr. Chairman.

21 VICE CHAIRPERSON BOYD: Yes, sir.

22 COMMISSIONER BYRON: I note the
23 applicant is at the table. Would you like to say
24 something?

25 MR. GALATI: At this point we'd just

1 like to say thank you.

2 (Laughter.)

3 VICE CHAIRPERSON BOYD: Wisely done. I,
4 too, noted the applicant there, but in any event.
5 All right, thank you, gentlemen; thank you for
6 this item.

7 I want to go back on my own personal
8 agenda here. For some reason I'm starting off
9 roughly today. I called it August 2nd, and I
10 missed another item here.

11 As we note at the staff table, our
12 Executive Director, Mr. Blevins, is not here
13 today. He's off. And sitting in for him as
14 Acting Executive Director is our brand new Chief
15 Deputy Director, Melissa Jones. And I wanted to
16 take note of that and congratulate Melissa, and
17 welcome here to the executive office. And give my
18 condolences to Commissioner Geesman who lost his
19 principal Advisor --

20 (Laughter.)

21 VICE CHAIRPERSON BOYD: -- to that
22 position. But, in any event, Melissa, pardon me
23 for not doing this first, and welcome aboard.

24 CHIEF DEPUTY DIRECTOR JONES: Thank you
25 very much. I'm pleased to be here.

1 VICE CHAIRPERSON BOYD: We look forward
2 to working with you, as we have in the past. Very
3 good.

4 All right. Next agenda item, item
5 number 3, La Paloma Generating Station. Possible
6 approval of petition to amend the existing
7 certificate to allow use of injection wells as the
8 primary method of water disposal; and use of the
9 zero liquid discharge system as a backup disposal
10 option. Mr. Meyer.

11 MR. MEYER: Yes, --

12 VICE CHAIRPERSON BOYD: I'll try not to
13 give your entire presentation again, so --

14 (Laughter.)

15 MR. MEYER: Well, you did it so well
16 last time, I was actually thinking I was going to
17 get off easy on this one, as well.

18 Back in 2001 the project owner
19 approached the Commission when they were having
20 issues with the operation and maintenance of the
21 ZLD system, and requested a backup injection well
22 system.

23 At that point it was approved by staff
24 based on the original decision giving the
25 applicant the option of either technology. So

1 staff analyzed both the use of injection wells for
2 ZLD on the project to further understand ZLD.

3 The project owner opted to use that
4 system; constructed it; operated it. And when
5 they had problems they asked and were approved by
6 the Commission to have a backup injection well.

7 That one was drilled down into an
8 aquifer that had higher quality water. EPA did
9 not permit them to inject water into that aquifer,
10 but told them to go deeper, get a confining layer
11 between the injection water and that higher
12 quality water source.

13 They returned to us and asked for
14 approval to expand their injection well system
15 over the life of the project, and use that as
16 their primary; and then the ZLD as a backup.

17 The Commission has looked at that and
18 agrees that it is not going to be an increased
19 environmental impact on the project, and
20 recommends approval of the petition.

21 The project owner is -- excuse me -- the
22 operator is available to answer any questions on
23 the ZLD system if the Commissioners have any.

24 VICE CHAIRPERSON BOYD: Thank you. Any
25 questions from -- I have a question about ZLD in

1 general. I'm just wondering if the failure here
2 to achieve a good system bodes poorly for the
3 future; or has technology advanced to the point
4 that we won't see difficulties like this perhaps
5 in the future, i.e., technology perhaps has
6 improved?

7 MR. MEYER: This was one of the earlier
8 ones. And some of the subsequent projects -- my
9 other projects in the City of Burbank that is
10 operating with a ZLD is functioning.

11 The only difference from our original
12 understanding is the level of maintenance and
13 effort. They have actually crews working 24 hours
14 a day, multiple crews, just to keep the system
15 running, which they did not anticipate originally.

16 But on that smaller power plant in
17 Burbank they were able to operate it. But, as you
18 say, it's a smaller plant, less effluent to deal
19 with, and, you know, just with being a smaller
20 plant with less effluent, they're able to do it.
21 And it's also a more modern version of the ZLD
22 system.

23 So, to answer your question, with a new
24 ZLD or expanded ZLD, they may be able to get La
25 Paloma to work, but they would have to be offline

1 for awhile while they expanded that system.

2 VICE CHAIRPERSON BOYD: Okay. Well, I'm
3 sure the Siting Committee will keep an eye on
4 this. As a former member of the Siting Committee,
5 I was, you know, was glad to see ZLD come along.
6 But apparently it hasn't quite come along as good
7 as we'd hoped. Good luck to all.

8 I have no indication of any witnesses on
9 this item, but is there anyone here who wants to
10 testify on this item? Anyone on the phone, Madam
11 Secretary?

12 Comments or questions?

13 COMMISSIONER GEESMAN: Mr. Chairman, we
14 had an extensive discussion of this at the Siting
15 Committee. And recommend approval.

16 But I would emphasize this is a plant-
17 specific subject, plant-specific discussion.
18 We're not prepared, at least based on the
19 discussion that we did have at the Siting
20 Committee, to make any general conclusions as to
21 the implications for ZLD technology going forward,
22 or the approach that the Commission Staff and the
23 Commission has taken in its decisions over the
24 last several years regarding ZLD.

25 We would recommend approval of the

1 petition to amend in this circumstance. We think
2 that the factual background at this particular
3 plant justifies the amendment.

4 So I would move approval of the
5 amendment.

6 COMMISSIONER BYRON: And I concur. The
7 applicant's made a best effort here; and I think
8 this is a good solution for this particular plant.
9 So I second the motion.

10 VICE CHAIRPERSON BOYD: Okay, there's
11 been a motion and a second.

12 All in favor?

13 (Ayes.)

14 VICE CHAIRPERSON BOYD: Opposed? No
15 opposed. It carries four to nothing. Thank you,
16 gentlemen.

17 MR. MEYER: Thank you, Commissioners.

18 VICE CHAIRPERSON BOYD: Item number 4,
19 Dynege Moss Landing Power Plant, 99-AFC-4C.
20 Possible approval of a petition to amend the
21 existing certificate to permit the addition of a
22 temporary pilot desalination plant to the project
23 site. Ms. Stone.

24 MS. STONE: Good morning, Commissioners,
25 Staff and the public. First some background.

1 This plant was sited by this Commission in October
2 of 2000 and has been operational since 2002.

3 This proposed request, for
4 clarification, is not to permit the desal plant,
5 but just to allow it to connect into the plumbing
6 at the Moss Landing facility.

7 The desal plant has already been
8 permitted by Monterey County and the Coastal
9 Commission.

10 For this project no additional water
11 will be drawn from Moss Landing Harbor, therefore
12 no additional impact in the impingement and
13 entrainment impacts.

14 The new unit will receive its seawater
15 from piping currently used to supply seawater to
16 the Moss Landing Power Plant seawater desalination
17 facility. Using a reverse osmosis technology, the
18 pilot project will test approximately .14 million
19 gallons per day of the 1.2 million gallons a day
20 of circulating water normally discharged from the
21 condensers of Units 1 and 2. It's about 11
22 percent of that water.

23 No potable water will be distributed as
24 a result of this pilot desalination plant. The
25 pilot plant will recombine the desalted water and

1 the brine and discharge that back into the
2 discharge lines of Units 1 and 2, which lead to
3 the discharge tunnels to Monterey Bay.

4 The connection of the pilot desalination
5 plant to the existing piping and the operations of
6 the pilot desalination plant will not affect the
7 operations of the Moss Landing Power Plant.

8 Chemical components and salinity of the
9 power plant's discharge water will not measurably
10 change due to the pilot project.

11 The staff analysis has revealed that on
12 July 14 of 2006 Monterey County Planning
13 Department filed a CEQA notice of exemption for
14 the California American Water Pilot Plant with the
15 Monterey County Clerk and with the Governor's
16 Office of Planning and Research.

17 The pilot plant was deemed eligible for
18 a CEQA categorical exemption under section 15306
19 of the State CEQA guidelines.

20 On August 29, 2006 the Monterey County
21 Board of Supervisors approved a coastal
22 development permit and design approval for the
23 pilot plant.

24 On September 18 of 2006 the California
25 Regional Water Quality Control Board, Central

1 Coast Region, issued a monitoring and reporting
2 program for discharges with low threat to water
3 quality under the general permit for this pilot
4 desalination plant.

5 The Regional Board determined that the
6 discharger will be adding small quantities, a
7 total less than 129 pounds per day of inorganic
8 chemicals, which are approved for use in potable
9 drinking water, to the discharge. The
10 concentrations in this discharge would not degrade
11 receiving waters if they were to be discharged
12 directly.

13 However, those concentrations will
14 further be reduced by the large flow of once-
15 through cooling water at a rate of a approximately
16 5350 parts of cooling water to one part of the
17 pilot plant's discharge. This renders
18 insignificant any potential adverse effects of
19 chemical additives on ocean water quality.

20 Additionally, any waste produced during
21 filter backwash and cleaning will be collected in
22 storage tanks and disposed of offsite.

23 On December 19th the California Coastal
24 Commission granted a coastal development permit.
25 And on January 25th of 2007 the Coastal Commission

1 issued a staff report of findings. In May of 2007
2 the Coastal Commission had a hearing to address
3 the issues.

4 In report dated June 15, 2007, the
5 Coastal Commission issued an addendum to the
6 revised findings. This addendum upheld the
7 December 19 decision to grant a coastal
8 development permit to this pilot desalination
9 project.

10 One of the things that the Coastal
11 Commission found in their last report was that the
12 plant will be designed and operated so that the
13 potential impacts of its discharge will be
14 insignificant and will not require additional
15 mitigation.

16 Because of its design and operational
17 limits and the resulting minimal impacts the
18 proposed CAW pilot plant is also the least
19 environmentally damaging alternative, and
20 therefore complies with the Moss Landing Community
21 Plan.

22 As proposed, this pilot plant will avoid
23 all significant adverse environmental impacts. In
24 addition to this, the California Public Utilities
25 Commission is currently evaluating, through its

1 CEQA review, alternative locations and water
2 sources for a full-scale desalination facility.

3 Additionally to that various water
4 districts and water interests in the County have
5 convened to evaluate alternatives to siting the
6 proposed full-scale facility at the power plant.
7 It is therefore not necessarily likely that the
8 pilot facility will lead to a full-scale facility
9 at this site.

10 Further, any proposal for a full-scale
11 facility within the coastal zone would require
12 separate review to insure the development would be
13 compatible with the Coastal Act and the local
14 coastal plan provisions that are intended to
15 protect the habitat.

16 This pilot facility is not expected to
17 cause more than minimal impacts. And because it
18 does not necessarily lead to cumulative impacts
19 that would be caused by construction and operation
20 of a full-scale facility, it conforms to the
21 Coastal Act and to the local coastal plans north
22 coast land use plan.

23 Due to the above reports and findings,
24 and or our analysis, and because there will not be
25 any increase in water drawn from the harbor or

1 discharged to Monterey Bay, staff concludes there
2 will be no significant impacts as a result of this
3 pilot desalination facility.

4 However, our staff has recommended that
5 a cultural resources condition of certification --
6 be amended to require full-time monitoring during
7 any ground disturbance of native soil. And to
8 require a report that discusses soil types and
9 monitoring.

10 We expect that this project will be in
11 field soil, but this is being put in just to
12 protect cultural resources in the event that they
13 should dig into native soils.

14 The public process on this amendment,
15 Cal Am filed -- or not Cal Am, I'm sorry, Dynegy
16 Moss Landing filed and docketed on April 24 their
17 petition. A notice of receipt and staff analysis
18 was mailed to the post-certification mailing list
19 and affected public agencies on June 22nd. And it
20 was posted to the Energy Commission's website and
21 docketed on June 25th.

22 Two members of the public opposed this
23 proposed amendment. And they are in the audience
24 today, and I believe would like to speak. the
25 issues they bring up appear to be more germane to

1 the original certification of the Moss Landing
2 Power Project, and to Water Board jurisdiction
3 over the NPDES permit renewal.

4 We also have in the audience today
5 representatives from CalAm, the company that will
6 be building the pilot project. And Mr. Randall
7 Hickok is here representing Dynegy Moss Landing.

8 Our findings here is that the petition
9 meets all the criteria of section 1769 concerning
10 post-certification project modifications. That
11 the modification will not change the findings in
12 the Energy Commission's final decision pursuant to
13 section 1755. The project will remain in
14 compliance with all -- now the project, I mean the
15 Moss Landing Power Plant project, will remain in
16 compliance with all applicable laws, ordinances,
17 regulations and standards subject to provisions of
18 Public Resources Code section 25525.

19 The change will be beneficial to
20 California American Water and the public because
21 it will provide needed information on the
22 feasibility of using the reverse osmosis
23 technology for a desalination plant on the coast.
24 The changes based on information that was not
25 available to parties prior to the Commission's

1 certification.

2 Staff is recommending that the Energy
3 Commission approve the project modification and
4 the associated revision to condition of
5 certification CUL-9.

6 Are there any questions that you have of
7 me?

8 VICE CHAIRPERSON BOYD: Thank you, Ms.
9 Stone. I intend to call on the petitioner and
10 host agency Dynegy, and then the American --
11 California American Water, and then the members of
12 the public, but first, are there any questions
13 from the Commissioners or the staff?

14 If not, then call on Dynegy. And I have
15 here the name of Randy Hickok.

16 MR. HICKOK: My name is Randy Hickok. I
17 am Managing Director of Asset Management for
18 Dynegy's West Coast Assets.

19 Don't have a lot to offer that the CEC
20 Staff hasn't already offered. We're trying to
21 accommodate a desalination project that we believe
22 has a lot of community support. We have no
23 financial gain in this transaction, we're trying
24 to merely be accommodating, so we're receiving no
25 payment, we're receiving no services-in-kind. And

1 trying to make happen something that we think the
2 local community is interested in seeing happen.

3 So I'm happy to answer questions if you
4 have any of me.

5 VICE CHAIRPERSON BOYD: Thank you. Any
6 questions of Dynegy?

7 COMMISSIONER BYRON: No.

8 VICE CHAIRPERSON BOYD: Any other
9 comments from Dynegy? If not, we will hear from
10 Mr. Tim Miller of California American Water.

11 MR. MILLER: Good morning, Members of
12 the Commission. I'm Tim Miller, corporate counsel
13 for California American Water.

14 Our primary reason for showing up today
15 was just to be available to respond to any
16 concerns of the Commission, and to respond to some
17 information that we believe is incorrectly
18 reflected in the record, in Madeleine Clark's
19 written comments that were submitted to Commission
20 Staff.

21 So, we'd like to make sure that you have
22 a clear understanding of what we're proposing to
23 do at Moss Landing Power Plant: This is a
24 temporary pilot project facility. It is permitted
25 to operate by the Coastal Commission for 12

1 months. And all we are doing is we are testing
2 our reverse osmosis system to verify that it can
3 produce potable water from a potential saline
4 source on the Monterey Peninsula.

5 One of the reasons that the Moss Landing
6 Power Plant presents a good location for our pilot
7 facility is because it's our opinion that the
8 water quality there presents a worst case scenario
9 in terms of our ability to product potable water.

10 The data that we gain from our research
11 there will be valid regardless of where a
12 permanent desalination facility is located in
13 Monterey Peninsula. It's our opinion that no
14 other location presents that same set of
15 circumstances.

16 The protest that has been filed
17 regarding this project we believe contains some
18 inaccurate information. Again, the main aspect of
19 this plant is it's temporary; it's going to be
20 there for a year. And I think staff really did a
21 good job on covering the issues of the
22 environmental impact, so I won't belabor that
23 particular point.

24 The critical fact that we think that's
25 been misrepresented, that hasn't been covered by

1 staff at this point, is the status of a future
2 location of a permanent desalination facility in
3 Monterey. We have an application on file that
4 would put a permanent facility at Moss Landing
5 Power Plant.

6 The California Public Utilities
7 Commission is currently preparing an EIR on our
8 application to have a desalination facility
9 combined with an aquifer storage and recovery
10 system in Monterey Peninsula.

11 As part of that EIR they're evaluating
12 an alternative that would have the desalination
13 facility located in Marina, California. The
14 Public Utilities Commission has not ordered
15 anybody to put a permanent desalination facility
16 in Marina. They are merely evaluating that as
17 part of the CEQA process.

18 So to the extent that the protest
19 suggests that siting a pilot plant in Moss Landing
20 Power Plant is somehow infeasible, the research
21 would be moot or something along those lines, it's
22 just not accurate. Our opinion is it's the best
23 location to test water quality; and that is our
24 main focus, is making sure we have good data so
25 that we can go to the Department of Health

1 Services and the PUC and say, yes, we can produce
2 potable water from the Monterey Peninsula.

3 And our need to do that is because the
4 State Water Resources Control Board has ordered
5 California American Water to find an alternative
6 source of potable water for the Monterey
7 Peninsula; and to reduce our draw of water from
8 the Carmel River.

9 With that I'll conclude. Thank you.

10 VICE CHAIRPERSON BOYD: Thank you. Any
11 questions? No questions. Thank you very much.

12 All right, Carolyn Nielson.

13 MS. NIELSON: Good morning. Thank you
14 very much for this opportunity to speak to you. I
15 come today because I believe there are some very
16 serious problems occurring in the Monterey Bay
17 because of the thermal plume of the Moss Landing
18 Power Plant.

19 I know that these are more appropriately
20 addressed to the Water Board, and I have done
21 that. I cannot count how many times I've been to
22 Santa Barbara, San Luis Obispo, Monterey,
23 Watsonville, virtually every single meeting of the
24 Water Board that pertained to the Moss Landing
25 Power Plant since hearings were first begun in

1 2000.

2 And so I'm here before you today because
3 you have ultimate jurisdiction over the Moss
4 Landing Power Plant for the life of that project.

5 As you may remember in 2000 when the
6 application for certification was being
7 considered, the State of California was
8 experiencing an energy crisis. Communities in
9 California were dealing with rolling blackouts and
10 steeply rising energy prices. And because of the
11 situation there was a lot of pressure to build
12 energy production facilities as quickly as
13 possible. In fact, I remember, at that time, that
14 a 30-day approval period was even considered.

15 Because of this urgency several
16 resources assessment studies pertaining to the
17 Moss Landing Power Plant expansion were omitted or
18 abbreviated with the expectation that supporting
19 studies and monitoring would take place after the
20 plant was operational.

21 The plant expansion was certified in
22 October of 2000 and began commercial operations in
23 July of 2002. In 2003 a record number of sea
24 otter deaths were recorded in the Monterey Bay
25 Region. Subsequently, it was reported by Steve

1 Shimek, Executive Director of the Otter Project,
2 that a microbe called toxoplasma gondii was to
3 blame. And that this microbe was in the nearshore
4 waters of the Monterey Bay because the people in
5 north Monterey County region were flushing their
6 kitty litter down their toilets and it was
7 migrating from septic leach lines into the Elkhorn
8 Slough and Monterey Bay. Toxoplasma gondii is
9 commonly found in the intestines of cats.

10 Assemblyman John Laird was even
11 persuaded to introduce a bill requiring that the
12 distributors of kitty litter add a label warning
13 people not to flush their litter, but rather to
14 put it in the trash in order to protect the marine
15 environment.

16 At the same time as all of this concern
17 over kitty litter was taking place, the Director
18 of the Sanctuary Integrated Monitoring Network
19 contracted with Dr. Karunthachalan Kannan in New
20 York -- he's in the Public Health Department in
21 New York -- and asked him to conduct postmortem
22 examinations of the carcasses of the sea otters
23 that had died in the Monterey Bay area.

24 And after his initial examination Dr.
25 Kannan reported that the dead sea otters were

1 mostly females and their babies. And he said that
2 he had found that they were dying from several
3 different infectious diseases, including
4 salmonella and E.coli, as well as toxoplasma
5 gondii.

6 This is very significant because if the
7 sea otters are dying from several different
8 infectious diseases, kitty litter is not the
9 source of the pathogenic bacteria causing the
10 record number of deaths.

11 The premature deaths are occurring for
12 some other reason. And it is more reasonable to
13 believe that the multiple diseases infecting the
14 sea otters in the Monterey Bay/Elkhorn Slough area
15 is happening because of a proliferation of
16 pathogenic bacteria in the warm water of the
17 thermal plume of the Moss Landing Power Plant.

18 Bacteria have always been present in the
19 coastal waters, but in cold water they do not
20 reproduce to levels that become deadly. It is the
21 same thing as when you take a potato salad to a
22 picnic and if it stays cold, there will be no
23 problems. But if it gets warm, the bacteria that
24 are naturally occurring will proliferate to
25 dangerous and deadly levels.

1 Last August there was a spell of very
2 hot weather in San Jose and many children played
3 in the fountain in downtown Caesar Chavez Plaza.
4 And soon afterwards many of these children became
5 extremely ill with salmonella infections.
6 Salmonella was undoubtedly always present in the
7 fountain water, but not at dangerous levels. Only
8 when the water became warm due to the hot weather
9 did the salmonella bacteria proliferate to
10 dangerous levels.

11 It is inevitable that bacteria will
12 proliferate in warm, nutrient-rich water. And
13 that is what is happening in the nearshore water
14 adjacent to the power plant.

15 The sea otters congregate in the warm
16 water in the thermal plume, and the females that
17 are the most vulnerable after giving birth, and
18 they are the ones that are suffering increased
19 morbidity and death, as well as their infants and
20 young ones.

21 These problems in the sea otter
22 population were completely ignored in the study
23 and the reports of the ecological effects of the
24 Moss Landing Power Plant Thermal Discharge which
25 was published last year, March 2006. These

1 studies were required by the CEC to satisfy the
2 condition of certification known as soil and water
3 number 4. There are only two sentences in this
4 document, and they're on the last page.

5 And this is what it says, quote, "Sea
6 otters were regularly observed utilizing the
7 thermal plume for grooming, resting, foraging and
8 interacting with other sea otters. The reason for
9 this otter utilization of the plume is uncertain,
10 but may have to do with the relatively warmer
11 water at the plume." Unquote.

12 Nothing was said about the record number
13 of sea otter deaths in 2003, nor the multiple
14 diseases detected in the post mortem studies being
15 conducted by Dr. Karunthachalan Kannan. This is a
16 serious omission in a document purporting to be a
17 study of the ecological effects of a thermal
18 plume. Whoever wrote it must have assumed that
19 everyone had been convinced that the sea otter
20 problems came from the kitty litter or they were
21 expecting that nobody was going to read this
22 document.

23 Another serious problem that I believe
24 has been exacerbated by the expanded heated water
25 discharges is the collapse of the ground fishery.

1 National Marine Fisheries records that the
2 Monterey Bay used to support a very important
3 commercial ground fishery, one of the three most
4 important ground fisheries on the Pacific Coast.
5 In 2005 this fishery collapsed.

6 In 2002 a very important Ph.D.
7 dissertation was published by Dr. Jennifer Brown
8 of UCSC, UC Santa Cruz. She spent several years
9 studying the English sole and the sandabs, two
10 species of ground fish in the Monterey Bay. And
11 she discovered by examining their -- stones that
12 more than 55 percent of the individuals she'd
13 captured had spent their juvenile period in the
14 Elkhorn Slough.

15 From January through May adult ground
16 fish congregate in the benthos near the discharge
17 structure of the Moss Landing Power Plant in order
18 to spawn. And the eggs and the larvae are carried
19 into the Elkhorn Slough by tidal action. Those
20 larvae that survive to become juveniles remain in
21 the Elkhorn Slough where the water is warm and the
22 food is plentiful. And at the end of their
23 juvenile period they migrate back out into the
24 Monterey Bay and the cycle repeats itself with a
25 new generation of adults who return, once again,

1 to the benthos area are the mouth of the estuary
2 beginning in January in order to spawn.

3 Beginning in July of 2002 when the Moss
4 Landing Power Plant expansion commenced commercial
5 operations 34 percent more heated water was
6 discharged from the power plant into the Monterey
7 Bay 600 feet offshore.

8 The expanded Moss Landing Power Plant is
9 now permitted to discharge 3700 acrefeet of hot
10 water every day. That's about six square miles
11 one foot deep.

12 Two and a half years ago the ground
13 fishery collapsed. National Marine Fishery
14 library documents that temperatures about 26
15 degrees Centigrade will be lethal to groundfish.
16 Sadly, the temperatures of the water at the bottom
17 of the discharge structure where the groundfish
18 come to spawn was never measured.

19 The studies prior to the certification
20 of the power plant only estimated the magnitude
21 and the extent of the project's heat load.
22 Biologist David Mayer, the Director of the
23 environmental assessment 316(b) studies reasoned
24 that since significant adverse impacts did not
25 occur in the last 50 years of the Moss Landing

1 Power Plant operation it was unlikely that they
2 would occur when the combined cycle units
3 commenced operation.

4 Debra Johnston, a marine biologist for
5 the California Department of Fish and Game, and
6 also a member of the technical working group
7 disagreed with Dr. Mayer.

8 At the May 12th meeting, 2000, of the
9 CEC meeting here she testified that heat was very
10 deleterious to fish and she asked that this be
11 stated clearly in the final staff assessment, and
12 not just added as a footnote.

13 Dick Anderson, biologist for the CEC and
14 also a member of the technical working group,
15 advised the CEC to require the applicant, Duke
16 Energy, to carry out post-operational thermal
17 plume studies to verify the results of the
18 estimates.

19 This became the condition of
20 certification, as I said, that was known as soil
21 and water number 4 of this report. The studies of
22 the ecological effects of the Moss Landing Power
23 Plant thermal discharge was intended to satisfy
24 that condition of certification.

25 As I indicated previously, mammals and

1 sea otters were not included in this study. And
2 unfortunately, no studies were done of the benthic
3 region around the discharge structure where the
4 groundfish come to spawn. Only the inter-tidal
5 beach and the shallow sub-tidal beach areas of the
6 benthos were studied. No studies were done of the
7 deep water benthos near the discharge structure.

8 I asked for each of you to receive a
9 copy of this map which is in a set of documents
10 entitled, Moss Landing Power Plant post-
11 modernization thermal plume evaluation plan, and
12 it's dated April 2002.

13 This document shows the locations of the
14 various stations where the temperature of the
15 thermal plume was intended to be measured. There
16 are some long-term floating stations and some
17 long-term fixed stations, as well as stations for
18 the purpose of the survey only.

19 I wanted to point out to you that
20 station that is given the designation of ML-11 is
21 located very near the discharge. And this is the
22 station that was selected by the Regional Water
23 Board to be the station where baseline receiving
24 water temperatures were to be measured.

25 This station is a floating long-term

1 station and the measurements are made ten feet
2 below the surface of the water. Please note that
3 the discharges from the Moss Landing Power Station
4 take place very close to the station and at 20
5 feet below the surface.

6 If the Moss Landing Power Plant is
7 discharging up to 3700 acrefeet of hot water a day
8 at that location, it is inevitable that the water
9 at station ML-11 will be very warm. Nevertheless,
10 this was the station that the Regional Water Board
11 selected to measure baseline receiving water
12 temperatures.

13 This is very troubling. But what is
14 even more troubling is the applicant, Duke Energy,
15 requested that the Water Board consider a specific
16 exemption to the 20-degree thermal discharge
17 limitation; and this was granted.

18 The permit now reads, quote: "Except
19 during periods of heat treatment the daily average
20 temperature of the discharge shall not exceed the
21 daily average natural temperature of the receiving
22 water by more than 28 degrees Fahrenheit or 15.6
23 degrees Centigrade." Unquote.

24 That means 28 degrees Fahrenheit above
25 the temperatures as they are now being measured at

1 station ML-11.

2 This is astounding. If, as Department
3 of Fish and Game Marine Biologist Debra Johnson
4 states, heat is very deleterious to fish, then the
5 groundfish which congregate in the benthos at the
6 base of the discharge structure are inevitably
7 going to suffer adverse impacts.

8 It seems reasonable to believe that the
9 collapse of the ground fishery may have occurred,
10 at least in part, because of the 34 percent
11 expansion of heated water discharges that began in
12 July of 2002.

13 This temperature at station ML-11 may be
14 exceeding the legal limit of 26 degrees Centigrade
15 every day.

16 Dick Anderson of CEC worried that
17 because of the warm water coming from the Slough,
18 as well as the effects of dredging, it was going
19 to be impossible to determine who was responsible
20 if negative effects were observed.

21 But at this point what we need to know
22 simply is the temperature of the water at the base
23 of the discharge structure in the benthos where
24 the groundfish have historically come to spawn.

25 In 2002 the energy crisis was an

1 emergency and there was intense pressure to get
2 new power plants built or expanded as soon as
3 possible. In the studies prior to the
4 certification of Moss Landing Power Plant not only
5 were thermal plume studies eliminated, but the
6 studies of the benthos, the beach and the jetty
7 were also omitted. And source water sampling took
8 place for only nine months. No source water
9 samples were collected from February 24th to June
10 17th, the most productive season in the Monterey
11 Bay. This is when the larvae and the eggs and the
12 groundfish would have been collected because
13 spawning would have been taking place at that
14 time.

15 It was believed that the omission of
16 these studies and source water surveys would not
17 cause irreparable damage to the ecology because of
18 the post-operational and monitoring studies that
19 had been required as condition of certification.
20 And it was assumed that those studies and
21 monitoring would detect adverse effect and correct
22 them should they occur. Sadly, this did not
23 happen.

24 This report and the studies that it
25 describes are woefully inadequate. And now

1 serious and tragic ecological events and changes
2 are occurring in the Monterey Bay adjacent to the
3 Moss Landing Power Plant. This report does not
4 even acknowledge that it is happening.

5 You may be asking yourself why am I here
6 all alone asking for your attention and your
7 assistance. And the answer can be found in this
8 document. This is an agreement that was signed by
9 Duke Energy and four environmental groups. They
10 were the Ocean Conservancy, Save Our Shores, the
11 Otter Project and Friends of the Sea Otters.

12 The agreement provides \$1 million to
13 these four groups in exchange for an agreement
14 that they not say or do anything to interfere with
15 the construction of the Moss Landing Power Plant
16 expansion.

17 It was called a monitoring agreement,
18 but it was really a non-interference agreement.
19 As a monitoring agreement it was meaningless
20 because it was unenforceable. None of these
21 groups will be coming to talk to you, or to
22 criticize what is going on at Moss Landing Power
23 Plant.

24 I've spoken to two members of these
25 groups and they are hoping that the so-called

1 monitoring contract is going to be renewed.

2 One more thing I would like to suggest,
3 in going through my file I came across a document
4 that was docketed April 28, 2000. It is section 3
5 of a document called final Moss Landing Power
6 Plant thermal plan compliance report pertaining to
7 alternatives for achieving compliance with thermal
8 plan. It was docketed on April 28, 2000.

9 One of the alternatives that was
10 considered at that time was a separate offshore
11 discharge for the combined cycle units. There is
12 a map included. I didn't reproduce it for you
13 because it's in -- it's very very poor.

14 But it shows a possible configuration of
15 a separate discharge for the new combined cycle
16 units. And perhaps it would make sense to revisit
17 this alternative again.

18 If the heated discharges coming from the
19 power plant are causing adverse impacts on the
20 beneficial uses of the Monterey Bay, perhaps it
21 would help if the size of the thermal plume could
22 be divided and discharged in two separate
23 locations. And if the discharge structure or
24 structures could be located even farther offshore
25 in deeper, colder water the thermal plume would

1 inevitably be even better mixed with the receiving
2 waters.

3 As I said, the Moss Landing Power Plant
4 is permitted to discharge 1.2 billion gallons of
5 heated water every day. That is a huge quantity
6 of water. And even though all of the units of the
7 power plant rarely operate simultaneous, even half
8 that amount is a huge amount of water being
9 discharged every day.

10 I realize that CalAm's proposal for a
11 small pilot desal facility will not add to the
12 effects that I believe are presently occurring
13 because of the thermal plume, but the timing of
14 this application does not seem appropriate.

15 Before CalAm invests in infrastructures,
16 the studies that were omitted back in 2000 must be
17 undertaken and not halfheartedly, but seriously.
18 The Elkhorn Slough and the estuary are the largest
19 and most important coastal wetland in California.
20 And the tragedy occurring in the sea otter
21 population is real.

22 The collapse of the ground fishery is
23 also lamentable. Not just because it is the loss
24 of a valuable resource, but because the collapse
25 has caused economic hardship for many who once

1 depended on that resource.

2 Maybe it's not too late to repair the
3 damage that has been done if we focus attention on
4 these problems immediately. However, this is not
5 the time to invite another group of stakeholders
6 to establish a claim, and a dependency on the
7 cooling water streams of the Moss Landing Power
8 Plant.

9 Before another layer of stakeholders
10 becomes conjoined with the cooling water streams,
11 the problems in the sea otter population and the
12 problems with the ground fishery must be sorted
13 out. Perhaps it's not too late.

14 It is critical to proceed rationally,
15 deliberately and carefully. For our future and
16 the future of our children and grandchildren I
17 trust that the strength of your leadership and the
18 wisdom of your office will guide you in the
19 stewardship of the important public resources
20 under your jurisdiction.

21 Thank you.

22 VICE CHAIRPERSON BOYD: Thank you, Ms.
23 Nielson. I, for one, am struggling to make the
24 connection between your testimony and the item
25 before us today. But out of courtesy to you for

1 the distance you've traveled, and because I think
2 I and my fellow Commissioners care about this
3 subject, I think I indulged your lengthy
4 presentation.

5 I am struggling with, though, the
6 relevance to the item before us today. I don't
7 know how my fellow Commissioners feel. I do care
8 about what you said. I'm a former Assistant
9 Director of Fish and Game; a former Deputy
10 Secretary of the Resources Agency. I'm very
11 familiar with these issues, and I hope those
12 agencies, as well as the Water Board, are pursuing
13 your concerns.

14 I know our compliance staff is now well
15 aware of your concern. And perhaps in separate
16 proceedings can deal with the questions. But with
17 that, I thank you; and ask if any of my fellow
18 Commissioners have comments.

19 COMMISSIONER GEESMAN: Well, I guess I
20 would note that she quite appropriately
21 acknowledged at the very outset of her remarks
22 that the statement was probably better directed to
23 the Regional Water Quality Control Board.

24 I think what's important here, because
25 looking around I think that with the exception of

1 Commissioner Rosenfeld, who joined the Commission
2 shortly after World War I, --

3 (Laughter.)

4 COMMISSIONER GEESMAN: -- none of us had
5 the pleasure of the original licensing proceeding
6 on this project. And that's a phenomenon we're
7 quite often confronted with for project
8 amendments.

9 It's important that we not yield to the
10 temptation to re-litigate issues that were
11 addressed and resolved in the original licensing.
12 The original license issued is entitled to a
13 presumption of legitimacy on the part of the
14 Commission.

15 What's in front of us is a fairly narrow
16 amendment. And our statute provides particular
17 findings that we need to make in determining
18 whether the amendment should be approved.

19 Now, the opportunity for re-litigation
20 of the subject matter that she raised exists in
21 the NPDES permit renewal process under section
22 316(b) of the Clean Water Act. And the Regional
23 Water Quality Control Board revisits those
24 questions every five years.

25 I think as all of the Commissioners

1 know, we've been working with the State Water
2 Resources Control Board in addressing what the
3 impacts on the electrical system will be if recent
4 court decisions interpreting section 316(b).

5 So, it's not that there is not a forum
6 for her concerns. For better or for worse, it
7 doesn't happen to be this forum on this particular
8 amendment.

9 I think we had some other requests for
10 public comment?

11 VICE CHAIRPERSON BOYD: Yes, Madeleine
12 Clark, Director of the Elkhorn Slough Coalition.
13 And, Ms. Clark, is you have something new and can
14 connect today's action I will allow your
15 testimony. If it's basically a repeat of the
16 previous testimony, as you heard, the relevance to
17 this item is questionable. And the time it's
18 taking to have the discussion is becoming
19 significant.

20 So, Ms. Clark, if you'd like to work
21 within those parameters, we'd be glad to hear from
22 you.

23 MS. CLARK: Thank you, Mr. Boyd, Members
24 of the Commission. My name is Madeleine Clark. I
25 am the Director of the Elkhorn Slough Coalition.

1 And before I launch into my statement I
2 would like to rebut some of the comments made by
3 Commissioners.

4 The reason that she brought this
5 information to you is to make you aware that prior
6 decisions were made on faulty science; that
7 monitoring studies that were mandated were
8 incomplete and not in the best interest of the
9 public's interest. They were in the best interest
10 of the applicants who financed these studies.

11 What we're asking is that you don't make
12 your decisions in a vacuum. You mentioned that
13 there's a very narrow scope of what you're
14 addressing today, the petition that's before you.
15 But if you don't consider all of the parameters
16 that are concerned with this application, then
17 we're wasting your time. And you're not servicing
18 the public's needs.

19 So that having been said, I'd like to
20 share with you my statement. You may have already
21 read it, but the reason I read it into the record
22 is because the media, both here in Sacramento and
23 in Monterey County, follows our activities very
24 closely. It's more convenient for them to hear
25 the public statement and address the issues raised

1 in the public statement.

2 My statement is very short, five
3 minutes. And if you have any questions you'd like
4 to address at the end of my statement, I would be
5 more than happy to entertain them.

6 So, that being said, we'd like to
7 suggest you follow state policy and the
8 recommendations of the California Public Utilities
9 Commission, lead agency for the CalAmerican Water
10 desalinization coastal water project, by denying
11 Dynegy's petition to modify intake and discharge
12 structures at their Moss Landing Power Plant to
13 accommodate CalAmerican Water's desalinization
14 pilot plant.

15 The California Public Utilities
16 Commission has directed CalAmerican Water to look
17 to Marina for a desalinization plant location.
18 Marina has the added advantage of close proximity
19 to the Monterey Bay Water Pollution Control Agency
20 Wastewater Treatment Plant, the Marina Coast Water
21 District Desalinization Plant and brine discharge
22 waterpipes extending two miles out into the
23 Monterey Bay.

24 Our supporting documentation include
25 attachment A, the California Public Utilities

1 Commission coastal water project, contains our
2 arguments to the Public Utilities Commission on
3 October 18, 2006, suggesting that in light of
4 recent court rulings and state policy changes
5 regarding once-through cooling at coastal power
6 plants partnering any desalinization facility,
7 pilot or otherwise, with once-through cooling at
8 the Moss Landing Power Plant is ill advised.

9 Please pay close attention to an article
10 that was published in The Boston Globe describing
11 the collapse of fish population in Mount Hope Bay
12 after PG&E converted recycled to once-through
13 cooling at their Brighton Point Station Power
14 Plant. The similarities to Moss Landing are worth
15 noting. And I brought the article for your
16 review.

17 In November 2006 the Public Utilities
18 Commission directed the Division of Ratepayer
19 Advocates and CalAmerican Water to consider
20 alternative water projects to CalAmerican Water's
21 proposed desalinization plant in Moss Landing.

22 The Division of Ratepayer Advocates
23 formulated a committee of stakeholders, the
24 regional plenary oversight group, RPOG, in January
25 of 2007, this committee and subcommittees have met

1 once to two times a month to consider options that
2 might actually provide viable water supplies for
3 the Monterey Peninsula.

4 I want to make a note that we are not
5 against desalinization plants or power plants or
6 anything else. The desalinization plant just
7 doesn't belong in Moss Landing partnered with the
8 power plant.

9 I mention other attachments, supporting
10 documentation, you have that in your packets. I
11 won't belabor the point here, but I will say, to
12 wrap this up, lastly the Regional Water Quality
13 Control Board Staff report dated August 2nd
14 considering approval of the CalAmerican Water and
15 Poseidon Resources request to modify the Moss
16 Landing Power Plant discharge permit to
17 accommodate discharge from three pilot plants,
18 shows that each plant would generate 129 pounds
19 daily of bleach, battery acid, ammonia, rust
20 retardant and power-activated carbon, which are
21 pellets of coconut shells that settle solid but do
22 not dissolve, drain cleaner and water softener.

23 If we do the math we realize that 129
24 pounds per day multiplied by 365 days a year times
25 three pilot plants is over 70 tons, or 142,260

1 pounds of toxic chemicals discharged annually less
2 than 600 feet from the mouth of the Elkhorn
3 Slough.

4 Tidal flows wash these toxins and
5 contaminants over nearshore jetties that service
6 nurseries for the crabs and spawning fish that
7 inhabit the Slough and the Monterey Bay National
8 Marine Sanctuary.

9 Coupled with the increased temperature
10 from the power plant discharge water, a recipe for
11 environmental disaster is created.

12 We ask that the CEC consider the
13 cumulative effects that the three planned power
14 plants will have on the ecosystem. Once again, we
15 ask you not to make your decisions in a vacuum.

16 The discharge site is a favorite feeding
17 ground of sea otters, the warm waters and
18 plentiful crabs scavenging dead fish larvae
19 surrounding the discharge area make the site a day
20 at the spa for these engaging marine animals.
21 Significant numbers of sea otters died when the
22 power plant increased heated discharge from the
23 site in 2002. Enough so that Duke Energy
24 discontinued operation of the old part of the
25 power plant that uses 90 percent of the discharge

1 water. So almost a happy ending. Today those two
2 units are rarely operated, and only used as peaker
3 plants.

4 In conclusion we'd like to point out
5 that it sets a bad example, a bad precedent, to
6 grant Dynegy's request to modify intake discharge
7 structures at their Moss Landing Power Plant to
8 accommodate the pilot desalinization plant.

9 Dynegy's desire to avoid compliance with
10 316 mandates of the Clean Water Act leads them to
11 mistakenly believe that they can prevent the
12 inevitable by partnering with CalAmerican Water
13 and Poseidon to add another layer of stakeholders.

14 We ask the CEC, deny Dynegy's petition
15 and put an end to these continual delays by
16 CalAmerican Water to provide viable water supply
17 to the Monterey Peninsula.

18 Senate Bill 9510 directed CalAmerican
19 Water to find water alternatives to the over-
20 pumping of the Carmel River 12 years ago. They
21 are currently subject to over \$300 million a year
22 in fines and penalties from NOAA for violation of
23 the Endangered Species Act.

24 It is time for CalAmerican Water to quit
25 using the Moss Landing coastal water project as an

1 instrument for pseudo-compliance. Dynegy's
2 collusion with CalAmerican Water not only adds
3 insult to injury, it assures that Dynegy exemption
4 to state and federal laws designed to protect
5 sensitive marine resources like the Elkhorn
6 Slough.

7 The point being CalAm has no intention
8 of ever building a desal plant in Moss Landing for
9 financial and environmental regions. To do so
10 they would have to pipe the water to the Monterey
11 Peninsula, and the cost of the water would be
12 prohibitive.

13 I was at a meeting with members -- or
14 with employees from CalAmerican Water and other
15 environmental groups, and a gentleman by the name
16 of Peter Spilett, who was the head of
17 environmental public outreach, told us that CalAm
18 does not make their money by producing and
19 distributing water. How they make their money is
20 by financing huge waterworks projects, like a dam
21 or a desalinization plant.

22 So, if they get approval from the CPUC,
23 who is the lead agency on their projects, to build
24 a huge plant, they say, okay, we're going to
25 borrow \$250- \$300 million to build this plant.

1 The PUC allows them to make a 10 percent return on
2 that money that they borrow from themselves. And
3 they're quite happy. It's called making it on the
4 flow, as Mr. Spilett put it.

5 Now, I found this to be rather eye-
6 opening. This might be old news to you gentlemen,
7 but what it said to me was as long as CalAm can
8 continue to avoid compliance with 9510, avoid the
9 penalties and fines, and borrow money from
10 themselves to build a plant they'll never build,
11 they're doing pretty good. They're making a lot
12 of money from both ends, but still Monterey County
13 goes without water.

14 So, luckily the PUC, through the
15 Division of Ratepayer Advocates, stepped in and
16 said, you know what, enough is enough. Monterey
17 County needs water. And we can't sit back and
18 wait for CalAm to come to the table with a project
19 in Moss Landing, because it will never happen
20 because of all the environmental concerns that Ms.
21 Nielson mentioned in her presentation.

22 Lastly, I'd like to address Mr. Hickok's
23 comments that there's nothing in it for us. No.
24 What's in it for them is noncompliance with
25 mandates of the 316(b) of the Clean Water Act.

1 In closing, because this sums it all up,
2 this was a Boston Globe article, July 23, 2002:
3 EPA fix order for once-through cooling at PG&E
4 power plant. Fall River." This is in Boston.

5 "State and federal agency ordered New
6 England's largest fossil fuel power plant
7 yesterday to make environmental improvements
8 estimated to cost between \$68 million and \$250
9 million amid mounting evidence that hot water
10 discharge from Brighton Point Station was
11 virtually wiping out fish populations in Mount
12 Hope Bay.

13 "Biologists say that the warm water from
14 Brighton Point, while not lethal to adult fish, is
15 devastating to fish larvae, killing off entire
16 generations of fish such as winter flounder.
17 Although fish populations in the Bay have been
18 declining since 1979, they nosedived after 1984
19 when plant operators converted a previously closed
20 cycle cooling system to an open cycle, increasing
21 the plant's withdrawal of cooling water and
22 discharge of warm water, by about 45 percent."

23 This is so similar to what's happening
24 in Moss Landing. The local fishery, which in 1986
25 accounted for 12.7 million worth of winter

1 flounder, and several less popular species, has
2 all but disappeared.

3 The loss has also damaged the local
4 economy as recreational anglers gave up fishing on
5 the Bay.

6 Gentlemen, that concludes my remarks. I
7 appreciate your time and attention to our
8 concerns. We hope you will deny the petition that
9 Dynegy has put before you for the obvious reasons.
10 We don't need another layer of stakeholders to say
11 it's imperative that we cling to once-through
12 cooling to produce desalted water or anything
13 else.

14 As far as the other agencies approving
15 this pilot plant, the California Coastal
16 Commission, the staff strongly recommended against
17 approving the permit. And the Coastal Commission
18 disregarded staff recommendations and went ahead
19 and approved it anyway.

20 As far as Monterey County approving the
21 permit, we have an ordinance in Monterey County,
22 no desalinization plants may be owned by private
23 entities. So it wasn't really objected to.
24 Nobody really put in strong arguments against it,
25 assuming that it just would not happen. But our

1 local supervisors said, well, since they're not
2 actually selling the water, we'll let them go
3 ahead and do this.

4 So, it's helpful, I think, to hear both
5 sides of the story and understand that, no, there
6 is not a lot of support for this project in
7 Monterey County. As a matter of fact, there's a
8 lot of opposition to it, because we love the
9 Elkhorn Slough; we love what it provides for us as
10 a community. And we do not wish to go back to
11 pre-2000 when PG&E was running the power plant and
12 we considered the Slough a sewer.

13 As I mentioned, the power plant doesn't
14 operate the two old units that use 90 percent of
15 the water. We've seen a renaissance of flora and
16 fauna come back. Because water is very forgiving
17 and it will recover if given a chance. But if we
18 add desal to the mix, we're asking for an
19 environmental disaster.

20 Thank you very much.

21 VICE CHAIRPERSON BOYD: Thank you. Any
22 comments or questions?

23 I'd like to ask staff -- Commissioner
24 Geesman.

25 COMMISSIONER GEESMAN: I would make a

1 motion to approve the amendment.

2 VICE CHAIRPERSON BOYD: There's been a
3 motion. Is there a second?

4 COMMISSIONER BYRON: Second.

5 VICE CHAIRPERSON BOYD: In that case
6 I'll ask for the vote.

7 All in favor?

8 (Ayes.)

9 VICE CHAIRPERSON BOYD: Opposed? None.
10 It's approved four to nothing.

11 Item number 5, Russell City Energy
12 Center, 01-AFC-7C, possible approval of petition
13 for ownership change from Calpine Corporation to
14 Russell City Energy Company, LLC. Mr. Shaw.

15 MR. SHAW: Good morning, Commissioners
16 and audience. I'm Lance Shaw.

17 The Russell City Energy Center is a 600
18 megawatt, natural gas fired combined cycle power
19 plant licensed to be built in the City of Hayward.
20 it is owned by Russell City Energy Company, LLC.
21 Certified September 11, 2002. The project has not
22 begun construction.

23 The owner requests approval of a change
24 that has already taken place, to reflect a
25 transfer of the project's assets and ownership

1 from Calpine Corporation to Russell City Energy
2 Company, LLC. Russell City Energy Company, LLC is
3 a wholly owned, indirect subsidiary of Calpine
4 Corporation, 65 percent ownership; and of Aircraft
5 Leasing Corporation, a wholly owned, indirect
6 subsidiary of General Electric, 35 percent.

7 Just for clarification there are two
8 other additional amendments before the Commission
9 not mentioned today in this petition. One is a
10 major amendment to modify the project, including
11 moving the facility about 1300 feet northwest of
12 its original site. Evidentiary hearing has been
13 completed.

14 The second is a request to extend the
15 deadline of commencement of construction from
16 September 10, 2007 to September 10, 2008. That is
17 not on today's docket.

18 This petition to modify the project was
19 filed April 23, 2007. Notice of receipt was
20 mailed on June 14, 2007, to the mailing list. It
21 was also posted on the Energy Commission's
22 website. And that was June 15.

23 There's been no public comment received
24 on this particular ownership change petition.

25 The petition meets all the filing

1 criteria for section 1769(a) concerning post-
2 certification project modifications. The
3 modification will not change the findings of the
4 Energy Commission's final decision pursuant to
5 section 1755.

6 The project will remain in compliance
7 with all applicable LORS, laws, ordinances,
8 regulations and standards, subject to the
9 provision of Public Resources Code section 25525.

10 Staff recommends the Energy Commission
11 approve this petition.

12 VICE CHAIRPERSON BOYD: Thank you, Mr.
13 Shaw. Any questions or comments?

14 COMMISSIONER GEESMAN: Move approval.

15 VICE CHAIRPERSON BOYD: It's been moved.

16 COMMISSIONER BYRON: Second.

17 VICE CHAIRPERSON BOYD: And second.

18 All in favor?

19 (Ayes.)

20 VICE CHAIRPERSON BOYD: Opposed? The
21 ayes have it, four to nothing. Thank you, Mr.
22 Shaw.

23 MR. SHAW: Thank you.

24 VICE CHAIRPERSON BOYD: Item number 6,
25 Chevron Richmond Power Plant Replacement Project,

1 small power plant exemption, 07-SPPE-1. Possible
2 Committee appointments for the project. Ms. Dyas.

3 MS. DYAS: Good morning, Commissioners.
4 I'm Mary Dyas, Staff Siting Project Manager for
5 the Chevron Richmond Power Plant replacement
6 project. And with me is Staff Counsel, Kerry
7 Willis, who is sitting in for Lisa DeCarlo.

8 On June 22nd Chevron USA filed a small
9 power plant exemption application seeking an
10 exemption from the California Energy Commission's
11 licensing process. Chevron is proposing to add an
12 additional 60 megawatts net capacity to its
13 existing electrical generation system within its
14 refinery in the City of Richmond, Contra Costa
15 County.

16 The project will be located in separate
17 areas of the refinery and will consist of a
18 replacement generation train to be located within
19 the refinery's existing cogeneration facility; a
20 new steam turbine generator and associated cooling
21 tower to be located in a new hydrogen production
22 facility within the refinery; reconductoring to
23 upgrade approximately 4000 feet of existing
24 transmission line; and the shutdown of the boilers
25 located in the existing number one power plant

1 facility which is currently providing steam to the
2 refinery.

3 At this time we are requesting a
4 Committee be assigned.

5 VICE CHAIRPERSON BOYD: Thank you. Any
6 questions? I'd like to suggest a Committee
7 consisting of Presiding Commissioner Jeffrey
8 Byron, and Associate Member of the Committee,
9 Commissioner Rosenfeld. Somebody make such a
10 motion?

11 COMMISSIONER GEESMAN: I'll move
12 approval.

13 COMMISSIONER ROSENFELD: Second.

14 VICE CHAIRPERSON BOYD: It's been moved
15 and seconded.

16 All in favor?

17 (Ayes.)

18 VICE CHAIRPERSON BOYD: Opposed? None.

19 The motion carries. Thank you, you have your
20 Committee.

21 COMMISSIONER BYRON: I look forward to
22 serving with you, Commissioner Rosenfeld.

23 COMMISSIONER ROSENFELD: I look forward
24 to following your leadership, sir.

25 (Laughter.)

1 MS. DYAS: Commissioners, we have some
2 representatives from Chevron here who would like
3 to say a few words.

4 VICE CHAIRPERSON BOYD: Oh, thank you;
5 I'm sorry. I had no notification of that fact.

6 MS. DYAS: Sorry about that.

7 MR. BUCHANAN: Good morning,
8 Commissioners and Staff. Thank you for the
9 opportunity to briefly address you this morning on
10 our project.

11 My name is John Buchanan. I am the
12 Business Unit Manager over the blending and
13 shipping and utilities areas of the Chevron
14 Richmond Refinery. I'm responsible for the steam
15 and electrical generation and distribution
16 throughout the refinery.

17 And the power plant project before you
18 is a part of an overall renewal project to upgrade
19 our infrastructure and replace some of our older
20 technology process plants within the Chevron
21 Refinery with newer, more reliable, more energy
22 efficient, and obviously more environmentally
23 friendly technologies.

24 We're committed to having the turbine
25 generator online by the first quarter of '09, and

1 the cogeneration unit online by the first quarter
2 of 2010. And this is in coordination with the
3 other projects as part of this overall renewal
4 project.

5 And as outlined in the small power plant
6 exemption permit, the project will comply with all
7 applicable laws, regulations and standards, and
8 have no significant impact on the environment.

9 And obviously we look forward to working
10 with staff and the Siting Committee over the next
11 few months to address questions and concerns
12 regarding the project, in order to achieve an
13 affirmative decision by the Commission regarding
14 our request for exemption.

15 Thank you, and be glad to answer any
16 questions.

17 VICE CHAIRPERSON BOYD: Well, now that
18 you've subjected yourself to questions, --

19 (Laughter.)

20 VICE CHAIRPERSON BOYD: -- a quick
21 question. How much of your native electricity
22 load is this addition going to provide you
23 meeting?

24 MR. BUCHANAN: It'll supply, when we're
25 done with this and the other projects we're doing,

1 we'll be supplying 100 percent of our native load.
2 Today we're at about 85 to 90 percent.

3 VICE CHAIRPERSON BOYD: All these
4 projects you reference, will they result in any
5 significant refinery creep, allowing your refinery
6 to produce more transportation fuel?

7 MR. BUCHANAN: We don't increase the
8 capacity of our units, but we will increase our
9 reliability, which obviously has a benefit from
10 just the whole supply/demand. The units that are
11 being replaced are primarily older technology
12 equipment built in the, anywhere from the power
13 plant in the '30s and '40s, to some of the process
14 plants are '60s and '70s.

15 VICE CHAIRPERSON BOYD: So we can look
16 forward to less breakdown, less price volatility
17 in the future when you get done.

18 MR. BUCHANAN: We sure hope so.

19 VICE CHAIRPERSON BOYD: Thank you very
20 much.

21 Any other questions? Guess not. Thank
22 you.

23 MR. BUCHANAN: Thank you.

24 VICE CHAIRPERSON BOYD: Agenda item
25 number 7, CPV Sentinel Energy project data

1 adequacy recommendation and possible Committee
2 appointment. Mr. Pfanner.

3 MR. PFANNER: Yes, thank you, Member of
4 the Committee. My name's Bill Pfanner; I'm the
5 Project Manager for the CPV Sentinel project. And
6 we have Arlene Ichien today representing Staff
7 Attorney Caryn Holmes.

8 Briefly, on June 25, 2007, the AFC was
9 submitted to the Energy Commission to construct
10 and operate a simple cycle peaking power plant.
11 The Sentinel project is proposed to be nominally
12 rated 850 megawatt electric generating facility
13 consisting of eight natural gas fired General
14 Electric LMS100 combustion turbines, generation
15 operating in simple cycle mode.

16 Briefly, the power plant consists of a
17 37-acre site, 14-acre construction laydown, 3250
18 feet of new transmission line, and 2.6 miles of
19 new natural gas pipeline.

20 The power plant, transmission lines and
21 portions of the gas and construction laydown are
22 located in unincorporated Riverside County. And
23 portions of the construction laydown area and
24 portions of the gasline will be located within the
25 City of Palm Springs. So the site is situated

1 approximately eight miles northwest of the center
2 of Palm Springs, and 4.5 miles west of the
3 community of Desert Hot Springs.

4 Briefly, staff has completed its data
5 adequacy review of the AFC and determined that it
6 does not meet the requirements listed in Title 20,
7 section 1704 and division 2, chapter 5, appendix B
8 of California Codes and Regulations for the 12-
9 month process.

10 Of the 23 technical disciplines staff
11 identified that there were ten areas deficient.
12 Staff has provided a summary, a table of data
13 adequacy worksheets for all deficient technical
14 areas. And the worksheets for the aforementioned
15 sections identify the additional information that
16 we believe is necessary for fulfilling the AFC
17 data adequacy requirements.

18 So, therefore, staff is recommending at
19 this time that the Energy Commission adopt the
20 list of deficiencies and not accept the AFC until
21 the additional information specified in the data
22 adequacy worksheets is accepted as completed.

23 As a note, staff has been working with
24 the applicant and they have submitted a draft data
25 adequacy package that staff will begin reviewing.

1 And we will make the recommendation as soon as we
2 have found it complete, to be on the appropriate
3 business meeting for data adequacy and Committee
4 assignment.

5 So, staff would be happy to answer
6 questions. And we note the applicant is also here
7 today to answer any questions.

8 VICE CHAIRPERSON BOYD: Thank you, Mr.
9 Pfanner. Any questions of Mr. Pfanner? If not,
10 can we hear from the applicant's representative?

11 MR. CARROLL: Yes, good morning. Mike
12 Carroll with Latham and Watkins on behalf of CPV
13 Sentinel.

14 As Mr. Pfanner pointed out, the original
15 data adequacy recommendation did identify 17
16 deficiencies in ten areas. The supplement that
17 was submitted yesterday we believe addresses 15 of
18 those 17 items. The two items that are remaining
19 include a letter from South Coast Air Quality
20 Management District and a letter from the
21 Independent System Operator. So those are two
22 items that are not completely within our control.

23 We have some question, frankly, about
24 whether those two letters are required for data
25 adequacy, but nevertheless we're working with the

1 staffs of all three agencies, the CEC, the ISO and
2 the South Coast District, to obtain the requested
3 letters, or some alternative satisfactory to the
4 CEC Staff.

5 Based on those conversations we're very
6 hopeful that those letters will be forthcoming
7 within a timeframe that would allow the staff to
8 make a positive recommendation on data adequacy
9 for your August 15th Board meeting. And so that
10 will be our objective.

11 VICE CHAIRPERSON BOYD: Thank you, Mr.
12 Carroll. Questions or comments?

13 COMMISSIONER GEESMAN: Based on those
14 representations I would move approval of staff
15 recommendation.

16 VICE CHAIRPERSON BOYD: It's been moved;
17 is there a second?

18 COMMISSIONER BYRON: Second.

19 VICE CHAIRPERSON BOYD: A motion and a
20 second.

21 All in favor?

22 (Ayes.)

23 VICE CHAIRPERSON BOYD: Any opposed? No
24 opposed. Motion carries four to nothing.

25 MR. CARROLL: Thank you.

1 MR. PFANNER: Thank you.

2 VICE CHAIRPERSON BOYD: Thank you.

3 Item number 8, Orange Grove Power Plant
4 Project, small power plant exemption, 07-SPPE-2,
5 possible Committee appointment for the proposed
6 Orange Grove Power Plant project. Ms. Miller.

7 MS. MILLER: Good morning,
8 Commissioners. I'm Felicia Miller, Staff Siting
9 Project Manager for the Orange Grove project. I'd
10 also like to introduce Jared Babula, Staff's
11 Counsel.

12 On July 19, 2007, Orange Grove Energy,
13 LP, filed a small power plant exemption
14 application seeking an exemption from the
15 California Energy Commission's licensing
16 requirements.

17 Orange Grove Energy, LP, is proposing to
18 construct a 96 megawatt electrical generation
19 plant in northern San Diego County near the
20 township of Pala.

21 The project will consist of two new
22 combustion turbine generators fueled by natural
23 gas; a new two-mile gas extension line; a new 1.8-
24 mile waterline between the existing water main and
25 the project; and an onsite, underground

1 transmission line will provide interconnection to
2 the nearby Pala Substation.

3 If the project is approved the applicant
4 plans to begin construction in January 2008, and
5 begin commercial operation in June 2008.

6 At this time we're requesting that a
7 Committee be appointed to this project.

8 VICE CHAIRPERSON BOYD: Thank you. Any
9 questions of staff? If not I'd like to recommend
10 the Committee as follows. Dr. Rosenfeld, you'll
11 appreciate this. I'd like to recommend the
12 Presiding Member of that Committee be myself; and
13 I would like to recommend that my Associate
14 Commissioner be Commissioner Rosenfeld.

15 Is there a motion?

16 COMMISSIONER GEESMAN: I'll move
17 approval.

18 COMMISSIONER ROSENFELD: Can I move
19 that?

20 (Laughter.)

21 VICE CHAIRPERSON BOYD: Dr. Rosenfeld
22 would love to move that, so --

23 COMMISSIONER GEESMAN: Well, then I'll
24 second.

25 VICE CHAIRPERSON BOYD: -- could,

1 Commissioner Geesman, can we accept your second?

2 All right.

3 There's been a motion and a second.

4 All in favor?

5 (Ayes.)

6 VICE CHAIRPERSON BOYD: Opposed? None.

7 You have your Committee, thank you very much.

8 MS. MILLER: Thank you.

9 VICE CHAIRPERSON BOYD: Item number 9,
10 Eastern Municipal Water District. Possible
11 approval of a \$3 million loan to the District to
12 install a 750 kW digester gas-fueled fuel cell
13 cogeneration system. Mr. Wang.

14 MR. WANG: Good morning, Commissioners.
15 My name is Joseph Wang; and I am the Project
16 Manager for this loan application.

17 Eastern Municipal Water District has
18 requested a \$3 million loan to install three 250
19 kW fuel cell systems at its Moreno Valley Regional
20 water reclamation facility. These systems are
21 designed to upgrade it to 300 kW later.

22 Digester gas produced from this
23 wastewater treatment plant will be treated and
24 reformed to produce hydrogen as a feedstock for
25 the fuel cells.

1 All electric output from the
2 cogeneration system will be used onsite; and the
3 waste heat from the fuel cells will be used to
4 heat the sludge digester.

5 The total project cost is about \$8.4
6 million; and \$3.375 million will be coming from
7 the self generation incentive rebate; and the
8 remaining \$2 million will be coming from the
9 district project funds.

10 The project will save over 5.5 million
11 kilowatt hours -- or about 50 percent of the
12 energy use at the plant. And reduce about 670 kw
13 onpeak demand.

14 This project is expected to save over
15 \$574,000 a year; and has a single payback of 9.5
16 years based on the net project cost after rebate.

17 This ultraclean cogeneration technology
18 will be exempt from the South Coast Air Quality
19 Management District's emission permit
20 requirements. And this project is also expected
21 to reduce CO2 emissions by 2260 tons a year.

22 Staff has reviewed this project and
23 recommended approval of this loan.

24 VICE CHAIRPERSON BOYD: Thank you,
25 Mr. Wang. Comments, questions? Commissioner

1 Byron.

2 COMMISSIONER BYRON: Mr. Wang, a quick
3 question. Have we done any of these loans in the
4 past for fuel cells that you know of?

5 MR. WANG: Yes. We funded a natural gas
6 fired fuel cell project for Alameda County. And
7 the project is still being built.

8 COMMISSIONER BYRON: It's under
9 construction?

10 MR. WANG: Yes.

11 COMMISSIONER BYRON: And are there any
12 more of these that are planned that you know of?

13 MR. WANG: Yes. There is another
14 digester gas fueled fuel cell being planned at the
15 City of Modesto Wastewater Treatment Plant, also.

16 COMMISSIONER BYRON: And when might we
17 see that?

18 MR. WANG: Well, we're currently working
19 with them on the feasibility study of using the
20 digester gas going through the cleaning and
21 reforming process as a first step. And based on
22 the fuel requirement then they will conduct
23 further study to see if it's feasible to use at
24 their treatment plant, the fuel cell cogen system.

25 COMMISSIONER BYRON: So will we see that

1 this year or probably next year?

2 MR. WANG: Probably next year.

3 COMMISSIONER BYRON: Okay. Thank you.

4 VICE CHAIRPERSON BOYD: Thank you. Any
5 other questions?

6 COMMISSIONER GEESMAN: I'll move
7 approval.

8 COMMISSIONER ROSENFELD: Second.

9 VICE CHAIRPERSON BOYD: There's a motion
10 and a second.

11 All in favor?

12 (Ayes.)

13 VICE CHAIRPERSON BOYD: Opposed? None.
14 It's approved four to nothing. Thank you, Mr.
15 Wang.

16 MR. WANG: Thank you.

17 VICE CHAIRPERSON BOYD: Item 10, City of
18 Alhambra. Possible approval of a \$1,178,410 loan
19 to the City of Alhambra to retrofit the City's
20 traffic signals from incandescent to LED; and to
21 convert the City's streetlighting system from
22 series to parallel. Ms. Suleiman.

23 MS. LEW: Good morning. My name is
24 Virginia Lew and I --

25 VICE CHAIRPERSON BOYD: Ah, you are not

1 Ms. Suleiman. Excuse me.

2 MS. LEW: -- and I'm representing Adel
3 Suleiman on this item.

4 I'd like to make some corrections on
5 this item regarding the agenda. These corrections
6 were contained in the memo in your backup package,
7 but they were not reflected on the agenda.

8 The loan amount should be \$895,270,
9 rather than \$1,178,410. The annual kilowatt hour
10 savings should be 737,281 kilowatt hours, rather
11 than 708,000 kilowatt hours. The annual cost
12 savings is \$89,527 rather than \$117,841.

13 And this amount should also be corrected
14 in table 1 on your backup package, as well.

15 This project consists of two components,
16 the conversion of incandescent traffic signals and
17 the upgrading of inefficient streetlight wiring
18 system from series to parallel.

19 Both of these projects will result in
20 the annual cost savings of \$89,527. To get the
21 maximum loan amount, both projects must be
22 completed by the City. Otherwise the loan amount
23 will be reduced based on ten times the annual cost
24 savings, or the total project cost, whichever is
25 less.

1 Staff has reviewed the projects and
2 believe that they meet the requirements of the
3 loan program. This project has been approved by
4 the Efficiency Committee. And I'll be happy to
5 answer any questions at this time.

6 VICE CHAIRPERSON BOYD: Questions?

7 COMMISSIONER ROSENFELD: Virginia, this
8 is a very friendly question. This is such a great
9 project. How many cities have not converted yet
10 to LEDs? Do we have a whole bunch of stragglers?

11 MS. LEW: Well, I think there are -- I
12 mean, every time we go out, you know, some cities
13 have said we've converted everything. And then
14 there's cities like the City of Alhambra that
15 still has red, green and yellow still to convert.
16 And so that was really amazing to us.h

17 And I think we estimate that somewhere
18 around 70 percent of all the traffic lights in
19 California have been converted to LEDs. And then
20 the majority of them that have not been converted
21 to LEDs are the amber and pedestrian signals. And
22 so, if they haven't converted the pedestrian
23 signals, we still have a really good project.
24 Because those pedestrian signals typically are on
25 almost as long as the red.

1 So we're still working on identifying,
2 you know, cities that have potential projects out
3 there.

4 COMMISSIONER ROSENFELD: Yeah, it
5 certainly seems as if we should be beating bushes
6 or complete this wonderful project.

7 MS. LEW: I know we have the survey that
8 we did about two years ago trying to find out
9 which cities and counties have not done traffic
10 light conversions.

11 And so whenever we meet with, we share
12 that with these companies; and so we look for
13 opportunities to go down and meet with cities that
14 are still on our list and confirm they still have
15 LEDs left to convert.

16 COMMISSIONER ROSENFELD: I guess having
17 enthusiasm I should move this item.

18 COMMISSIONER GEESMAN: Second.

19 VICE CHAIRPERSON BOYD: There's a motion
20 and second.

21 All in favor?

22 (Ayes.)

23 VICE CHAIRPERSON BOYD: Opposed?

24 Approved four to nothing. Thank you, Ms. Lew.

25 Item 11, possible approval of purchase

1 order 07-409-005 for \$250,000 to provide services
2 for application and database development and
3 support. Ms. Gass.

4 MS. GASS: Good morning, Commissioners.
5 My name is Rita Gass and I am the Project
6 Development and Support Office Manager for the
7 information technology services branch.

8 We're asking for approval today of a
9 purchase order in the amount of \$250,000 with
10 Creatus, Inc. The support provided by Creatus,
11 Inc. will include programming, application
12 support, office automation, web and database
13 development and administration.

14 This item will provide ITSB means to
15 obtain timely development and support for the
16 Commission's numerous business applications,
17 modeling programs and database systems.

18 Thank you.

19 VICE CHAIRPERSON BOYD: Thank you. Any
20 questions?

21 COMMISSIONER GEESMAN: Move the item.

22 COMMISSIONER ROSENFELD: Second.

23 VICE CHAIRPERSON BOYD: There's a motion
24 and a second.

25 All in favor?

1 (Ayes.)

2 VICE CHAIRPERSON BOYD: Approved four to
3 nothing; thank you very much.

4 Item 12, possible approval of purchase
5 order 07-409-004 for no more than \$90,000 with
6 Enterprise Networking Solutions to mitigate the
7 existing MS Access database portion of the New
8 Solar Home Partnership Database.

9 MR. NARVAND: Good morning,
10 Commissioners. My name is Payam Narvand from the
11 renewables energy office.

12 Today I'm here to request a database
13 enhancement contract for our new Solar Home
14 Partnership Program, up to \$90,000 with Enterprise
15 Networking Solutions.

16 This request was already approved by the
17 Renewables Committee and the purpose of this
18 database enhancement contract is to converge our
19 existing new Solar Home Partnership database into
20 a web-enabled software. And this online
21 application tool for our new residential
22 construction program will benefit all the
23 stakeholders, primarily solar and retail
24 contractors, as well as builders and Energy
25 Commission Staff. And it will also help and

1 support outsourcing efforts with our NSHP
2 partnering agencies.

3 This application will also be consistent
4 with California Public Utilities Commission effort
5 to web-base application for the retrofit and
6 commercial market under the California Solar
7 Initiative.

8 VICE CHAIRPERSON BOYD: Thank you. Any
9 questions?

10 COMMISSIONER GEESMAN: I'd move
11 approval.

12 COMMISSIONER ROSENFELD: Second.

13 VICE CHAIRPERSON BOYD: There's a motion
14 and a second.

15 All in favor?

16 (Ayes.)

17 VICE CHAIRPERSON BOYD: Opposed? None.
18 Congratulations, carries four to nothing.

19 MR. NARVAND: Thank you.

20 VICE CHAIRPERSON BOYD: Thank you. Item
21 13, possible approval of contract 400-07-001 for
22 \$135,000 with the Department of General Services,
23 Office of Fiscal Services for accounting support
24 in preparation of independent audits related to
25 the Energy Commission's Tax Exempt Revenue Bond

1 program.

2 Hopefully I didn't give your entire
3 presentation.

4 MS. HEINZ: Just about. I'll catch up
5 with time from the other presentations.

6 This is an interagency agreement with
7 DGS' unit called contracted fiscal services. they
8 provide accounting services and do year-end
9 closing in preparation for audits for the State
10 Controller's Office and other agencies that use
11 the Treasurer's Office as a trustee.

12 So it was recommended by our auditing
13 contractor, Gilbert Associates, to talk to them.
14 And we did so. And they would provide these
15 services. Because if Gilbert Associates, our
16 auditor, goes ahead and does a closing of our
17 books, they, in effect, are auditing their own
18 work. So there would be a possible conflict of
19 interest.

20 The Infrastructure Bank, which is our
21 issuer of record, is in the same situation. And
22 they are going through the same process and will
23 be contracting with Contracted Fiscal Services for
24 the same type of year-end closing.

25 So, with that I'd ask for your approval.

1 VICE CHAIRPERSON BOYD: Questions,
2 comments? Question.

3 COMMISSIONER GEESMAN: It's my
4 understanding that this is expected to cover three
5 years and two bond issues; is that accurate?

6 MS. HEINZ: Two years and three bond
7 closings. Because of the fiscal year --

8 VICE CHAIRPERSON BOYD: Commissioner
9 Byron, you had a question?

10 COMMISSIONER BYRON: I just note an
11 apparent discrepancy between the item on the
12 agenda and the memorandum that I have.

13 MS. HEINZ: Correct. I think that that
14 backup package --

15 COMMISSIONER BYRON: Could you correct -
16 - which figure -- which dollar amount is the
17 correct one.

18 MS. HEINZ: \$135,000, and I think that
19 backup package you had was from June. And the
20 contract package that's complete has the correct
21 figures and dates, and that is dated July 12th.

22 So I think what you have in your backup
23 package was the June package.

24 VICE CHAIRPERSON BOYD: It's correct.
25 So the correct amount is 135 --

1 MS. HEINZ: \$135,000.

2 COMMISSIONER BYRON: Thank you.

3 VICE CHAIRPERSON BOYD: Thank you.

4 COMMISSIONER GEESMAN: I'll move
5 approval.

6 COMMISSIONER ROSENFELD: Second.

7 VICE CHAIRPERSON BOYD: Motion and a
8 second.

9 All in favor?

10 (Ayes.)

11 VICE CHAIRPERSON BOYD: Opposed? None.
12 Thank you, carries four to nothing.

13 Item 14, University of California
14 Riverside. Possible approval of amendment for an
15 augmentation of \$1,142,408 to PIER work
16 authorization. The amendments funds three
17 research projects under the air quality research
18 program. Ms. Mueller.

19 MS. MUELLER: Good morning. I'm Marla
20 Mueller and I'm with the PIER environmental area
21 program.

22 At the business meeting March 17, 2004,
23 the Commissioners approved a work authorization
24 with the University of Riverside to administer the
25 PIER air quality research program.

1 The purpose of this augmentation is to
2 provide annual research funds to that PIER air
3 quality research program. California continues to
4 have some of the worst air quality in the United
5 States; and California regulators continue to
6 wrestle with how to meet federal and state clean
7 air requirements.

8 This program addresses the important
9 issue of air quality and energy production. This
10 proposed augmentation would add \$1,142,408 to the
11 existing agreement to allow for continuation of
12 this important research.

13 Consistent with the budget proposal for
14 06/07 this augmentation would fund three research
15 projects: a tracer study to produce data needed
16 for improving near-field air quality models for
17 distributed generation; development of test
18 protocols to accurately measure low emission
19 levels required by the Air Resources Board
20 certification of distributed generation; and a
21 scoping study to examine the feasibility of energy
22 efficiency and similar measures as a measure in
23 state implementation plans to meet federal air
24 quality standards.

25 The first of these projects would be

1 with UC Riverside, and would not exceed \$400,000.

2 To date there have been no experiments
3 to measure how pollution is dispersed from the
4 exhaust of a distributed generation unit operating
5 in an urban environment with the effects of
6 buildings, streets, et cetera.

7 Understanding how these pollutants
8 disperse is a major factor in determining the
9 impact of near-range air quality and public
10 exposure from the operation of distributed
11 generation.

12 The objective of this research is to
13 improve the current understanding of the
14 dispersion of these pollutants in the near-field,
15 which would be up to 1 kilometer, by conducting
16 tracer studies and by doing some water --
17 experiments. This data would be used to improve
18 existing models. In fact, we're currently funding
19 a model that would specifically go into that near-
20 field model to help improve it.

21 And then the other two projects would be
22 brought back to the business meeting when we've
23 identified the specific contractors for that work.

24 Thank you.

25 VICE CHAIRPERSON BOYD: Thank you. I

1 believe there's supposed to be a correction to the
2 second bulleted item which reads \$842,408; it's
3 supposed to --

4 MS. MUELLER: Yes, --

5 VICE CHAIRPERSON BOYD: -- changed to
6 542?

7 MS. MUELLER: Yes, thank you.

8 VICE CHAIRPERSON BOYD: Any questions,
9 comments?

10 COMMISSIONER GEESMAN: Well, I'll repeat
11 the comment I made in the R&D Committee as it
12 relates to the third bullet. The scoping study to
13 examine the feasibility of energy efficiency as a
14 measure in the state implementation plans.

15 The State of Maryland included energy
16 efficiency in its SIP in 2004. And I think the
17 California air quality regulatory system has been
18 slow on the uptake in this subject area. And I'm
19 hopeful that with the role expected for energy
20 efficiency in meeting our AB-32 goals, that this
21 takes on a much higher priority in our air quality
22 regulatory system than it has up to now.

23 COMMISSIONER ROSENFELD: Can I add to
24 Commissioner Geesman's praise of this. You talked
25 about World War I. My memory is I believe that

1 energy efficiency has been a recommended measure
2 for 15 years back at South Coast Air Quality
3 Management District. And they have never gotten
4 around to approving the project.

5 They badly need their SIP, white roofs,
6 cool-colored pavements, heat island mitigation,
7 all of these things have been suggested for a long
8 time. And I hope the scoping study speeds them up
9 a little bit.

10 MS. MUELLER: I was just going to give a
11 real quick update. I do have a draft statement of
12 work. I've talked to the South Coast and the
13 Sacramento Metropolitan Air Quality Management
14 District. They're both interested in this project
15 and have agreed to review the statement of work.

16 So as soon as I touch base with a couple
17 people in the Commission I will be sending that
18 out for their review. Also I've talked to the
19 federal EPA. I do need to talk to ARB. I feel
20 bringing them in at this point in the process will
21 increase our chances of it becoming a part of the
22 SIP.

23 COMMISSIONER GEESMAN: Excellent.

24 COMMISSIONER ROSENFELD: And use all
25 your charm.

1 (Laughter.)

2 COMMISSIONER ROSENFELD: I have a ten-
3 year-old paper here for you to pass out.

4 MS. MUELLER: Thank you.

5 VICE CHAIRPERSON BOYD: Well, I was
6 personally quite intrigued with this and excited
7 about it when I read about it for this meeting.
8 So, let's see if we can all move the issue. I
9 think there's a Chair at the Air Board who will be
10 receptive to this idea now. So, good luck.

11 COMMISSIONER GEESMAN: I'll move the
12 item.

13 COMMISSIONER ROSENFELD: Second.

14 VICE CHAIRPERSON BOYD: Commissioner
15 Byron has a question.

16 COMMISSIONER BYRON: If I may, I was
17 struck -- I'm also in support of this -- but I was
18 struck in the problem statement there was a line
19 "emission limits for small DG have been set so low
20 that ARB test methods are no longer adequate to
21 detect such low levels." And I was not aware of
22 this. Can you ell me how significant that problem
23 is?

24 MS. MUELLER: ARB has found with their
25 2007 standards that they're having trouble

1 certifying microturbines. So, we've had
2 discussions and discussed this with them. They're
3 very interested in the project that will improve
4 their methods so that they can -- will improve
5 their chances of certifying specifically
6 microturbines.

7 But their feeling is that microturbines
8 is the most difficult problem. And when we get
9 the microturbines taken care of that we'll address
10 the other DG technologies that the Air Resources
11 Board is responsible for.

12 COMMISSIONER BYRON: Now, when you say
13 microturbines are the most significant problem,
14 you mean with regard to detection of the emission
15 levels?

16 MS. MUELLER: Yes, with regard to being
17 able to measure because of the low flow rate, the
18 small exhaust stack. There's a variety of issues
19 that it presents.

20 COMMISSIONER BYRON: Okay.

21 MS. MUELLER: And they've had one
22 microturbine that was not able to be certified in
23 the noise. So they need an improved method to be
24 able to be sure they can certify these.

25 VICE CHAIRPERSON BOYD: I found it a

1 little unusual that they passed the measure
2 without a test method being available.

3 COMMISSIONER BYRON: Yes.

4 VICE CHAIRPERSON BOYD: That's rather
5 atypical in my memory. But my memory is ten years
6 old now, so.

7 MS. MUELLER: And I had discussions with
8 them before this went in. So I guess they felt
9 their standard was adequate until they've come up
10 to this problem.

11 VICE CHAIRPERSON BOYD: Marla's charm
12 didn't work. Anyway, --

13 COMMISSIONER BYRON: All right, thank
14 you.

15 VICE CHAIRPERSON BOYD: -- there's been
16 a motion and a second.

17 All in favor?

18 (Ayes.)

19 VICE CHAIRPERSON BOYD: Opposed? None.
20 Thank you, Marla.

21 I was trying to make a correlation with
22 World War I, but I'll stay away from that.

23 Item 15, Ekster and Associates.

24 Possible approval of work authorization MR-72 for
25 \$75,000 with Ekster and Associates under the UC

1 Master Research Agreement. The project, Field
2 Demonstration of Automation of Sludge Thickening
3 Process. Mr. Kapoor.

4 MR. KAPOOR: Good morning,
5 Commissioners. My name is Rajesh Kapoor, and I am
6 a member of PIER Staff in industrial, agriculture
7 and water program.

8 Staff requests your approval of \$75,000
9 work authorization with CIEE directing them to
10 conduct a field demonstration of new sludge
11 management process designed to improve and
12 stabilize that maintain production from existing
13 water treatment digesters.

14 This is the first of three projects that
15 was selected through competitive solicitation
16 through CIEE for a PIER-funded field demonstration
17 of emerging energy efficient industrial technology
18 projects.

19 Sludge produced during this water
20 treatment is processes in digesters before the
21 final disposal. Methane gases byproduct of sludge
22 digestion, methane gases utilized for generation
23 of electric -- energy, and used onsite.

24 It is estimated that as much as 60
25 megawatt of electricity was produced in 2001 from

1 wastewater treatment plants in California.

2 The quality of methane, the use of
3 production and overall heating value of the gas
4 varies and depends on the concentration of sludge.
5 Frequent variation of sludge concentration due to
6 many factor prevents sludge digesters from
7 optimizing the methane production. Current
8 practice to use manual controls to adjust digester
9 sludge feedstock to the digester. The
10 concentration of sludge varies widely due to
11 changing nature of that sludge.

12 The operating parameters of sludge
13 thickness have to be adjusted continuously to
14 optimize the gas production of the digester.

15 This proposed project will develop an
16 automatic control system to maintain that
17 concentration of feed sludge. The control system
18 will utilize newly developed online analyzers to
19 maintain the sludge concentration. The control
20 system and instrumentation will be installed as
21 the wastewater plant in City of Oxnard.

22 It is expected that automation of sludge
23 thickening process will increase methane
24 production by at least 10 percent. The proposed
25 project will use \$75,000 from fiscal year 2005

1 allocation, and the contractor will provide
2 \$60,000 as a cost share.

3 The R&D Policy Committee approved this
4 project. Staff requests your approval for this
5 project.

6 VICE CHAIRPERSON BOYD: Thank you. Any
7 questions, comments?

8 COMMISSIONER GEESMAN: Move approval.

9 COMMISSIONER ROSENFELD: Second.

10 VICE CHAIRPERSON BOYD: There's a motion
11 and a second.

12 All in favor?

13 (Ayes.)

14 VICE CHAIRPERSON BOYD: Approved four to
15 nothing.

16 MR. KAPOOR: Thank you, Commissioners.

17 VICE CHAIRPERSON BOYD: Thank you.

18 Item number 16, Lawrence Berkeley
19 National Laboratory. Possible approval of
20 amendment adding \$250,000 and six months to the
21 terms of contract 500-05-001 with Lawrence
22 Berkeley National Lab. Ms. Chew.

23 MS. CHEW: Good day, Commissioners. I'm
24 Kristy Chew, the Demand Response Program Manager
25 for the Energy Systems Integration Team of the

1 Public Interest Energy Research program.

2 I'm here today to request approval of
3 amendment 2 of contract 500-05-001 with Lawrence
4 Berkeley National Laboratory for the amount of
5 \$250,000. The Energy Commission's PIER program
6 entered into this contract with Lawrence Berkeley
7 National Lab in August 2005.

8 Its focus has been and continues to be
9 the field demonstration of the aggregation of
10 existing small commercial and residential customer
11 air conditioning load control devices to
12 demonstrate the use of demand response as an
13 ancillary service for the California Independent
14 System Operator.

15 The Lawrence Berkeley National Lab
16 researchers have worked closely with Southern
17 California Edison to recruit the necessary
18 customers and to install the test equipment; and
19 the researchers are also working with the Cal-ISO
20 to insure that these test methods are sound enough
21 to meet the stringent demands of the Cal-ISO
22 ancillary services market.

23 As part of this effort Lawrence Berkeley
24 National Lab and PIER are working with the Western
25 Electricity Coordinating Council to obtain the

1 necessary changes to the current WECC rules to
2 allow demand response to be used as a Cal-ISO
3 ancillary service, such as spinning reserve.

4 This amendment allows the research team
5 to expand the research project by one, widening
6 the data collection area to include three
7 additional distribution lines; two, to develop and
8 test dispatch signals between the Cal-ISO and
9 Southern California Edison; and three, conduct
10 customer surveys of program participants and
11 nonparticipants.

12 Staff recommends that the Commission
13 approve this contract amendment. I'm happy to
14 answer any questions at this time.

15 VICE CHAIRPERSON BOYD: Thank you, Ms.
16 Chew. Any questions, comments?

17 COMMISSIONER ROSENFELD: This came
18 through the R&D Committee, of course, and I --
19 move the item.

20 COMMISSIONER GEESMAN: Second.

21 VICE CHAIRPERSON BOYD: There's a motion
22 and second.

23 All in favor?

24 (Ayes.)

25 VICE CHAIRPERSON BOYD: Opposed? None.

1 Congratulations, approved unanimously.

2 Item 17, Lawrence Berkeley National
3 Laboratory. Possible approval of contract 500-07-
4 001 for \$150,000 with Lawrence Berkeley to
5 evaluate the capability of fine-grid global
6 circulation models to address urban reflectivity.
7 I just wanted to mention that word, urban
8 reflectivity.

9 COMMISSIONER ROSENFELD: Good words.

10 VICE CHAIRPERSON BOYD: Mr. O'Hagan.

11 MR. O'HAGAN: Good morning,
12 Commissioners. My name is Joe O'Hagan; I'm in the
13 PIER environmental area. I'm appearing on behalf
14 of Guido Franco who couldn't be here.

15 The proposed project with Lawrence
16 Berkeley National Lab is to measure the potential
17 climate effects of increasing albedo urban
18 reflectivity from urban areas. Urban areas
19 probably occupy about 1 percent of the earth's
20 surface. There's been a lot of climate change
21 research looking at the effects of land use
22 changes on the climate. But there hasn't been, as
23 far as we know, any work on looking at increasing
24 albedo from urban areas.

25 And of course, through the efforts such

1 as cool roofs, cool communities, and things like
2 that for energy savings the hope is that we can
3 see increases in efficiency savings, 20 percent or
4 so. And there'll be a corresponding increase in
5 reflectivity from these areas.

6 So the question is how to model these
7 effects and to determine just what the extent of
8 their effects on the climate is.

9 And part of the issues facing, that will
10 be addressed in this study would be that most of
11 the climate models have a fairly coarse-grained
12 resolution. Most urban areas are a lot smaller
13 than the grid size that's used in these models.

14 So part of this effort would be to look
15 at recent improvements in climate models dealing
16 with a fine-grained resolution that would more
17 capture the -- better capture the effects of these
18 urban areas, select the appropriate climate change
19 model. And then utilize data that had been
20 collected by the Berkeley Urban Heat Island
21 Institute. And then run simulations with this
22 climate change model on different levels of CO2
23 and different levels of urban albedo.

24 VICE CHAIRPERSON BOYD: Thank you,
25 Mr. O'Hagan.

1 COMMISSIONER ROSENFELD: Thanks, Joe.
2 I'd like to make a comment particularly to Mr.
3 Geesman, although I think he understands this
4 already. This is an interesting spinoff of the
5 urban heat island work that's been going on.

6 If you have a white roof in Los Angeles
7 or whatever, it pays for itself because it saves
8 air conditioning electricity.

9 That's not what this project is about.
10 This is the fact that you actually make cities
11 more reflective. As Joe said, 1 percent of the
12 land mass of the world is cities, and it's
13 growing.

14 If you make them more reflective by 10
15 percent, you cool the earth a little bit. Maybe 1
16 percent of a degree; but the whole problem we're
17 fighting is 2 degrees.

18 We ran an old model by Jim Hansen, and
19 if we calculate his model correctly, we need to do
20 some more work. The total amount of savings in
21 CO2 equivalent is 5 gigatons, which is, I think,
22 25 times the whole proposition 32 amount that we
23 are breaking our backs over.

24 So, it does seem like a very interesting
25 spinoff. So I, with pleasure, move the item.

1 COMMISSIONER GEESMAN: Second.

2 VICE CHAIRPERSON BOYD: There's a motion
3 and a second.

4 All in favor?

5 (Ayes.)

6 VICE CHAIRPERSON BOYD: Opposed? None.
7 Congratulations, four to nothing.

8 MR. O'HAGAN: Thank you very much.

9 VICE CHAIRPERSON BOYD: Commissioner
10 Rosenfeld, I thought we were trying to see if your
11 cool roofs were heating the climate up a little
12 with this study, but never mind.

13 COMMISSIONER ROSENFELD: Not at all.

14 VICE CHAIRPERSON BOYD: Item number 18,
15 Lawrence Livermore National Laboratory. Possible
16 approval of work authorization MR-073 for \$150,000
17 with Lawrence Livermore. The project is research
18 activities for the AB-1925 report to the
19 Legislature on accelerating geologic carbon
20 sequestration strategies. Ms. Mueller.

21 MS. MUELLER: Good morning. I'm here on
22 behalf of Mary Jane Coombs requesting approval of
23 this work authorization for \$150,000. The
24 California Energy Commission, in coordination with
25 the Department of Conservation, was tasked by

1 Assembly Bill 1925 with writing a report to the
2 California Legislature containing recommendations
3 for how the state can develop parameters to
4 accelerate the adoption of cost effective geologic
5 sequestration strategies for long-term management
6 of industrial carbon dioxide.

7 This report must be submitted to the
8 Legislature on or before November 1, 2007; and
9 will be included in the 2007 IEPR.

10 The contractor at Lawrence Livermore
11 National Lab will engage and manage a team of
12 experts to evaluate California's needs with
13 respect to facilitating the adoption of cost
14 effective, commercial-scale geologic
15 sequestration.

16 This work will involve applying existing
17 models and analysis developed through the West
18 Coast Regional Carbon Sequestration Partnership
19 phase one research and other regional carbon
20 sequestration partnerships.

21 The individual researchers will
22 contribute whitepapers on their findings that will
23 serve as a foundation for the report. These
24 papers will be peer reviewed.

25 A working group, including PIER Staff,

1 WestCARB Staff and subject matter experts was
2 formed to oversee the report's creation. A
3 separate BOA work authorization is funding some
4 additional whitepapers as well as two public
5 workshops.

6 This work authorization will fund the
7 research for two whitepapers, formulation of
8 conclusions and recommendations in coordination
9 with input from other state agencies; and
10 synthesis and publication of the full report.

11 The report will include recommendations
12 for research needs to be addressed and documented
13 in a followup report in 2010.

14 Thank you.

15 VICE CHAIRPERSON BOYD: Thank you.

16 Questions, comments?

17 COMMISSIONER ROSENFELD: Marla, I wasn't
18 listening. When is all this due at the
19 Legislature?

20 MS. MUELLER: November 1st.

21 COMMISSIONER ROSENFELD: November 1st.
22 You've been given a mouthful of stuff to do by
23 November 1st.

24 MS. MUELLER: And I was assured they're
25 going to have it done.

1 COMMISSIONER GEESMAN: The staff has
2 already started working on this, so they're
3 anticipating meeting the deadline.

4 I'll move the item.

5 COMMISSIONER ROSENFELD: Second.

6 VICE CHAIRPERSON BOYD: There's a motion
7 and a second.

8 All in favor?

9 (Ayes.)

10 VICE CHAIRPERSON BOYD: Opposed? None.
11 Thank you. Approved four to nothing.

12 Item 19, California State Controller's
13 Office. Possible approval of amendment 3 to
14 contract 200-98-012 with the Controller's Office
15 to add money and extend the term of the agreement
16 to continue auditing services and support to the
17 PIER audit program. Ms. Aronhalt.

18 MS. ARONHALT: Hi. I'm Susan Aronhalt,
19 and I manage the PIER audit program.

20 This request is for a continuation of
21 the existing interagency agreement with the State
22 Controller's Office. They provide auditing
23 support and services for the PIER audit program.

24 The audit program was developed in 1998
25 as part of the PIER contract streamlining effort

1 to allow simplified and expedited invoicing. The
2 audit program conducts fiscal assessments of PIER
3 contractors and grant recipients to insure they
4 are properly invoicing the Commission, adequately
5 accounting for project costs, and complying with
6 the contract administrative terms. We also
7 provide guidance on the contract fiscal and
8 administrative requirements.

9 The extension augmentation extends it
10 for a period of three years, provides \$100,000 in
11 funding for each year, and clarifies the
12 assessment and audit process.

13 VICE CHAIRPERSON BOYD: Thank you.

14 Questions?

15 COMMISSIONER ROSENFELD: I move the
16 item.

17 COMMISSIONER GEESMAN: Second.

18 VICE CHAIRPERSON BOYD: Motion and a
19 second.

20 All in favor?

21 (Ayes.)

22 VICE CHAIRPERSON BOYD: Carries four to
23 nothing. Thank you.

24 Item 20, possible approval of contract
25 500-07-003 for \$540,000 with John Maulbetsch to

1 quantify the adverse effect of wind on air-cooled
2 condenser fan performance, et cetera. Mr.
3 O'Hagan.

4 MR. O'HAGAN: Good afternoon,
5 Commissioners. My name is Joe O'Hagan; I'm with
6 the PIER environmental area.

7 And the proposed contract before you is
8 to look at the effects of wind on air-cooled
9 condenser dry cooling performance.

10 As you know, using air-cooled condensers
11 for a power plant can save millions of gallons of
12 fresh water a day. But there are performance
13 issues associated with using that cooling
14 technology.

15 One of the major ones that people really
16 didn't appreciate until recently is the effect of
17 wind on condenser performance. And lowered
18 condenser performance certainly affects power
19 plant output.

20 There had been a previous study
21 conducted by Mr. Maulbetsch that looked at the two
22 mechanisms of wind effects on condensers. There's
23 recirculation of the heated air leaving the
24 condenser, going and getting entrained back into
25 the condenser, lowering heat rejection ability.

1 And also direct effect of winds on fan
2 performance. You use a lot of fan power to move
3 that air through the condenser. And the wind
4 actually starves those fans. And so the
5 efficiency of the fans drops off; the air stays
6 longer within the condenser; it heats up. So,
7 once again, your heat rejection ability has
8 dropped off.

9 Up to this recent study that Mr.
10 Maulbetsch had conducted, the thought was that the
11 plume recirculation was the major mechanism for
12 wind effects. But actually his study showed that
13 it's the opposite; it's the effect on fans,
14 especially those on the perimeter of the air-
15 cooled condenser.

16 Usually your air-cooled condensers are 8
17 by 5 of different cells, each with a fan. And
18 those on the outside where the wind effects are
19 the ones most susceptible to the wind effects.
20 And there can be a significant dropoff in
21 performance.

22 The proposed project would be to do an
23 in-depth study at one 540 megawatt power plant
24 with an air-cooled condenser. There would also be
25 modeling done to understand these mechanisms. And

1 also to identify and evaluate potential mitigation
2 measures.

3 Initial studies showed that just a
4 catwalk out on the perimeter of the air-cooled
5 condenser, what you have is purely utilitarian,
6 but actually does help reduce the effects of the
7 cross-winds on fan performance.

8 VICE CHAIRPERSON BOYD: Thank you.

9 Questions?

10 COMMISSIONER ROSENFELD: Instead of just
11 wind -- on airplanes, we need baffles on fans, I
12 guess. I move the item.

13 COMMISSIONER GEESMAN: Second.

14 VICE CHAIRPERSON BOYD: There's a motion
15 and a second.

16 All in favor?

17 (Ayes.)

18 VICE CHAIRPERSON BOYD: Opposed? None.
19 Carries four to nothing. Thank you, Mr. O'Hagan.

20 MR. O'HAGAN: Thank you very much.

21 VICE CHAIRPERSON BOYD: Item 21, Gas
22 Technology Institute. Possible approval of
23 amendment to contract 500-05-011 with GTI to add
24 \$446,494 in additional tasks to this contract.

25 The tasks will explore improving the

1 energy efficiency of commercial under- and over-
2 fired charbroilers. I found that interesting.
3 And secondly, and curiously, to study possible
4 deficiencies in tankless water heaters. Mr.
5 Scruton.

6 MR. SCRUTON: Good afternoon,
7 Commissioners. I am Chris Scruton with the PIER
8 buildings efficiency team.

9 In the first phase of this gas-funded
10 research the Gas Technology Institute developed a
11 new type of commercial fryer which proved to be
12 more energy efficient and also required much lower
13 volumes of cooking oil than the standard units.
14 This design has been adopted for production by a
15 commercial cooking equipment manufacturer.

16 The first phase also examined whole-
17 house tankless water heaters, which are considered
18 to be a more efficient alternative to tank-type
19 water heaters. But in this study they discovered
20 that there are actually many performance
21 deficiencies.

22 So if this amendment is approved by the
23 Commission the Gas Technology Institute will
24 undertake to develop more efficient charbroilers
25 with the same manufacturer they worked with on the

1 fryers. And they will also investigate ways to
2 solve or mitigate the problems that were
3 discovered with the tankless water heaters.

4 So, based on the success in the earlier
5 phase of the program, the staff recommends
6 approval. And I'll be happy to try to answer any
7 questions you might have.

8 VICE CHAIRPERSON BOYD: Thank you.

9 Questions, comments?

10 COMMISSIONER ROSENFELD: I move the
11 item.

12 COMMISSIONER GEESMAN: Second.

13 VICE CHAIRPERSON BOYD: A motion and a
14 second.

15 All in favor?

16 (Ayes.)

17 VICE CHAIRPERSON BOYD: Opposed? None.

18 Carries four to nothing. Thank you.

19 Item 22, Renewable Portfolio Standard
20 2005 Procurement Verification. Also approval of
21 this report as required by Senate Bill 1078. Mr.
22 Orta.

23 MR. ORTA: Good morning; I am Jason Orta
24 with the Energy Commission's Renewable Energy
25 Office.

1 I am here today to request approval of
2 the renewable portfolio standard verification
3 report, and the associated errata, which provide
4 the Energy Commission's findings on the amount of
5 renewable energy procured by Pacific Gas and
6 Electric, Southern California Edison, and San
7 Diego Gas and Electric under California's
8 renewable portfolio standard.

9 The verification report is prepared as
10 part of the Energy Commission's responsibilities
11 under the RPS. The verification report verifies
12 the investor-owned utilities' initial baseline
13 procurement amount, which serves as their
14 baselines for purposes of their renewable
15 portfolio standard targets and their annual
16 procurement targets for the years 2004 and 2005.

17 The RPS procurement verification report
18 transmits the Energy Commission's RPS procurement
19 verification findings to the CPUC.

20 In addition I would also like to read
21 the various errata to the report.

22 Under the acknowledgements page under
23 the section titled, written comments were received
24 from the following, add the following in the line
25 before the California Public Utilities Commission:

1 Three Phases Energy Services.

2 The errata also revises the 2005
3 Southern California Edison's annual procurement
4 target. Before it was -- the draft stated that it
5 was 12,949,076 megawatt hours. And that number
6 has been revised to 12,620,726 megawatt hours.

7 The procurement towards Southern
8 California Edison -- Southern California Edison's
9 procurement towards in excess of their 2005 annual
10 procurement has been revised from negative 24,675
11 megawatt hours to 303,675 megawatt hours.

12 Their estimated incremental procurement
13 for Southern California Edison for 2005 has been
14 revised from 704,959 megawatt hours to 1,033,309
15 megawatt hours.

16 Southern California Edison's incremental
17 procurement in excess of their 2005 incremental
18 procurement target has been revised from negative
19 24,675 to positive 303,675.

20 This table also includes table 5, which
21 also includes revisions to San Diego Gas and
22 Electric's annual procurement target for 2005 from
23 604,740 megawatt hours to 604,741 megawatt hours.
24 Their total procured in excess of their -- for San
25 Diego Gas and Electric, for their 2005 annual

1 procurement target and total procured in excess of
2 their 2005 incremental procurement target has been
3 revised from 220,626 megawatt hours to 220,625
4 megawatt hours.

5 There's also some additional errata to
6 table 7, which table 7 is entitled, PG&E RPS
7 procurement. The total RPS procurement listed for
8 PG&E for 2004 has been revised from -- from the
9 draft from 8,559,270 to 8,574,976 megawatt hours,
10 which results in a corresponding revision of 11.63
11 percent of their retail sales to 11.65 percent of
12 their retail sales.

13 Also, the 8,574,976 number is also
14 PG&E's procurement that's eligible towards their
15 2004 annual procurement target.

16 Additionally, there is also a footnote
17 that clarifies that all of PG&E's procurement for
18 2004, all 8,574,976 megawatt hours will be
19 eligible towards their annual procurement target.

20 In addition to that, table 9 was
21 corrected to show that PG&E's procurement for 2004
22 is 9.84 percent above their annual procurement
23 target for 2004.

24 Additionally, table 15 has also been
25 revised for Southern California Edison. Their

1 2004 annual procurement target has been revised
2 from 12,219,442 megawatt hours to 11,891,092
3 megawatt hours. For 2005 it's been revised from
4 12,949,076 megawatt hours to 12,620,726 megawatt
5 hours, which results in a revised retail sales --
6 their annual procurement target for Southern
7 California Edison for 2004 and 2005 results in for
8 2004 that's 16.3 percent of their retail sales;
9 for 2005 it's 16.76 percent of their retail sales.

10 For 2004 for Southern California
11 Edison's incremental procurement has been revised
12 from 1,734,209 megawatt hours to 2,062,559
13 megawatt hours. For 2005 that's been revised from
14 704,960 megawatt hours to 1,033,309 megawatt
15 hours, which corresponds to a revision from 2.38
16 to 2.83 percent of their 2004 retail sales; from
17 .94 percent to 1.37 percent for 2005.

18 And additionally, there's also another
19 clarifying change. For 2005 Southern California
20 Edison's procurement, eligible towards their
21 annual procurement target has been revised from
22 12,924,402 megawatt hours to 12,924,401 megawatt
23 hours.

24 Again, these also -- the changes for the
25 revisions towards Southern California Edison's

1 2004 and 2005 annual procurement targets have
2 resulted in 16.84 percent of their 2003 retail
3 sales and 17.3 percent of their 2004 retail sales.

4 Table 17 has been revised to show that
5 Southern California Edison's 2004 procurement is
6 11.41 percent above their RPS target instead of
7 8.41 percent. For 2005 it's been revised upwards
8 from -- to 2.41 percent of their RPS target
9 instead of .19 percent below.

10 Again, as I mentioned earlier, I revised
11 2005's San Diego Gas and Electric's annual
12 procurement target from 604,740 megawatt hours to
13 604,741 megawatt hours. That appears on table 20.
14 That change is also made on table 21.

15 And finally, on table 22, instead of
16 being 51.92 percent above their annual procurement
17 target for 2004, San Diego Gas and Electric is
18 51.77 percent. And for 2005 instead of being
19 36.58 percent above their annual procurement
20 target for that year, they are 36.48 percent.

21 And that concludes the errata that I
22 have here.

23 VICE CHAIRPERSON BOYD: Thank you. We
24 do have one witness. Any questions of staff
25 before I turn to Mr. Guliassi of PG&E?

1 MR. GULIASI: Thank you, Commissioner
2 Boyd, Commissioners. I want to first thank you
3 for holding this item from the originally
4 scheduled date back in May. There were some
5 concerns we had with the report and we needed this
6 amount of time to straighten the matter out.

7 I especially want to thank the
8 Renewables Staff, and particularly Mr. Orta, who
9 spent a lot of time and effort on this issue. You
10 can probably tell from the remarks he made,
11 there's a lot of painstaking work that goes into
12 getting this report right. And it's important
13 that the numbers be right.

14 So I want to thank you and thank the
15 staff for the effort that you put into this
16 report.

17 VICE CHAIRPERSON BOYD: Thank you. Any
18 comments?

19 COMMISSIONER GEESMAN: Move approval.

20 VICE CHAIRPERSON BOYD: A motion. Is
21 there a second?

22 COMMISSIONER BYRON: Second.

23 VICE CHAIRPERSON BOYD: A motion and a
24 second.

25 All in favor?

1 (Ayes.)

2 VICE CHAIRPERSON BOYD: Opposed? None.
3 Approved four to nothing. Thank you.

4 MR. ORTA: Thank you.

5 VICE CHAIRPERSON BOYD: Agenda item 23
6 is the minutes. We have to remove one of the
7 three items listed there, approval of the June
8 20th meeting minutes will have to be held over for
9 lack of a quorum present at that meeting to
10 approve the minutes thereof.

11 So we have minutes of June 27th and the
12 minutes of July 11th. And we have plenty of
13 people here --

14 COMMISSIONER ROSENFELD: I move the two
15 minutes.

16 COMMISSIONER GEESMAN: Second.

17 VICE CHAIRPERSON BOYD: All in favor?

18 (Ayes.)

19 VICE CHAIRPERSON BOYD: Approved.

20 Item 24, Commission Committee
21 presentations. Anybody have anything they'd like
22 to discuss under this heading? Yes, Commissioner
23 Byron.

24 COMMISSIONER BYRON: Just briefly, if I
25 may. Like Commissioner Geesman, I also have lost

1 an excellent principal advisor recently, Dr. Kevin
2 Kennedy. Actually he's not left yet, but he's in
3 San Francisco today doing work for the Commission.

4 I just briefly wanted to say that
5 Kevin's been at the Commission for about seven
6 years, working in siting. He was the Project
7 Manager for the Integrated Energy Policy Report in
8 2005, and he's been a Senior Advisor for the last
9 two years for Chairman Desmond and myself this
10 past year.

11 I wanted to say that his skills, his
12 expertise, his personality are going to be missed.
13 However, his passion for climate change will be
14 realized more fully in his new position. We
15 haven't lost him from state service; he's moving
16 to the Air Resources Board. And certainly the Air
17 Resources Board gained in our loss.

18 But my best wishes to Kevin, and we will
19 miss him.

20 VICE CHAIRPERSON BOYD: Well, we do look
21 forward to improved relations with the Air
22 Resources Board on the subject of climate change
23 with Kevin being there. So your loss, hopefully,
24 is our gain. Thank you.

25 And other?

1 Chief Counsel's report. Mr.

2 Chamberlain.

3 MR. CHAMBERLAIN: Thank you, Mr.
4 Chairman. I'd just like to introduce the newest
5 member of my staff. You met him a little earlier
6 in the meeting. Jared Babula has a --

7 VICE CHAIRPERSON BOYD: Welcome.

8 MR. CHAMBERLAIN: -- BS degree in cell
9 biology and a JD with honors from Empire College.
10 He has a master of environmental law with honors
11 from Golden Gate University. And he spent the
12 first seven years of his practice doing toxic tort
13 litigation where he developed a collaborative
14 approach to case resolution.

15 He would like you to know that he's an
16 A-level competitive badminton player.

17 (Laughter.)

18 MR. CHAMBERLAIN: And he now refers to
19 himself as a humble state employee trying to make
20 the world a better place one regulation at a time.

21 VICE CHAIRPERSON BOYD: Welcome to that
22 club.

23 MR. CHAMBERLAIN: In addition, we are
24 losing one of our attorneys, Ken Celli, who's
25 moving to the Hearing Office. So I think that's

1 our loss, but the Commission's gain, nonetheless.

2 VICE CHAIRPERSON BOYD: Thank you, Mr.
3 Chamberlain.

4 Executive Director's report. Ms. Jones.

5 CHIEF DEPUTY DIRECTOR JONES: Hello. I
6 would just like to make one introduction. As you
7 know, B.B. has restructured the Energy Commission
8 to once again assemble our analytic activities
9 associated with electricity supply and demand.
10 And he has selected Sylvia Bender -- if you'd come
11 up, Sylvia -- to serve as the Deputy Director for
12 the new Electricity Supply Analysis Division.

13 VICE CHAIRPERSON BOYD: Congratulations,
14 Sylvia.

15 COMMISSIONER GEESMAN: Congratulations.

16 MS. BENDER: Thank you. I have to say,
17 it is both an honor and a challenge to be selected
18 for this position and given this charge of
19 renewing this analytic division.

20 It certainly is not something that I'm
21 going to be able to do all alone. So I'm looking
22 forward to involvement from a lot of staff around
23 the Commission, and certainly a lot of support and
24 direction from all of you, as well.

25 I think it's not going to be an easy

1 job, but I think I'm optimistic about the future
2 of this; and I hope that you all will be, too.

3 VICE CHAIRPERSON BOYD: Indeed. Looking
4 forward to not having to delve as deep as we have
5 had to in the past, some of these estimates we
6 produce. We have high expectations, Sylvia.
7 Congratulations.

8 MS. BENDER: Okay.

9 COMMISSIONER BYRON: Congratulations.

10 COMMISSIONER ROSENFELD:
11 Congratulations, Sylvia.

12 CHIEF DEPUTY DIRECTOR JONES: And that's
13 all I have to report.

14 VICE CHAIRPERSON BOYD: Okay. We have a
15 Legislative Director, we must have a Legislative
16 Director's report.

17 LEGISLATIVE DIRECTOR SMITH: Good
18 afternoon, Commissioners. Strangely, I have
19 nothing specific to report to you folks. I'd be
20 more than happy to answer any questions if you
21 have any.

22 VICE CHAIRPERSON BOYD: Do we dare?
23 Thank you, Mike, I don't think we have any
24 questions. Pleased to see you have a few minutes
25 lull to attend our meeting, though.

1 Public Adviser's report.

2 MR. BARTSCH: Mr. Chairman, Nick Bartsch
3 representing the Public Adviser's Office. We do
4 not have anything specific to report to you this
5 time. Thank you.

6 VICE CHAIRPERSON BOYD: Thank you, Mr.
7 Bartsch.

8 Public comment? Les, you're the only
9 public left. Do you have anything else you --

10 (Laughter.)

11 MR. GULIASI: How much time do I have?

12 (Laughter.)

13 VICE CHAIRPERSON BOYD: None. Seeing
14 none, we stand adjourned. Thank you, all.

15 (Whereupon, at 12:27 p.m., the business
16 meeting was adjourned.)

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CERTIFICATE OF REPORTER

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

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

IN WITNESS WHEREOF, I have hereunto set my hand this 28th day of August, 2007.

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