

DOCKET

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BUSINESS MEETING
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

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

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

THURSDAY, SEPTEMBER 14, 2006

10:04 A.M.

Reported by:
Peter Petty
Contract Number: 150-04-001

COMMISSIONERS PRESENT

Jackalyne Pfannenstiel, Chairperson

James D. Boyd

Jeffrey D. Byron

STAFF and CONTRACTORS PRESENT

B.B. Blevins, Executive Director

Arlene Ichien, for Chief Counsel Chamberlain

Dick Ratliff, for Chief Counsel Chamberlain

James Reede, Jr.

Atlas Hill

Angela Gould

Michael Lozano

Brian Ellis

Dora Yen-Nakafugi

Jamie Patterson

Michael Seaman

Melinda Dorin

Donna Stone

Paul Kramer

PUBLIC ADVISER

Nick Bartsch for Margret Kim

ALSO PRESENT

Allan J. Thompson, Attorney
on behalf of Panoche Energy Center

ALSO PRESENT

Merwin Brown, Director, Transmission Research
Program
California Institute for Energy and Environment

Noel Davis
Chambers Group

Peter Raimondi
University of California Santa Cruz

Eric Pendergraft
AES Huntington Beach, LLC

John Steinbeck
Tenere Environmental

D. Shane Beck
MBC Applied Environmental Sciences

Tom Luster (via teleconference)
California Coastal Commission

Rick R. Rothman, Attorney
Bingham McCutchen, LLP

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

2 10:04 a.m.

3 CHAIRPERSON PFANNENSTIEL: This is the
4 Energy Commission business meeting of September
5 14th. Please join me in the Pledge of Allegiance.

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

8 CHAIRPERSON PFANNENSTIEL: We have a
9 couple of agenda modifications to start with.
10 We're going to move consideration of item number
11 2, Huntington Beach, to the end of the agenda. I
12 think that the rest of the agenda will move fairly
13 expeditiously, so I think we'll move that to after
14 item 14 on the agenda.

15 Item 13 has been held for the next
16 business meeting, so that will not be considered
17 today.

18 Begin with the consent calendar; do I
19 have a motion for the consent calendar?

20 COMMISSIONER BOYD: Move consent.

21 COMMISSIONER BYRON: Second.

22 CHAIRPERSON PFANNENSTIEL: In favor?

23 (Ayes.)

24 CHAIRPERSON PFANNENSTIEL: Consent
25 calendar is approved.

1 Moving on to item number 3a, possible
2 approval of the Executive Director's data adequacy
3 recommendation for the Vernon Power Plant, a 943
4 megawatt combined cycle facility in the City of
5 Vernon, Los Angeles County. Dr. Reede.

6 DR. REEDE: Good morning, Chairman
7 Pfannenstiel and Commissioners. My name is Dr.
8 James Reede. And the staff has completed its data
9 adequacy review of the Vernon Power Plant project
10 application for certification and supplements A
11 and B, submitted on August 25th and September 8th.

12 Staff has determined that the AFC and
13 the supplements contain all the information
14 required by California Code of Regulations, Title
15 20, section 1704, including appendix B for the 12-
16 month AFC process.

17 We have received comments from other
18 agencies. The South Coast Air Quality Management
19 District has indicated that the air permit
20 application is complete as of July 28, 2006.

21 And L.A. County Department of Public
22 Works, Watershed Management Division and Los
23 Angeles Department of Water and Power have both
24 raised concerns regarding the applicant's
25 transmission line routes.

1 Caltrans has also expressed concerns
2 related to the proposed transmission lines
3 crossing of Interstate 710.

4 Finally, the Southern California
5 Association of Governments submitted a no-comments
6 letter.

7 Staff recommends that the Energy
8 Commission accept the application for
9 certification and please appoint a Committee to
10 oversee this proceeding.

11 CHAIRPERSON PFANNENSTIEL: Thank you,
12 Dr. Reede. Is there further discussion on that
13 item?

14 Do we have a motion to approve the
15 Executive Director's recommendation?

16 COMMISSIONER BOYD: I'll move approval.

17 COMMISSIONER BYRON: Second.

18 CHAIRPERSON PFANNENSTIEL: In favor?

19 (Ayes.)

20 CHAIRPERSON PFANNENSTIEL: So item 3a
21 has been approved.

22 3b is possible Committee assignment for
23 the Vernon Power Plant project. That possible
24 Committee assignment is myself as Presiding
25 Commissioner, and Commissioner Boyd as Associate.

1 Is there a motion for that Committee?

2 COMMISSIONER BYRON: I'll move that
3 item.

4 COMMISSIONER BOYD: I'll second it.

5 CHAIRPERSON PFANNENSTIEL: In favor?

6 (Ayes.)

7 CHAIRPERSON PFANNENSTIEL: So the
8 Committee has been assigned. Thank you.

9 DR. REEDE: Thank you, Chairman
10 Pfannenstiel.

11 CHAIRPERSON PFANNENSTIEL: Item 4,
12 possible approval -- 4a, possible approval of the
13 Executive Director's data adequacy recommendation
14 for the Panoche Energy Center, a nominal 400
15 megawatt simple cycle facility located in
16 unincorporated western Fresno County. Dr. Reede,
17 again.

18 DR. REEDE: Good morning, again,
19 Chairman Pfannenstiel. I'm still Dr. James Reede.
20 The staff has completed its data adequacy review
21 of the Panoche Energy Center application for
22 certification submitted on August 2, 2006.

23 Staff has determined that the AFC does
24 not contain all the information required by the
25 California Code of Regulations, Title 20, section

1 1704, including appendix B for the 12-month AFC
2 process.

3 Twenty-three technical disciplines were
4 reviewed, and information is still needed in ten
5 areas: air quality, biological resources,
6 geological hazards, land use, paleontological
7 resources, project overview, reliability,
8 socioeconomics, transmission system engineering
9 and water resources.

10 The attachments included with your
11 packet include the worksheets of whether each
12 technical discipline evaluated is adequate or
13 inadequate. We have not received written comments
14 from the San Joaquin Valley Air Pollution Control
15 District yet. However, they have indicated that
16 they received the air permit application as of
17 August 10, 2006.

18 We have received information from the
19 U.S. Environmental Protection Agency stating that
20 the applicant will require an underground
21 injection control permit. They will also require
22 a permit from the Regional Board.

23 On the issue of water resources, the
24 applicant did not provide characterization of the
25 water being used, nor of the deep injection well

1 that they are proposing. We see this as a major
2 impediment to them eventually reaching data
3 adequacy.

4 The U.S. Bureau of Reclamation has
5 approached the Energy Commission with a proposed
6 solution for their use of cooling water; and staff
7 has also developed a zero liquid discharge
8 scenario that if the applicant would consider, may
9 be able to move the project forward.

10 At this meeting staff is recommending
11 that the Energy Commission not accept the AFC
12 until all the additional information specified in
13 attachment B is supplied.

14 Pursuant to California Code of
15 Regulations, Title 20, section 1709(c), if the
16 Commission accepts staff's recommendation you may
17 use the attached data adequacy worksheets to
18 indicate in writing those parts of the AFC that
19 fail to meet the information requirements and the
20 manner in which it can be made complete.

21 Staff recommends that the application be
22 determined to be data inadequate.

23 CHAIRPERSON PFANNENSTIEL: Thank you.

24 And for the applicant?

25 MR. THOMPSON: Yes, thank you very much.

1 My name is Allan Thompson, Project Counsel for the
2 project.

3 We accept the data inadequacy
4 determination recommendation by staff in the
5 listed areas. And we are working diligently to
6 compile that information and submit it. For
7 example, the EPA permit hopefully is being filed
8 as we speak.

9 I'm not going to comment on the proposed
10 fixes by staff. We will see those in due time and
11 consider them. But I wanted you to know that we
12 are working on them hard, and we'll get them in as
13 soon as we can.

14 Thank you.

15 CHAIRPERSON PFANNENSTIEL: Thank you,
16 Mr. Thompson. I'm wondering whether there is any
17 estimate from the applicant on when we might see
18 this as data adequate?

19 MR. THOMPSON: We are targeting the end
20 of the month. And target dates are only that,
21 target dates. Part of the recommendations are
22 that we get data adequacy statements from the EPA
23 on the deep well injection permit, and from San
24 Joaquin on the air permit.

25 So part of the unknowns in the data

1 acquisition effort are getting other agencies'
2 approvals that we have submitted sufficient
3 information for their review, as well.

4 CHAIRPERSON PFANNENSTIEL: I understand.
5 Thank you. So we'll take no action on that item
6 then at this time. Thank you, both.

7 COMMISSIONER BOYD: I think we have to
8 move approval of the staff recommendation to find
9 the application data inadequate, and I'll make
10 that motion.

11 COMMISSIONER BYRON: I'll second it.

12 CHAIRPERSON PFANNENSTIEL: Thank you.

13 All in favor?

14 (Ayes.)

15 CHAIRPERSON PFANNENSTIEL: We have moved
16 that.

17 Item 5, possible approval of purchase
18 order 06-433.00-008 for \$250,000 to Enterprise
19 Network Solutions, Inc., for technical support and
20 integration of computer-related technologies into
21 the Energy Commission's information technology
22 structure. Good morning.

23 MR. HILL: Good morning. My name is
24 Atlas Hill; I'm with the information technology
25 services branch.

1 We are asking for the approval of a
2 purchase order contract with Enterprise Network
3 Solutions to provide technical support, assistance
4 with planning, installing and operational training
5 for state employees.

6 All of this is for the integration of
7 computer-related technologies into the Energy
8 Commission's information technology
9 infrastructure.

10 Examples of these computer-related
11 technologies requiring professional services would
12 be the expansion of our uninterruptible power
13 supply, or UPS system; our computer-cooling
14 system; installation of standard computer racks;
15 expansion of our data network, data communication
16 network; service co-location support; and last but
17 not least, independent performance and security
18 technology audits.

19 CHAIRPERSON PFANNENSTIEL: Thank you.
20 Are there questions? Discussion?

21 COMMISSIONER BOYD: Move approval.

22 COMMISSIONER BYRON: Second.

23 CHAIRPERSON PFANNENSTIEL: In favor?

24 (Ayes.)

25 CHAIRPERSON PFANNENSTIEL: Thank you.

1 MR. HILL: Thank you.

2 CHAIRPERSON PFANNENSTIEL: Item 6,
3 possible approval of purchase order 03-05-70-0471D
4 for \$55,100 to Public Sector Consultants, Inc. for
5 an independent project oversight consultant to
6 provide project oversight services for the Western
7 Renewable Energy Generation Information System
8 project. Good morning.

9 MS. GOULD: Good morning. My name's
10 Angie Gould; I'm from the renewable energy office.
11 And I'm presenting the WREGIS independent project
12 oversight consultant contract for your approval.

13 The WREGIS project is being established
14 in response to California legislation that
15 requires the Energy Commission to develop a system
16 to track renewable energy generation, to verify
17 compliance with California's RPS.

18 WREGIS will assist in verifying
19 compliance with renewable energy programs in the
20 western interconnect, and help insure that
21 renewable energy output is counted only once.

22 And this contract is for an independent
23 project oversight consultant or IPOC. And they
24 will help insure that WREGIS is completed within
25 scope timeline and estimated budget. And this

1 consultant is required by the Department of
2 Finance for this project.

3 Public Sectors Consultants' proposal was
4 selected as the winning bidder for a ten-month
5 term from September 2006 to July 2007. We ask
6 that the Energy Commission approve this contract.

7 CHAIRPERSON PFANNENSTIEL: Thank you,
8 Ms. Gould. Questions? Commissioner Byron.

9 COMMISSIONER BYRON: Excuse me. Ms.
10 Gould, do you know, are there more WREGIS
11 contracts coming?

12 MS. GOULD: One more.

13 COMMISSIONER BYRON: Okay.

14 MS. GOULD: In two weeks.

15 COMMISSIONER BYRON: Thank you.

16 CHAIRPERSON PFANNENSTIEL: Further
17 questions?

18 COMMISSIONER BOYD: Move approval.

19 COMMISSIONER BYRON: Second.

20 CHAIRPERSON PFANNENSTIEL: All in favor?

21 (Ayes.)

22 MS. GOULD: Thank you.

23 CHAIRPERSON PFANNENSTIEL: Thank you,
24 it's been approved.

25 Item 7, possible approval of contract

1 500-06-015 for \$284,969 with the Gas Technology
2 Institute to demonstrate a new cost-effective,
3 high-efficiency, low-emission, gas-fired radiant-
4 tube technology used extensively in heat-treating
5 industries. Good morning.

6 MR. LOZANO: CEC contract manager
7 Michael Lozano. Good morning.

8 Increases in the price of natural gas
9 and increasingly stringent emissions requirements
10 have demonstrated the need for more efficient
11 sources of metals heating and melting.

12 One of the technologies for process
13 heating for the ferrous and nonferrous metals
14 industry is a single-ended radiant tube, also
15 known as a SERT.

16 Gas Technology Institute and North
17 American Manufacturing Company have developed a
18 new technology called the reverse annulus single-
19 ended radiant tube, the RASERT.

20 The two relevant RASERT technologies are
21 more uniform heat distribution through the tube,
22 which increases thermal efficiency to 68 percent
23 from approximately 42 percent. And decreases
24 associated NOx formations from about 140 ppm to 70
25 ppm.

1 The goals of this agreement are, one, to
2 collaborate with the host site, California Steel
3 Industries, for technology deployment; conduct
4 repeated performance verification analysis of the
5 RASERT prototype; fabricate ten commercial RASERTs
6 for deployment purposes; carry out information
7 gathering of the installed RASERTs to confirm
8 performance metrics; and establish a technology
9 transfer and commercialization plan.

10 The proposed project represents an
11 investment of the public funds in the amount of
12 \$285,000 over a period of two years. Matched
13 funding in the amount of \$171,000 has been pledged
14 by the partners. The 285,000 will be funded out
15 of the '06 natural gas research program budget of
16 \$15 million, which is 2 percent of the budget.

17 I'm recommending that this project be
18 adopted.

19 CHAIRPERSON PFANNENSTIEL: Are there
20 questions?

21 COMMISSIONER BOYD: I will move
22 approval; and just comment that I am impressed
23 with the potential to reduce NOx emissions by 50
24 percent. Our air quality community look very
25 anxiously to this, should it prove successful.

1 Good luck.

2 MR. LOZANO: Thank you.

3 COMMISSIONER BYRON: And I second it.

4 CHAIRPERSON PFANNENSTIEL: All in favor?

5 (Ayes.)

6 CHAIRPERSON PFANNENSTIEL: It's been
7 approved; thank you.

8 Item 8, possible approval of contract
9 500-06-018 for \$950,458 with the Gas Technology
10 Institute to demonstrate a cost-effective, high-
11 efficiency, gas-fired, drum dryer that produces
12 lower NOx emissions for use in the food and dairy
13 industries. Mr. Lozano.

14 MR. LOZANO: Contract manager Michael
15 Lozano, again. Good morning. Increases in prices
16 of natural gas and emissions requirements again
17 have demonstrated a need for efficient sources of
18 food process heating. GTI, Flynn Burner
19 Corporation and Groupe Lapperier and Verreault,
20 the dryer manufacturers and partners, have
21 developed a new gas-fired food-drying system, the
22 high-efficiency drum dryer, with the goal of
23 increased energy efficiency and reduced emissions.
24 Dryer efficiencies targeted at 75 to 85
25 percent; and currently it is 60 to 70 percent.

1 NOx emissions are targeted at less than 50 ppm
2 versus conventional steam-generated systems of
3 greater than 100 ppm.

4 The project utilizes unique heat-
5 transfer designs in a novel burner configuration.
6 The components of the system have been developed
7 and proven in the laboratory. CEC proposes to
8 partner with GTI, its partners and Southern
9 California Gas to demonstrate this drum dryer at a
10 site in southern California.

11 The proposed project represents an
12 investment of public funds in the amount of
13 \$950,458 for a period of three years. Matched
14 funding in the amount of \$561,000 has been pledged
15 by the partner. The 950,000 will be funded out of
16 the '06 natural gas research program budget of 15
17 million. It constitutes 7 percent of the budget.

18 I am recommending that this project be
19 adopted.

20 CHAIRPERSON PFANNENSTIEL: Thank you.

21 Discussion?

22 COMMISSIONER BYRON: I'll move the item.

23 COMMISSIONER BOYD: I'll second.

24 CHAIRPERSON PFANNENSTIEL: In favor?

25 (Ayes.)

1 CHAIRPERSON PFANNENSTIEL: The item has
2 been approved. Thank you, Mr. Lozano.

3 Item 9, possible approval of contract
4 500-06-019 for \$250,000 with Gas Technology
5 Institute to validate a new instrument capable of
6 measuring the isotopic composition of methane in
7 ambient air. Good morning.

8 MR. ELLIS: Good morning, Commissioners.
9 I'm Brian Ellis; I'm the CEC contract manager.
10 I'm seeking approval for a research that's going
11 to be the field testing and third-party validation
12 of a new instrument with the unprecedented ability
13 to measure in real time the isotopic composition
14 of methane in ambient air.

15 And this technology is important because
16 different sources like landfills or natural gas
17 pipelines will emit methane with different
18 signature isotopic compositions. And basically
19 what that means is that the ratio of carbon 12 to
20 carbon 13 in the methane emitted.

21 In theory, this instrument would enable
22 a regional monitoring of the proportional
23 contribution of different sources to methane
24 emissions. And this kind of environmental
25 forensics could lead to critical feedback to our

1 methane emissions estimates in the California
2 inventory, which is known to contain significant
3 uncertainties.

4 So no instrument currently is able to do
5 this, to measure the isotopic composition in real
6 time that's commercially available. And this does
7 represent a significant technical roadblock in
8 these kinds of studies.

9 So the goal of this research, besides
10 the testing of this new instrument, is to position
11 the new instrument's developer, which is GTI, to
12 collaborate in future California-specific studies
13 with LBNL, the Lawrence Berkeley Labs and NOAA,
14 both of whom have expressed interest in the
15 technology and are going to be the ones that are
16 third parties validating it for us.

17 If the instrument proves functional it
18 could be used both in stationary monitoring
19 projects, or mounted on aircraft, vehicles, and
20 moved around. It could additionally be adopted to
21 measure CO2 and methane.

22 And the ability to take real-time field
23 measurements like these would enable the
24 California inventory to be checked and greatly
25 refined. And a California Climate Action Team

1 identified method for reducing greenhouse gas
2 emission, which is reducing methane from
3 landfills. This would definitely help with that.

4 CHAIRPERSON PFANNENSTIEL: Thank you.
5 It sounds like a great breakthrough. Any
6 questions? Discussion?

7 COMMISSIONER BOYD: I'll move the item,
8 and I'm very impressed with the concept. I hope
9 you're successful, because we're certainly in the
10 greenhouse gas arena big-time. And this agency is
11 really trying to mine that resource, landfill gas.

12 COMMISSIONER BYRON: I continue to be
13 amazed at this organization. I hope this is also
14 successful. I second it.

15 CHAIRPERSON PFANNENSTIEL: All in favor?

16 (Ayes.)

17 CHAIRPERSON PFANNENSTIEL: It's been
18 approved, thank you.

19 MR. ELLIS: Thanks.

20 CHAIRPERSON PFANNENSTIEL: Item 10,
21 possible approval of contract 500-06-017 with the
22 U.S. Department of Energy, Lawrence Livermore
23 Laboratory, for \$350,000 to develop an interactive
24 web-based tool that consolidates renewable
25 resource data into a geographic information system

1 format suitable for integrated renewable siting,
2 planning and assessment. Good morning.

3 MS. YEN-NAKAFUGI: Good morning,
4 Commissioners. My name is Dora Yen and I'm the
5 technical lead for the wind resource program under
6 the PIER R&D program. And I'll be presenting this
7 item on behalf of Michael Kane.

8 We're seeking approval for research with
9 Lawrence Livermore National Lab's DOE facility to
10 develop an interactive web-based tool that will
11 enable us to consolidate the renewable resource
12 data, the current data that has been developed via
13 PIER research, as well as other updated
14 information from other state agencies in other
15 research projects, into a GIS information format
16 that will also enable and support analytical
17 capability.

18 To, at the same time, allow us to look
19 at renewable resources in an integrated fashion,
20 whether it's wind, geothermal, biomass; and also
21 encourage the sharing of the information amongst
22 all the infrastructures, whether it be the
23 Universities of California, the research
24 facilities, the general public. And then also to
25 support the buildout of our California GIS

1 information infrastructure.

2 It's very important that the information
3 that we currently use for research is validated
4 and is current, and submitted in a timely fashion.
5 And the attractiveness of this GIS platform is
6 that the information can be shared across all
7 platforms. And a web-based tool allows us to do
8 analysis without having to be a GIS expert.

9 So, for those reasons, we support the
10 approval of this project, as well as recommend
11 that this is part of the portfolio of suggested
12 projects in the 2005/2006 research R&D program.

13 CHAIRPERSON PFANNENSTIEL: Dora, is this
14 the first web-based tool for the resource
15 assessments? Or is this an update of something
16 that already exists?

17 MS. YEN-NAKAFUGI: Last year we
18 developed a demonstration portal just using wind
19 information. And we found that that has been very
20 useful for monitoring the implementation of wind
21 resources; that's expanding at such a fast rate,
22 that we have to get the information and
23 disseminate it out as quickly as possible. So
24 that demonstration portal will be expanded to
25 include all the renewable resources.

1 And also to integrate other resources
2 that may be impacted with the development of
3 renewables. So, it's really an analytical tool
4 base, not just producing maps.

5 CHAIRPERSON PFANNENSTIEL: And when do
6 we think it will be available to be used by
7 ourselves and the general public?

8 MS. YEN-NAKAFUGI: The portal will be
9 released, if you will, in two phases. The first
10 will be released internally for us to kind of use
11 and make sure that it's user-friendly, and do some
12 checks.

13 But it's planned to be released in two
14 phases. This is currently planned for about an
15 18-month project development timeframe. It's
16 scheduled out for 26 months right now. But the
17 first release will be within the next nine months.
18 And then -- because right now we're collecting all
19 the information. There's still some resource
20 assessments that are being completed at this time
21 that we want to take advantage of.

22 CHAIRPERSON PFANNENSTIEL: Thank you.
23 I'll look forward to being able to use it. Are
24 there other questions?

25 Is there a motion?

1 COMMISSIONER BOYD: Move approval.

2 COMMISSIONER BYRON: And I second.

3 CHAIRPERSON PFANNENSTIEL: All in favor?

4 (Ayes.)

5 CHAIRPERSON PFANNENSTIEL: It's been

6 approved, thank you.

7 Item 11, possible approval of PIER work
8 authorization MR-054 for \$599,467 with Virginia
9 Polytechnic Institute and State University under
10 the UC master research agreement number 500-02-004
11 with the Regents of the University of California,
12 Office of the President/CIEE for advanced
13 protection system using wide area measurements.

14 Good morning, Mr. Patterson.

15 MR. PATTERSON: Good morning,
16 Commissioners. I'm Jamie Patterson. I happen to
17 be the Commission contract manager for the
18 transmission research program under PIER.

19 Today we are looking for approval of
20 this contract, of this actually work authorization
21 in our master research agreement with Virginia
22 Tech. It is entitled, advanced protection systems
23 using wide area measurements.

24 What this is, this is actually adaptive
25 relaying using phaser measurement units. The

1 transmission research program happened to have an
2 area focused on the operation that primarily is
3 advancing the technology of phaser measurement
4 units. And we have brought forth several of these
5 projects throughout, oh, I guess about past two or
6 three business meetings that you have heard. And
7 this is another one seeking the application of
8 phaser measurement units in the valuable manner.

9 With me today I have Dr. Merwin Brown;
10 he is the Director of the CIEE, the transmission
11 research program. This particular project will be
12 managed by CIEE. They manage all of our projects
13 and provide the administration, implementation and
14 planning for the transmission program.

15 Merwin, would you like to present this,
16 the details of the project?

17 DR. BROWN: Okay, thank you, Jamie. I'm
18 Merwin Brown with the California Institute for
19 Energy and Environment and the University of
20 California. And as Jamie said, Director of the
21 Transmission Research Program in the PIER program.

22 As Jamie said, this project is another
23 one that we're bringing forward to you for
24 approval that is an application, developing an
25 application of being able to use phaser

1 measurement units to improve the reliability of
2 the grid. And in this particular case, to reduce
3 considerably the possibility of an outage.

4 One of the things that we found in
5 analyzing past outages is that we found that the
6 modern grid has developed what might be called an
7 auto-immune disorder, in which its protection
8 system, which is the relays, actually have been
9 found to make the situation worse rather than
10 better.

11 It's a very complicated subject, but the
12 simple answer, perhaps, as to why has been that
13 the grid operators facing a very uncertain and
14 changeable environment brought on by a number of
15 things, new kinds of generators, the wholesale
16 market situation, and even changes in the way
17 customers use energy, has meant that the old way
18 of using relays is what's created this problem.

19 This is going to attempt to use phaser
20 measurements to be able to allow the operator to
21 know in real time the condition of the grid over a
22 wide area so that they can take action of one of
23 two kinds.

24 For the old relays that are dumb and
25 have to be manually reset, the operator can see a

1 condition coming and perhaps take action of
2 another kind to prevent the possible outage if
3 that relay were to be tripped and used.

4 Or, allow a lot of the new relays being
5 bought today are smart relays. They have a
6 communication system associated with them. In
7 that case the operator or the system could
8 potentially automatically change the setting of
9 the relay so as not to cause a potential outage
10 problem.

11 And so that's what this research project
12 is all about.

13 CHAIRPERSON PFANNENSTIEL: Thank you.
14 Are there questions?

15 COMMISSIONER BYRON: Yes.

16 CHAIRPERSON PFANNENSTIEL: Yes.

17 COMMISSIONER BYRON: Dr. Brown, could
18 you just give me a brief explanation on how you
19 coordinate this activity with some of the
20 stakeholders? I assume the ISOs and the utilities
21 are involved in some way?

22 DR. BROWN: Yes. First of all, on a
23 routine basis, all these projects go through a
24 number of I guess you would say scrutiny from the
25 stakeholders, through our various advisory

1 committees, from the policy advisory committee,
2 which is constituted by high-level people in the
3 IOUs, the Cal-ISO, the CPUC. Commissioner John
4 Geesman chairs that committee. And DOE sits on
5 it.

6 Then we have technical advisory
7 committees that also look at this, which are
8 staffed by the technical manager levels of a lot
9 of these companies. And sometimes we also bring
10 in people from outside who can help us evaluate
11 these things.

12 And then this project will also have a
13 special committee put together with these
14 stakeholders that will follow and review and
15 comment on each of the tasks as they're done.

16 And then finally, if this all works out
17 the way that the researchers believe it will,
18 we're going to be asking the California IOUs and
19 Cal-ISO to actually test this on their system. So
20 that's our plan.

21 COMMISSIONER BYRON: Does it have
22 potential application in other system operating
23 regions throughout the country?

24 DR. BROWN: No reason why it couldn't.
25 It's being designed for California; I mean that's

1 the target. But there are obviously similarities
2 with grids across the nation. It will have
3 greater application in the west, I believe, than
4 it would in the east, only -- I mean it will be
5 designed for that, realizing there is a difference
6 in the eastern interconnection of the United
7 States versus the western. But I suspect some of
8 the fundamental research would be -- could be used
9 across the nation.

10 COMMISSIONER BYRON: Thank you.

11 CHAIRPERSON PFANNENSTIEL: Is there a
12 cost-sharing, Merwin?

13 DR. BROWN: At this particular stage,
14 no. It's too much of a fundamental research and
15 the risk is too high. So the only real cost
16 sharing would be the fact that our stakeholders
17 will pay for their participation in the project to
18 review the work, et cetera.

19 CHAIRPERSON PFANNENSTIEL: Further
20 questions?

21 COMMISSIONER BYRON: I'd be glad to move
22 the item.

23 COMMISSIONER BOYD: Second.

24 CHAIRPERSON PFANNENSTIEL: All in favor?

25 (Ayes.)

1 CHAIRPERSON PFANNENSTIEL: Thank you.

2 DR. BROWN: Thank you.

3 CHAIRPERSON PFANNENSTIEL: Item 12,
4 possible approval of an amendment for \$395,577 to
5 PIER work authorization MR-018 with the University
6 of California Davis, under the UC Master Research
7 Agreement number 500-02-004 with the Regents of
8 the University of California, Office of the
9 President/CIEE, for a project titled, California
10 lighting technology hub for research and emerging
11 technologies. Good morning.

12 MR. SEAMAN: Good morning,
13 Commissioners. I'm Michael Seaman from the PIER
14 buildings energy efficiency program.

15 Staff requests your approval for an
16 amendment to an existing PIER-funded work
17 authorization with the California Lighting
18 Technology Center at UC Davis.

19 The amendment adds a new set of tasks
20 that complement and are consistent with the
21 purpose of the original work authorization.

22 California architects, builders and
23 tradespeople, design professionals and utility
24 program planners have difficulty finding current
25 and credible information about energy efficient

1 lighting. While information on advanced lighting
2 technologies exists, the information is hard to
3 find and often not up to date.

4 Existing technology transfer mechanisms
5 tend to fall short of addressing broader
6 information-sharing needs. This problem is
7 particularly acute for PIER-developed lighting
8 products that would benefit from greater market
9 acceptance that would follow from easy access to
10 information about the benefits of their technology
11 innovations.

12 This amendment tasks CLTC to collect and
13 disseminate information about new research on
14 energy efficient lighting, whether done by CLTC,
15 California researchers, or others across the
16 country and around the world. With the amendment
17 CLTC will expand its outreach function to create a
18 portal of information about energy efficient
19 lighting research.

20 This portal will enable one-stop
21 shopping by architects, building design
22 professionals, lighting companies, builders and
23 tradespeople for information about all research on
24 energy efficient lighting.

25 This proposal has the following direct

1 benefits to California: It supports the leading
2 order of efficiency and demand response by
3 providing information on energy efficient lighting
4 systems, controls and demand response
5 technologies.

6 It supports the Governor's executive
7 order to reduce overall electricity use by
8 providing easily accessible information on energy
9 efficient lighting solutions, and by informing
10 green building and code processes.

11 And it provides California utilities,
12 key energy efficiency partners and end users with
13 convenient access to information they need.

14 The proposed amendment has been reviewed
15 by the RD&D Policy Committee which has recommended
16 that the Commission approve it.

17 Are there any questions?

18 CHAIRPERSON PFANNENSTIEL: I'm a big
19 believer in trying to get the information out into
20 those who will be using it, whether it's the
21 architects and engineers and builders, or the
22 general public.

23 And I'm very supportive of this, but I'm
24 trying to -- I don't quite understand whether that
25 information dissemination -- clearly, some of it

1 will be done through a web-based information hub.
2 But then there's reference to there would be other
3 sources of outreach. Will that be done by the
4 Lighting Center, themselves? Or will they sub it
5 out to a marketing firm? Or how do you expect
6 that to be accomplished?

7 MR. SEAMAN: They'll be doing this in
8 partnership with Southern California Edison.
9 There will be an improved web site at CLTC. It
10 will be mirrored at Edison. There will be lobby
11 displays in both locations, northern and southern
12 California. There would be an annual forum to
13 acquire, to capture information on research needs.
14 There will be a number of symposia tailored to the
15 specific audiences. And there will be
16 presentations and exhibits at trade shows.

17 COMMISSIONER BOYD: Question. The
18 municipal utilities, how do we get information
19 into their hands?

20 MR. SEAMAN: We're hoping that the
21 information will get to whoever needs it. And
22 if -- I'm certain that they'll be developing
23 metrics to learn are we getting in touch with the
24 people that we need to.

25 CLTC already has a pretty good track

1 record of reaching a targeted audience with a
2 specific message. With this project they're
3 enabled to go more broadly and more specifically
4 to reach out to whatever targeted audiences need
5 to be touched base with.

6 They're working in very close
7 partnership with industry and with SMUD and with
8 the IOUs. And everybody else is sort of coming
9 along for the ride.

10 COMMISSIONER BOYD: Okay, with our new-
11 found desire, if not responsibility, to work more
12 closely with the municipal utilities, that being
13 the CEC, I just want to make sure we build bridges
14 to all these people with this kind of information.
15 Because I agree with the Chairman, this is very
16 helpful information. This is good stuff with
17 regard to what this Commission is about.

18 So, thanks for your answer, Michael.
19 And maybe on behalf of Commissioner Rosenfeld,
20 I'll move approval.

21 COMMISSIONER BYRON: And I'll second it.

22 CHAIRPERSON PFANNENSTIEL: All in favor?

23 (Ayes.)

24 CHAIRPERSON PFANNENSTIEL: It's been
25 approved; thank you.

1 Item 14, possible approval of two
2 research proposals through the existing contract
3 500-04-025 with the San Jose State University and
4 Moss Landing Marine Laboratory. Good morning.

5 MS. DORIN: Good morning, Commissioners;
6 my name's Melinda Dorin and I'm the project
7 manager for the once-through-cooling contract with
8 Moss Landing Marine Labs over in PIER
9 environmental area.

10 So, just as background. In 2005 we sent
11 out an RFP under this contract. It was actually
12 money that's been encumbered since May of 2005.
13 And at the end of the year we sent out an RFP.
14 And we've already begun five research proposals
15 that we received under the RFP.

16 We did find that based on the technical
17 review there were some research ideas that still
18 needed to be developed. And we sought out two
19 additional proposals to meet the data gaps that we
20 didn't receive for the RFP.

21 So these are -- we had money left in the
22 contract, so these are two additional research
23 proposals. One is with Stratus Consulting and one
24 is with UC Santa Cruz.

25 And they are looking at a variety of

1 tasks. One of the tasks is to look at the models
2 that are used to develop the empirical transport
3 model and the habitat production -- models that
4 are used to calculate habitat restoration. And
5 also there's cumulative impacts analysis and
6 restoration tasks in the research.

7 And there isn't money -- because the
8 money is already encumbered, it's not in the
9 description. But the total money for both
10 contracts is \$292,000.

11 CHAIRPERSON PFANNENSTIEL: I'm sorry,
12 \$292,000?

13 MS. DORIN: -- two thousand dollars.

14 CHAIRPERSON PFANNENSTIEL: And can you
15 tell me what the entire project is?

16 MS. DORIN: Sure. So the first one with
17 UC Santa Cruz, that's the one looking at the
18 models. And they're going to be looking at
19 whether the models are used consistently. So
20 sometimes they use the median and sometimes they
21 use the mean. So, do analysis and look to see how
22 the models are used.

23 And also another part of that research
24 is to look at the target species, and resample,
25 and look at different species and see if the end

1 result of the model is the same. That's one of
2 the projects.

3 The other tasks Stratus Consulting is
4 actually five, it's five tasks. One of those,
5 like I mentioned, is cumulative impacts. And
6 that's really a knowledge-gap analysis. So,
7 looking at what's been done statewide for
8 cumulative impacts and how to design a good
9 cumulative impact analysis in California. One of
10 the tasks.

11 A couple other tasks are to look at
12 indicator species. So, first understand which
13 species we should be looking at, as far as life
14 history information. And then as part of that,
15 see what information is existing or what
16 information may need to be collected to
17 understand. Put that information into the models.

18 CHAIRPERSON PFANNENSTIEL: Thank you.
19 That was helpful. And I also was looking to get
20 the total amount of money for the entire effort,
21 which I see is \$1.5 million. I see that in the
22 writeup; I hadn't seen that. Thank you.

23 MS. DORIN: Oh, right, that 1.5 million
24 was the money that was already encumbered, right.

25 CHAIRPERSON PFANNENSTIEL: Right. I

1 understand. Are there further questions?

2 COMMISSIONER BOYD: Just a comment or --
3 I've discussed this project with Melinda in the
4 past, and I just want to kind of put in the record
5 that -- and maybe say for the Executive Director's
6 benefit, that I want to make sure that the actions
7 that this Commission has taken over the past few
8 years with regard to power plants that utilize
9 once-through cooling, or take their water supply
10 from various marine sites, be they estuaries or
11 the ocean, we've incented several in-depth
12 projects as part of our conditions for approving
13 power plants in the site. And who knows, we may
14 do that in the immediate future.

15 And I just want to make sure that all of
16 this is tied together. Because we've asked a lot
17 of second- and third-party organizations to carry
18 out these studies of impacts and what-have-you.
19 And this is, I would agree, this is much-needed
20 work. And we've all anxiously waited for this.

21 I just want to make sure that we
22 recognize in our various parts of this
23 organization that we have a lot of cross-over here
24 between past siting cases and undoubtedly future
25 siting cases. And this will be a tool that will

1 be very helpful.

2 As one who inherited several power plant
3 siting cases that went on for years because of
4 questions about this, I can see this is a much-
5 needed and welcome tool when it's developed in the
6 future.

7 So I would gladly move approval.

8 COMMISSIONER BYRON: And I second.

9 CHAIRPERSON PFANNENSTIEL: In favor?

10 (Ayes.)

11 CHAIRPERSON PFANNENSTIEL: Thank you,
12 it's been approved.

13 We will now return to item number 2 on
14 the original agenda.

15 MS. ICHIEN: Chairman Pfannenstiel and
16 Commissioners, on this item I am going to recuse
17 myself because I have worked with staff on this
18 matter. And so in Bill Chamberlain's place, Dick
19 Ratliff will be sitting in and be available for
20 you.

21 CHAIRPERSON PFANNENSTIEL: Thank you,
22 Ms. Ichien.

23 Item number 2a. We will take them
24 separately, the a and b. Possible -- 2a is
25 possible decision on the amount and final

1 application of compensation funds to mitigate for
2 impingement and entrainment losses resulting from
3 the operation of the cooling water systems for
4 units 3 and 4. And this is at Huntington Beach
5 Generating Station Retool project.

6 Commission Staff recommends the
7 restoration and maintenance of 104 acres of the
8 Huntington Beach wetlands for approximately \$7.9
9 million.

10 Ms. Stone.

11 MS. STONE: Good morning, Chairman,
12 Commissioners and members of the public. I'm
13 Donna Stone, the Commission's compliance project
14 manager for the Huntington Beach Generating
15 Station Retool project. And I'm going to briefly
16 go over some general facts that apply both to item
17 2a and 2b on the agenda today. These two items
18 are inextricably linked.

19 I will then turn over the technical
20 presentation for item 2a to the Commission's
21 consultants on impingement and entrainment, Dr.
22 Noel Davis of the Chambers Group and Dr. Peter
23 Raimondi of UC Santa Cruz Marine Lab.

24 After our consultants make their
25 presentation, AES Huntington Beach's consultants

1 and representatives will speak.

2 We also have representatives of the
3 Huntington Beach Wetlands Conservancy in the
4 audience today to answer any questions that you
5 may have of them.

6 Representatives of the Santa Ana
7 Regional Water Quality Control Board and the
8 California Coastal Commission are on the
9 telephone, also.

10 A brief history of how we've come to
11 where we are today. Units 3 and 4 were retired by
12 Southern California Edison in 1995. And then
13 after restructuring the generating station was
14 sold to AES. In 2001 the Energy Commission
15 granted an emergency certification for the
16 Huntington Beach Retool project, a 450 megawatt,
17 natural gas fired plant. The hope was that the
18 project would come online quickly and help to
19 alleviate the energy crisis California was
20 experiencing at that time.

21 Due to the expedited permitting process
22 that was used there was not sufficient time to
23 complete the lengthy studies that we normally do
24 prior to certification that determine the impacts
25 and the needed mitigation.

1 Therefore, the Commission's decision
2 contained six additional conditions required of
3 the project owner which are, in part, Bio-3, which
4 was to prepare a monitoring study plan and conduct
5 one year of monitoring to determine the actual
6 results, impingement and entrainment losses
7 resulting from the operation of the once-through
8 cooling system.

9 The second was to provide \$1,500,000 to
10 fund the project's impingement and entrainment and
11 resource sampling studies. And then the third bio
12 condition was Bio-5. It was to provide mitigation
13 and compensation funds to be used for such things
14 as tidal wetlands restoration, creation of
15 artificial reefs, some other form of habitat
16 compensation that is sufficient to fully address
17 the species impacts identified if the studies
18 determined that the project operations resulted in
19 significant impacts to one or more species of
20 coastal fish.

21 The amount of mitigation and
22 compensation funds in the final application will
23 be determined by the Commission in consultation
24 with the project owners and state and federal and
25 local resource agencies. And it is this condition

1 that is the subject of item 2a on the agenda this
2 morning.

3 The study was funded and is complete.
4 But Commission Staff and AES disagree about three
5 main items. One is whether the impacts are
6 significant; two is the level of impacts; and
7 three is the appropriate mitigation for those
8 impacts.

9 After attempting to resolve the
10 disagreement, staff has referred this item to the
11 Siting Committee. The Siting Committee, on July
12 25th, held a public workshop in Huntington Beach
13 at which staff presented its analysis and AES
14 countered with its information and its arguments.

15 On August 30 of this year staff's final
16 analysis was docketed and mailed to the Huntington
17 Beach mailing list and all interested parties; and
18 was posted on the web August 31st. A minute order
19 recommending approval of the staff's
20 recommendation was published by the Siting
21 Committee on September 8th. And then the staff-
22 proposed order was docketed and filed yesterday,
23 September 13th.

24 Today we are requesting that the
25 Commission adopt staff's recommendation on the

1 amount and final application of compensation funds
2 that the project owner is to pay to mitigate for
3 impingement and entrainment losses.

4 And now I'll turn this presentation over
5 to our consultants, Dr. Noel Davis and Dr. Peter
6 Raimondi.

7 DR. DAVIS: The study required by Bio-3
8 was overseen by a technical working group that
9 included the California Energy Commission and its
10 consultants, the California Coastal Commission,
11 the project owner and its consultants, the
12 California Department of Fish and Game, the
13 National Marine Fisheries Service, and the Santa
14 Ana Regional Water Quality Control Board.

15 This technical working group provided
16 input into the sampling design and methods for the
17 impact analysis, and approved the final study
18 plan. It reviewed all of the progress reports on
19 the study and finally approved the final report
20 which was finalized in April of 2005.

21 I'm now going to turn it over to Dr.
22 Pete Raimondi who is going to tell you about the
23 technical aspects of the study and the methods
24 that were used to determine impacts.

25 DR. RAIMONDI: Good morning. Before I

1 start I wanted to just reinforce what Noel had
2 said, which was that all this work was overseen by
3 the technical working group, which was a group of
4 people that had been put together including
5 independent scientists. And for the rest of this
6 discussion, the part that I'm going to give, I
7 wanted to just make everyone aware that we have no
8 contention at all with the technical aspects of
9 this report. The work that has been done by
10 Tenera and MBC is state of the art for California.
11 It's really wonderful work. And so we have no
12 qualms at all about the technical aspects of the
13 work.

14 It's mainly in terms of interpretation.
15 And these are reasonable scientific disagreements.
16 And that's why we're coming to you with these.

17 I want to go over just very briefly the
18 typical impingement, entrainment and thermal
19 effects for a generalized power plant, just so
20 that our terminology is similar.

21 Fish and other organisms, they could be
22 invertebrates, they could be plankton, they could
23 be marine mammals, for that matter, are entrained
24 in cool water that is used to cool the power
25 plant. And this is true for all intakes that use

1 once-through cooling.

2 Those fish and other organisms come in
3 and then there's almost always a traveling screen
4 mechanism that precludes the entry into the power
5 plant, itself, by big things, typically things
6 bigger than about three-eighths of an inch.

7 Those things that are impinged, those
8 are now called impinged organisms. They are then
9 deposited oftentimes into trash. And then they're
10 taken offsite and disposed of. There are some
11 power plants that have return systems, but not
12 this one.

13 The smaller things go through the pipe
14 and into the power plant. And there the
15 assumption, and it's a general assumption that is
16 accepted by all parties, is that anything that
17 actually is entrained into the power plant is
18 killed. And so then those dead things are then
19 deposited out in the outfall, which in Huntington
20 Beach's case is also in the open coast system, and
21 in the thermal discharge.

22 This is a schematic of the Huntington
23 Beach discharge in particular. There's an intake
24 pipe that's about 1500 feet offshore in 27 feet of
25 water. And then there's a discharge pipe that's

1 about 1200 feet offshore in about 22 feet of
2 water. So this is the general schematic for
3 Huntington Beach.

4 How do you go about estimating the
5 losses. What we're really talking about, and all
6 I'm going to be talking about today is entrainment
7 losses. That's entrainment of the larval
8 organisms that come into the plant. How do you go
9 about doing that?

10 This is a fairly straightforward
11 process. It's time consuming, it's labor
12 intensive and it's expensive. But it's a fairly
13 straightforward process.

14 First of all, you can calculate the
15 amount of water that's coming into the plant.
16 That can either be done through measurements or a
17 volumetric approximation based upon the pumps.
18 But that's a fairly straightforward approximation.

19 Then you can measure the concentration
20 of larvae that are coming in; and that's done
21 through sampling, net sampling typically. You
22 just pull nets; you count the number of things in
23 there; you take them to the species group. And
24 then you use that information, the number times
25 the volume, and you get the total number of

1 individuals of whatever species were entrained,
2 that have been entrained during that particular
3 year.

4 During the course of the Huntington
5 Beach study there were 57 fish species, and many
6 other invertebrate species that were collected
7 during the entrainment sampling. I put that
8 number up there, 57, because the analyses that
9 were done, we done on a subset of those species.
10 And that becomes a critical point.

11 So, how do you go about then assessing
12 the impact? I said it's really easy to estimate
13 entrainment, but assessing the impact is a much
14 more difficult process and it's in the realm of
15 models.

16 There are three models that the
17 technical working group agreed to utilize in
18 estimating the impacts or the effects of
19 entrainment. These are commonly used models. And
20 they're used across the whole country.

21 There are two that are what are called
22 demographic models because they turn larval losses
23 into adults. That's the currency, adults. One is
24 called fecundity hindcast, the other is called
25 adult equivalent loss. They're derivatives of the

1 same overall model.

2 The third one, which is a more recent
3 inclusion in the California cases, is what's
4 called proportional mortality. And it's based
5 upon the empirical transport model, something that
6 just came up in a prior item.

7 To understand these, I'm just going to
8 use this schematic. Here are the larvae that are
9 going into the plant through entrainment. And
10 these larvae, if they had not gone into the plant,
11 would have suffered normal mortality out in the
12 open water, and they would have eventually turned
13 into a certain number of adult fish. If you just
14 calculate the number of adult fish that these
15 larvae would have turned into, in the absence of
16 the power plant, you'd get an estimate of the loss
17 of adult stock. And that's adult equivalent loss,
18 because those are the adults that were lost due to
19 the entrainment of larvae.

20 To get that sort of information you need
21 one piece of information; and it's a piece of
22 information that we oftentimes don't have. And
23 that is the survivorship between the larval phase.
24 Those are the little babies that have just been
25 born, and the adult fish some years later. That

1 information is absent for most California species.

2 The other way to go about it is to take
3 these larvae before they've gone into the power
4 plant and say, how many adult females would have
5 been required to produce those larvae. You need
6 two pieces of information for that. You need to
7 know the number of babies adult females typically
8 produce; and then the loss rate, or the
9 survivorship between adult female extruding these
10 babies in a time when they are taken into the
11 power plant. Again, we don't have that
12 information for many species in California.

13 So, if you look, this is a table from
14 the report, and this is just the fecundity
15 hindcast column and this is the adult equivalent
16 loss column. The only point of this column is to
17 indicate how many not-applicables there are. And
18 the reason that there are not applicable is
19 because we didn't have the demographic or the life
20 history information to estimate fecundity hindcast
21 or adult equivalent losses for those species.

22 So there's only two species, the goby
23 complex and the northern anchovy that we can
24 calculate both. And one additional one for
25 blennies.

1 And so the only point of these last
2 series of slides is to say we don't have any
3 fundamental disagreement with the adult equivalent
4 loss estimation or fecundity hindcast estimation.
5 We just don't have the data to utilize it in any
6 sort of comprehensive way.

7 And so when we're looking at what the
8 impacts are of entrainment, the first two models,
9 fecundity hindcast, we don't have enough
10 information for adult equivalent loss. We also
11 don't have enough information, not that we don't
12 want to use them, we just can't.

13 And we can't because those sorts of data
14 have not been collected yet for the species that
15 are entrained there.

16 And so we're left, really, with one and
17 only one option, and that's proportional
18 mortality. Now I want to describe that to you
19 just briefly.

20 So, to understand proportional mortality
21 you need to understand two concepts, not one; not
22 just piece of M , which is the proportional
23 mortality coefficient, but also this term that's
24 called the source water population.

25 The source water population is a spatial

1 area, it's a region out in the ocean that contains
2 the larvae that could be at risk of entrainment.
3 So, it's that spatial area.

4 And what is that spatial area? It's
5 that spatial area where larvae could transit
6 during their early life and end up in the intake
7 pipe. And that's based upon how long they're in
8 the plankton.

9 So, what's proportional mortality, then?
10 Proportional mortality then is the percentage of
11 larvae at risk in that source water population
12 that are killed as a result of entrainment. So
13 some fraction of the ones at risk will be lost due
14 to entrainment. That's proportional mortality.

15 And so in this case it's a 1 percent.
16 And 1 percent might seem really small, but you
17 have to take that 1 percent in the context of the
18 source water population, as I'll describe in just
19 a second.

20 How was this done at Huntington Beach?
21 At Huntington Beach they established a spatial
22 grid to sample larvae that could be at risk of
23 entrainment. This is about a 10 by 4.5 kilometer
24 grid. There were stations that were set up in a T
25 formation. This is a very typical, this was

1 agreed upon by the technical working group; this
2 is state of the art stuff, again, no qualms about
3 this whatsoever.

4 Based upon the sampling in this you can
5 then establish what the source water population is
6 for a particular species. And here's another key
7 point. The proportional mortality estimates and
8 the source water populations will be different for
9 each species. It's not a uniform number.

10 So, as an example, for queenfish, a
11 croaker, the source water body is this area
12 depicted in red here, which is about 51 miles. So
13 it's 51 miles along the coastline out to just
14 about 4.5.

15 What that means is that individuals in
16 the source water population were at risk to
17 entrainment. For white croaker and other croaker
18 it was about 29 miles, and so it's smaller. Why
19 the difference? Their life histories, their
20 larval periods are different, their larval periods
21 of vulnerability. And you can see that for a
22 spotfin it's 10, and for blennies it's 7, and so
23 there's a variety of source water populations.

24 So, what do we do then. Remember, we
25 had 57 species. We can't use them all because

1 there just weren't data on -- sufficient data on
2 all them, so we had to take this particular
3 approach, which was to determine target species.
4 Target species are mainly determined by their
5 prevalence. If there's lots of them they're
6 probably a good estimator of the impact. If
7 there's few of them, probably not so good.

8 Determine the period when larvae are at
9 risk. That establishes the source water
10 population. Calculate the proportional mortality
11 for those target species.

12 Then this is a big jump, but it's an
13 important one. We're going to assume that the
14 target species, those ten or so species that we're
15 actually able to assess, are representative of
16 species that are not targets. Those are other
17 fish species and also invertebrates. So we get a
18 comprehensive view, if we make that assumption, of
19 the losses across the community of things that
20 could be lost.

21 And then these values represent the
22 estimated rates of mortality for all species that
23 have larvae who proportional mortalities were not
24 directly determined.

25 Here are the species that were used, and

1 I'm leaving one out, the goby complex, which
2 actually had huge numbers of losses due to
3 entrainment, and the AES Tenera are going to talk
4 about them separately.

5 So, we concentrated on those species
6 that are considered the open coast species; and
7 these are all open coast species. And this column
8 here, this is the actual estimated annual
9 entrainment. And it goes from 69 million down to
10 about 6 million larvae.

11 This is the proportional mortality
12 expressed in terms of percentages based upon our
13 best single estimate. And so if you just go
14 through here and you take the average, the best
15 estimate of the proportional mortality across all
16 species is about half a percent, which seems tiny,
17 tiny. In my opinion, that's misleading, the
18 assumption that that's tiny.

19 If you also incorporate a level of
20 uncertainty, because while this estimates the best
21 single estimate, there's uncertainty in these.
22 And so if we view something like a confidence
23 interval, how confident we are of this, the range
24 of possible effects are somewhere between half a
25 percent and 30 percent. And so the range is

1 broad. And while this is the best single
2 estimate, it could be as high as 30 percent based
3 upon the estimate of error that we have in these
4 models.

5 So, with the fecundity hindcast and EO,
6 we can't estimate adult loss. We can, but we
7 can't in this particular case, because we don't
8 have the data. With proportional mortality we
9 can.

10 And now here's the real question, and
11 this is where we enter into the realm of
12 disagreement between the two sides. What loss is
13 environmentally important. What counts as
14 important. Is it local, regional or national.
15 And so I'm going to present our view of this.

16 We think, and we favor the use of this
17 concept that is called area of production
18 foregone, sometimes also called habitat production
19 foregone; same model. It's a way to interpret the
20 loss. This method allows for conversion of
21 organism loss to habitat. And it can work for any
22 source of loss. Impingement, which we're not
23 talking about here, or entrainment. It can also
24 work for any estimate of loss, which is fecundity
25 hindcast or adult equivalent.

1 But importantly here it works really
2 well for proportional mortality. So we're going
3 to come back here; I'm going to use this example
4 again, and tell you that you can't, in my opinion,
5 interpret proportional mortality without knowing
6 the source water population.

7 There are two scenarios that I'm going
8 to play out here to give you our attitude about
9 this.

10 In scenario one, the proportional
11 mortality is 10 percent; in the other one it's
12 about half a percent, .56 percent, which is the
13 number that we're using.

14 What that means is that 10 percent of
15 the larvae at risk, or in scenario two, about half
16 a percent of the larvae at risk are actually lost,
17 killed due to entrainment. And just based upon
18 this, 10 percent is way worse, and it is, 10
19 percent is worse than half a percent. There's no
20 question about that.

21 Until you include the source water
22 population. And now let me tell you that in these
23 two examples the source water population's one
24 acre, that means 10 percent of the larvae in that
25 one-acre area are lost. And here it's 640 acres

1 or a square mile, which means half a percent of
2 all the larvae in 640 square acres are lost.

3 And if you multiply them together you
4 get, it's a simple expression, but you get the
5 area of production foregone. It's just a product
6 of those two.

7 And so in these two cases the area of
8 production foregone is .1 acre in scenario one;
9 and 3.6 acres in scenario two. And we view this
10 as the currency, as the correct currency. What
11 this means is that you would have to restore 3.6
12 acres or add 3.6 acres of new habitat to
13 compensate for the larval losses. In this case
14 you'd have to add .1 acres.

15 And that's why we use both these terms,
16 proportional mortality and source water
17 population, as a product and a new term, which is
18 APF, to give us a currency to evaluate impacts.

19 Okay, so for proportional mortality of
20 queenfish the mortality of queenfish was .6
21 percent. So we can calculate the source water
22 population, which I've already shown you; that's
23 this region here. Then the habitat required to
24 compensate for queenfish losses alone would be
25 89,928 acres, that this, that's the source water

1 population. Times .006, which is the loss rate,
2 which comes out to be 539 acres.

3 What this says is if you wanted to
4 completely compensate for the losses of queenfish
5 larvae you'd have to add 539 acres of new habitat
6 to the system. And that's based upon the best
7 single estimate of loss of queenfish.

8 If you go with the confidence interval
9 it would be up to about 26,000 acres. And so the
10 range is somewhere between 500 and 26,000; the
11 best single estimate is 500, but it could be much
12 more than that.

13 If you go to the tables then, and we
14 estimate the average APF, it comes out to be 208
15 acres across all species. But for units 3 and 4
16 we're going to cut it in half, and that comes up
17 with 104 acres. That's where the 104 acres comes
18 from. It's based upon the average APF for the
19 whole Huntington Beach system, divided into,
20 because we're only talking about units 3 and 4.
21 That's our best single estimate; the impact could
22 be as large as 4800 acres if you go with the
23 confidence interval.

24 And that's a description of the approach
25 that we took. And what does this mean? What it

1 means is if 104 up to 4800 acres of new Bay
2 habitat were added to the system in the general
3 area of the source water body, then for units 3
4 and 4, the direct impacts to fish and
5 invertebrates would be mitigated for. They'd be
6 compensated.

7 Direct impacts to other entrained
8 species would probably be mitigated for. The ones
9 that we didn't target, the ones that we didn't
10 sample, which is important. Because we want to
11 compensate for everything.

12 And indirect effects, things that feed
13 on those would probably also be mitigated for,
14 assuming that you could produce this new habitat
15 and it was comparable to what was in the area
16 already.

17 And so I'm going to turn it back over to
18 Noel now.

19 DR. DAVIS: The technical working group
20 used the information from the impingement and
21 entrainment study on the magnitude and nature of
22 impacts in order to determine the significance of
23 impacts and the amount of mitigation that would be
24 required to compensate for those impacts.

25 Because this process is a CEQA-

1 equivalent process, in order to determine
2 significance we had to use mandatory thresholds of
3 significance under CEQA. And on the slide here
4 are the thresholds of significance right from the
5 CEQA guidelines that apply to biological
6 resources. And the ones that are highlighted are
7 the ones that we based our determination of
8 significance on.

9 As Dr. Raimondi told you, the analysis
10 was done on a small number of targeted species.
11 But those are just representative of many more
12 species that are entrained by the cooling water
13 system.

14 Every day as much as, a permitted amount
15 of 253.5 million gallons per day may go into the
16 cooling water system to cool units 3 and 4. And
17 that water is not just water, it's habitat. And
18 it includes many many small organisms, a great
19 diversity of small organisms. And these small
20 organisms include the eggs, larvae and spores of
21 marine fishes, invertebrates and plants.

22 And these small organisms are also the
23 base of the food well. They're eaten by adult
24 fish, which then are eaten by a higher order
25 predators including seabirds, larger fishes,

1 marine mammals and human beings.

2 When all the organisms in the water that
3 goes through the power plant are lost, essentially
4 amounts to a loss of function of that seawater
5 habitat. It's losing its function as reproduction
6 because the output of reproduction, the eggs,
7 larvae and spores are killed. And it also
8 represents a loss of foraging value because all of
9 these organisms that form the base of the food
10 well also are killed.

11 So, by the mandatory threshold of
12 significance, this constitutes a reduction in the
13 functional value of native fish, wildlife and
14 plant habitat. And therefore is found to be
15 significant under CEQA.

16 In addition, the killing of what amounts
17 to billions of small organisms a year is clearly a
18 substantial degradation of the environment; again,
19 a mandatory finding of significance under CEQA.

20 In addition, this ocean water in the
21 vicinity of the power plant is foraging habitat
22 for several listed species. The endangered
23 California least tern has a breeding colony on the
24 beach just down the coast from the power plant.
25 And it feeds on fish species that are impinged and

1 entrained by the cooling water system.

2 The federal threatened western snowy
3 plover is abundant on the beaches near the power
4 plant. And it feeds on invertebrates, including
5 sand crabs, whose larvae are entrained in the
6 power plant.

7 And the endangered California brown
8 pelican also is common in the waters around the
9 power plant. And it, too, feeds on fish species
10 that are impinged and entrained.

11 Therefore, while there's no direct
12 impacts to listed species, there's indirect
13 impacts because their foraging habitat is
14 degraded. Again, a mandatory finding of
15 significance under CEQA.

16 Finally, I think we've all been
17 concerned and aware lately that our ocean waters
18 off California have become a serious cause of
19 concern. We see fisheries dropping and being
20 closed. And many measures being taken to try to
21 improve the state of our waters.

22 The impingement and entrainment of
23 marine animals by the cooling water system of the
24 power plant are contributing to the significant
25 cumulative impacts on marine life. So that, too,

1 is a finding of significance under CEQA.

2 As Dr. Raimondi told you, in order to
3 compensate for those losses -- oh, I've got this
4 slide -- this finding of significance by staff was
5 agreed with by the agencies that were part of the
6 technical working group. And these include the
7 National Marine Fisheries Service, the California
8 Department of Fish and Game, the Santa Ana
9 Regional Water Quality Control Board, and the
10 California Coastal Commission. All of these
11 agencies wrote letters saying that they find the
12 impacts to be significant.

13 So, as Dr. Raimondi told you, in order
14 to compensate for these impacts, we would need to
15 create 104 acres of new nearshore ocean habitat.
16 There's no real way to create, or even restore,
17 nearshore, soft-bottom habitat. So therefore, we
18 must look at in-kind -- out-of-kind mitigation.

19 And the out-of-kind mitigation that's
20 most appropriate for impacts to soft-bottom
21 habitat is wetlands restoration. There's a
22 history of using wetlands restoration for impacts
23 to nearshore, soft-bottom habitat because some
24 species benefit, such as gobies and California
25 halibut, benefit directly from tidal wetlands.

1 And tidal wetlands provide benefits that, while
2 they don't directly benefit some of the species
3 that are impacted, they provide indirect benefits.
4 They cleanse runoff before it enters the ocean;
5 and they're highly productive and export nutrients
6 to the nearshore marine environment.

7 Staff has identified a tidal wetlands
8 opportunity in the immediate vicinity of the
9 Huntington Beach Generating Station. And that's
10 what's shown on this slide. And those are the
11 Huntington Beach wetlands. And there's a
12 restoration plan already in place for those
13 wetlands, which means in terms of implementing a
14 restoration, they're already pretty far along, and
15 there's an entity, the Huntington Beach Wetlands
16 Conservancy, which has representatives here today,
17 that is in charge of the restoration.

18 Therefore, staff has recommended
19 restoration of those wetlands as mitigation for
20 the impacts of units 3 and 4. And we recommend
21 that the mitigation be done at a ratio of one-to-
22 one. Normally out-of-kind mitigation requires
23 mitigation ratio of greater than one-to-one. But
24 because tidal wetlands are so productive, probably
25 more productive than nearshore, soft-bottom

1 habitat, and because they offer a number of
2 benefits that nearshore, soft-bottom habitat
3 doesn't have, we feel that a one-to-one mitigation
4 ratio is appropriate.

5 So, therefore our recommendation is to
6 contribute money sufficient to restore 104 acres
7 of the Huntington Beach wetlands, and maintain
8 them for ten years. And at the time we wrote our
9 final analysis, that amount was \$7,956,000.

10 And the agencies on the technical
11 working team have agreed with staff's mitigation
12 recommendation.

13 CHAIRPERSON PFANNENSTIEL: Thank you.
14 Thank you, Ms. Stone, for an enlightening
15 presentation on this. I know most of it was in
16 the written material for this to highlight.

17 Now, should we ask applicant for comment
18 on the staff proposal.

19 MR. PENDERGRAFT: Good morning,
20 Commissioners. My name's Eric Pendergraft and I'm
21 the General Manager of the AES Huntington Beach
22 facility. I'm going to go over a little bit of
23 background, and then turn it over to a couple of
24 our experts to talk about some of the science.
25 And then I'll follow up to conclude.

1 First of all, we applied for this retool
2 back in 2001 in response to the energy crisis.
3 You know, the Governor, Governor Davis at that
4 time, issued an executive order that allowed for
5 this expedited power plant licensing process.
6 And, in fact, encouraged, you know, businesses to
7 come forward and provide generation to help ease
8 the crisis.

9 Now, units 3 and 4, as Ms. Stone alluded
10 to, were existing structures that had been retired
11 by Southern California Edison. Retooling those
12 units was really the quickest way to bring new
13 generation into supply for California. And I
14 think we were one of the only facilities in the
15 state that were able to have this ability.

16 With a lot of hard work by everybody
17 involved, both the staff and ourselves and all
18 those involved in this process, we were able to
19 complete the certification in the extremely
20 compressed timeframe; and the certificate was
21 ultimately granted and the units were operational
22 in January and August of 2003.

23 Now, you know, clearly with respect to
24 Bio-4 and Bio-5 and all the conditions, you know,
25 the intent of the conditions as written were to

1 focus on coastal fish. And it was our
2 understanding, we believed that most of the
3 stakeholder, if not all of them, understood that
4 that was the intent.

5 Now, Bio-4 required us to fund a study,
6 which we have done. And as Dr. Raimondi and Dr.
7 Davis have alluded to, we did agree with how the
8 study was put together. That is basically where
9 our agreement stops.

10 That study was put together under the
11 assumption -- with our agreement, under the
12 assumption it was constructed in a way that would
13 support the conditions as written. And
14 principally that it would be focused on
15 determining significant impacts to coastal fish.

16 So, our agreement basically stops at how
17 the design -- or how the study was designed.

18 It's also extremely important that
19 everyone recognizes the unique nature of this
20 project. I think it is unlike any project that
21 has probably ever been in front of the Commission
22 before. This is an existing structure; it is
23 approximately 40 years old; and it was designed as
24 a retool to take into account the fact that it was
25 existing and could get back into operation as

1 quickly as possible.

2 The certification is only valid through
3 2011. Our license period is only valid through
4 2011. And we are here talking about mitigation at
5 a point when half of that period has already
6 expired. And we have three and a half years worth
7 of actual operating data for us to rely on and
8 refer to.

9 Now, let's talk a little bit about the
10 term of the certification. If you go back and
11 review the record from the 2001 proceedings there
12 are a couple fundamental reasons for why it was
13 limited.

14 One, there was concerns by many of the
15 stakeholders regarding the expedited process. And
16 I will note that we objected to a limited license
17 period from the very start. It was originally
18 proposed to be five years; it was eventually
19 extended to ten. But we objected to that
20 limitation from the very beginning.

21 Further, there were some stakeholders
22 that felt, and I'm sure still feel, that the units
23 should be replaced when the existing license
24 expires. And if you review comments from the
25 record provided by CEC Staff during that period,

1 it supports the view of these stakeholders.

2 And I'll read this: The applicant is,
3 of course, free to make a future application to
4 extend operation of the facility beyond the five-
5 year period. Such a request would be the subject
6 of a new review and analysis. It is the
7 community's clear preference, which the staff
8 shares, that a modern, more efficient, less
9 visually prominent plant replace this aging
10 facility once California's energy emergency is
11 abated."

12 Additionally, since we were originally
13 granted the license there have been significant
14 regulatory developments with respect to
15 impingement and entrainment. The EPA finally
16 issued their rule 316(b). Now the State Water
17 Board, which is actually responsible for
18 implementing it, has issued a draft scoping
19 document that, as written, would require us to
20 implement technology and/or operational measures,
21 and explicitly limits the use of restoration.

22 Now, it's important to note that if we,
23 any additional technology we install or
24 operational measures that we take which
25 substantially reduce our impacts and the need for

1 mitigation through restoration.

2 Throughout this process we have
3 consistently met our obligations. The Surfstone
4 study was a huge contentious issue when this
5 proceeding was originally taking place in 2001.
6 We conducted that study. It confirmed that we
7 were not the source of the bacteria problems along
8 the Huntington Beach coastline.

9 We completed the Bio-4 study. Ms.
10 Stone, the Compliance Manager, has indicated to
11 us, at least, that we've met all the conditions of
12 certification with Bio-5 still pending.

13 And another very contentious issue at
14 the time was where all this energy was going to
15 go. And I will confirm to you that every megawatt
16 of energy from these facilities went to serve
17 California. The output is contracted fully and
18 completely to Southern California Edison. And
19 they are distributing it throughout California.

20 Now, I'm going to turn it over to John
21 Steinbeck, who's a principal scientist from TENERA
22 Environmental, and a Vice President there. He's
23 going to talk a little bit about the APF
24 application.

25 MR. STEINBECK: Good morning,

1 Commissioners; my name's John Steinbeck with
2 Tenera Environmental. And as Dr. Raimondi stated,
3 before, you know, I was a member of the research
4 team that designed the study, and actually Dr.
5 Raimondi and I have collaborated on many studies
6 that have been conducted on the California coast.
7 And I was a principal author of a CEC report on
8 assessment methods for looking at cooling water
9 intakes that Dr. Raimondi was one of the co-
10 authors on.

11 So, as he stated, there's a lot of
12 agreement here. And in that report there's a
13 mention of area production foregone as a method
14 for assessing impacts. So, as I say, there's a
15 lot of agreement here.

16 So, today I'll talk about the CEC
17 application of APF, and an alternative method that
18 was actually -- we talked about in the research
19 team as another approach. And this was for the
20 gobies that you heard about, the wetland.

21 And this APF was -- we were asked to do
22 this analysis, and we completed that as part of
23 the research team. Unfortunately, it was never
24 used in the staff's application of APF for scaling
25 the restoration.

1 In terms of my presentation I don't
2 really have to talk about APF too much, because
3 Dr. Raimondi covered that. But, I will talk about
4 how it was applied in the CEC Staff proposal and
5 our disagreements with that and this alternative
6 approach.

7 So, I'm not going to talk about this.
8 Other than I don't know if Pete mentioned this,
9 but one of the real confusing things about the
10 area production foregone is when you do this
11 translation into habitat a lot of people all of a
12 sudden when you're talking about larval fish
13 versus, and you were talking about larval fish and
14 all of a sudden you're talking about habitat, that
15 there's some implication that habitat's been
16 degraded or lost through the process of
17 entrainment. And that definitely is not the
18 implication in this; it's just a way to translate
19 the results of the larval losses into what
20 production would need to be used to replace that.

21 So, I'm going to skip this. This is
22 just my little graphic of the empirical transport
23 model that Pete talked about, and source water.
24 And then the APF.

25 I do want to talk about, just point out

1 one thing here, and if you'd look at this graph,
2 we sample a small area of this much larger source
3 water population of entrainable larvae. But if
4 you look at all those little dots up there that
5 are in the, our source water, those are all
6 larvae. And the source water is based on where
7 the larvae are in this application. And I'll come
8 back to that.

9 So there's no adults in this graph; it's
10 all larvae. So, under the correct application of
11 APF, this is a very appropriate and great method
12 of scaling results, when you can determine the
13 adult habitat that are producing the larvae. A
14 good example that was brought up was gobies. The
15 adult gobies occupy mudflats. So, in a wet -- if
16 a power plant was located in a wetland and 10
17 percent of that, the entrainable larvae were lost,
18 goby larvae were lost, then theoretically if you
19 replace 10 percent of that mudflat habitat where
20 the adult gobies are, that would replace the
21 larvae loss due to entrainment.

22 And this was actually the approach taken
23 at Moss Landing for coming up with the restoration
24 package there.

25 Another application good example would

1 be rockfish. The adults occupy reefs where they
2 produce larvae and you could determine the amount
3 of rocky reef in a source water area. And it's
4 probably not going to be the entire source water
5 area that we showed up there, because there's not
6 rocky reef everywhere. It's interspersed among
7 sand. But you could figure out how much rocky
8 reef is there. Dr. Raimondi's done this for
9 Diablo Canyon and come up with an APF estimate
10 that's again how much adult habitat would need to
11 be replaced to compensate for the losses.

12 But, in my mind, APF is not really
13 applicable to all habitats and species; and
14 specifically probably the most difficult
15 application is this approach that's being taken at
16 Huntington Beach where it's a three-dimensional
17 environment source water that's being estimated.
18 It's not an area, I think Dr. Raimondi used the
19 term bay habitat, well, it's not bay habitat.
20 It's just open coastal mostly sandy habitat out
21 there.

22 And the fish that most of those
23 estimates are based on, the croakers, are moving
24 around in that three-dimensional water habitat.
25 The number of adults is changing on multiple

1 temporal and spatial scales. I'm sure this isn't
2 the case, but there may not even be adults present
3 in that source water that's being estimated. What
4 you're estimating could be all based on strictly
5 larval transport.

6 So, I know that's not the case; I know
7 there's some adult fish there. But that number of
8 adult fish is constantly changing.

9 So, again, in this case the area of
10 production foregone is being based on water; and
11 that is really the only habitat here that's, you
12 know, the requirement for the adults to produce
13 larvae, is the water.

14 And so you kind of get the idea that
15 there's a high level of uncertainty associated
16 with taking this approach to calculating APF.

17 Now in the staff recommendation they
18 state that the APF calculations for Huntington
19 Beach were not difficult estimation. And, in
20 fact, that's true. If you take just this area of
21 water and multiply it times proportioned mortality
22 you can come up with a number. But the apparent
23 simplicity in this doesn't make the calculations
24 correct. And it ignores several assumptions or
25 ideas that are critical to this concept that I

1 think are important to remember.

2 So, this application of APF produces an
3 estimate of soft-bottom habitat. And this habitat
4 that's being estimated and the mitigation that's
5 being based on it has no connection to the
6 production of the larvae being entrained.

7 A contrasting example to this is Moss
8 Landing Power Plant where the restoration was
9 based on wetland mudflat habitat for adult gobies
10 that produces the larvae that were being
11 entrained. So, in this case you have an indirect
12 or out-of-kind estimate versus something like Moss
13 Landing where you have an inkind more direct
14 estimate.

15 So, the other problem with the CEC
16 estimate, APF, is that it assumes that this entire
17 source water area being estimated is habitat,
18 adult habitat for whatever adults are that are
19 producing the larvae. And as I previously stated,
20 probably don't know how many adults are out there
21 because it's changing all the time. And they're
22 using this three-dimensional, you know, water
23 column for where the larvae and eggs are just
24 released.

25 The other thing that's about this type

1 of approach is it's always going to result in the
2 largest possible estimate of APF, because you're
3 using the entire source water based on the larvae,
4 not the adults.

5 So, in this case APF, you don't have an
6 area, and the production foregone, you don't have
7 any production in that area that's being foregone,
8 so I don't -- one of the problems with this is I
9 don't see how it's applicable. Or if it is, a lot
10 of -- some considerations have to be taken into
11 account for the uncertainty associated with the
12 estimate.

13 All this is kind of unnecessary because
14 as I stated before, we came up with an alternative
15 estimate of APF that the research team and the CEC
16 Staff requested that we go through and come up
17 with. And the type of more detailed analysis that
18 I'll go through that we did on this is a real
19 stark contrast to the approach taken by the CEC
20 where you just multiply these numbers together.

21 So, as Pete stated, for this alternative
22 calculation, or like you say, more accurate
23 calculation, you start with the estimates
24 proportional mortality and we had to add in some
25 numbers for the gobies that might have been in the

1 wetland areas around Huntington Beach, and you
2 come up with, based on the cooling water volume of
3 203 mgd, about half of a percent of the goby
4 larvae were being entrained by the plant annually.

5 Now, so you have your estimate of
6 proportional mortality. Now, the other part of
7 this, and this is the missing step, is what is the
8 adult habitat. So, what we did, we went into the
9 national wetlands inventory and pulled out data on
10 mudflat habitat and the coastal wetlands near
11 Huntington Beach. And this is the habitat that's
12 critical to adult gobies. And increasing this
13 habitat does result in increased larval
14 production.

15 So, we came up with these numbers in
16 this table, you know, to look at the numbers
17 aren't that important, but basically we added up
18 all the data from the habitat to come up with
19 total number of acres of goby habitat, adult goby
20 habitat in those wetlands, and then multiplied
21 that by that proportional mortality.

22 So now you're taking a proportional
23 mortality and multiplying it times that adult
24 habitat. This is the exact same approach used in
25 Moss Landing for the Elk Horn Slough restoration

1 which has been very successful and it's a real
2 good model for restoration projects.

3 So, this came up with an estimate of,
4 let's see -- do I have it on -- an estimate of 16
5 acres. And we believe this is a more appropriate
6 application of APF, and provides direct benefits
7 to many of the -- well, directly to gobies, which
8 made up about 40 percent of the total entrainment.
9 It also provides direct benefits to a number of
10 other species that are dependent on those wetland
11 areas for production, or as adult habitat.

12 So, in total, --

13 COMMISSIONER BYRON: Mr. Steinbeck, may
14 I interrupt you for a moment?

15 MR. STEINBECK: Sure.

16 COMMISSIONER BYRON: Just to clarify
17 something you said. You said this results in 16
18 acres, is that correct?

19 MR. STEINBECK: Yes.

20 COMMISSIONER BYRON: You're not
21 referring to the slide 21, are you, that says 1603
22 acres?

23 MR. STEINBECK: Oh, okay. It actually
24 ends up with eight acres. So, --

25 COMMISSIONER BYRON: If I could just --

1 are you referring to this slide 21?

2 MR. STEINBECK: Let me go back.

3 COMMISSIONER BYRON: That has 1603
4 acres.

5 MR. STEINBECK: Right.

6 COMMISSIONER BYRON: Okay.

7 MR. STEINBECK: And so the original
8 estimate that we were using was based on the total
9 cooling water flow of 503 or 507 mgd. And so
10 that, if you -- that was about 1 percent of the --
11 resulted in mortality of about 1 percent. So 1
12 percent times that 1600 was the 16 acres.

13 But, as the total flow for the new
14 project was 203, so we adjusted that down by half.
15 So it's eight acres, or approximately eight acres.
16 Does that make sense?

17 COMMISSIONER BYRON: Yes, thank you.

18 MR. STEINBECK: Yeah, sorry about that.
19 What happens with this is a lot of numbers start
20 flying around, and then, you know, you can
21 understand.

22 Anyway, we believe this method provides
23 a direct estimate of, you know, rather than using
24 out-of-kind mitigation or out-of-kind application
25 of APF, this is an inkind direct application

1 that's providing direct benefits to a large number
2 of the species being entrained. It seems really
3 strange that when you have this direct method of
4 estimating an inkind mitigation with pretty good
5 level of certainty, with a lot of scientific
6 support, why would you choose an estimate based on
7 nearshore habitat that, you know, is very weakly
8 linked to adult production.

9 The other thing I'd point out is that
10 when we went through and did some calculations,
11 the APF estimates for gobies were really closely
12 supported by the demographic model results. This
13 is another way to kind of determine the -- kind of
14 add to the certainty with your estimates, you
15 know. Are you models giving you comparable
16 results.

17 In this case we were getting fairly
18 comparable results between demographic models and
19 the APF estimates for gobies.

20 And, let's see, you know, in contrast
21 you have the CEC approach which has a high degree
22 of uncertainty associated with that estimate.

23 So, --

24 CHAIRPERSON PFANNENSTIEL: Mr.

25 Steinbeck, I want to make sure I understand what

1 you're saying. That your alternative calculation
2 was done for the goby population.

3 MR. STEINBECK: Yes, which was --

4 CHAIRPERSON PFANNENSTIEL: And your
5 assumption, though, is that you can transfer that
6 analysis to the other fish populations in the
7 area. And so your conclusion of eight acres would
8 apply to the other -- to the entire area in other
9 words?

10 MR. STEINBECK: Well, that eight acres,
11 that's the number from the APF calculations.
12 That's applying direct mitigation for the losses
13 to the gobies, which are 40 percent of the total
14 estimated entrainment for the power plant. Plus
15 direct benefits for a large number of the other
16 species. I did some just rough calculations.

17 About 50 percent of the total estimated
18 entrainment would result in direct benefits from
19 that wetland mitigation. Other species, the other
20 roughly 50 percent, croakers and stuff, would get
21 indirect benefits from that. And the other thing
22 is that as we've heard from Noel and others,
23 there's -- the wetlands provide many other
24 benefits that, you know, go beyond just
25 compensating for the fish losses.

1 But I think the big problem is you have
2 something with a high degree of certainty that can
3 be supported scientifically with some, you know, a
4 lot of data behind it, versus something that
5 really has a very loose connection. And I think,
6 you know, you've heard it mentioned as out-of-kind
7 mitigation. Why would you choose out-of-kind
8 mitigation when you have an inkind mitigation
9 that's supporting about the same percentage of the
10 fishes that are being entrained.

11 I think finally, to put this into
12 context, the CEC Staff-proposed restoration of 104
13 acres based on a cooling water flow of 203 mgd,
14 the wetland mitigation for SONGS, and there was a
15 lot of different parts to the total mitigation
16 package for SONGS, but the wetland mitigation was
17 for mitigating entrainment losses, and was 150
18 acres. And that was for a total cooling water
19 flow of 2.5 billion gallons per day.

20 So it seems that the number for the
21 Huntington Beach is really out of, you know,
22 doesn't really have any connection, is really out
23 of scale here to comparable mitigations.

24 It's also kind of interesting that just
25 based on this calculated value for gobies, or the

1 calculated value for gobies and for the -- cost is
2 about 10 percent of the SONGS mitigation, which is
3 about right based on total cooling water flow.

4 So, now I'll turn it over to -- or, are
5 there any questions?

6 CHAIRPERSON PFANNENSTIEL: No other
7 questions.

8 MR. STEINBECK: I'll turn it over to
9 Shane Beck of MBC, who is also one of the
10 scientists involved in the project. Thank you.

11 MR. BECK: Good afternoon.

12 CHAIRPERSON PFANNENSTIEL: It's still
13 morning.

14 COMMISSIONER BYRON: Good morning.

15 MR. BECK: I've been up since 3:00. My
16 name is Shane Beck; I'm a Senior Scientist with
17 MBC Applied Environmental Sciences. And I was
18 Project Manager at MBC over the course of the
19 impingement and entrainment study, through study
20 plan development and the actual conduct of the
21 study.

22 And both MBC and Tenera, along with AES,
23 were members of the working group. We developed
24 the study plan and modified it with input from the
25 working group participants.

1 And I'm just going to go through briefly
2 some of the major sticking points that we have
3 right now. The study was designed to assess
4 significance as required by the conditions of
5 certification. But the significance criteria used
6 by staff were never discussed with AES, MBC or
7 Tenera. And as John pointed out, we feel the use
8 of APF to scale restoration is -- we think there's
9 a better way. It can be done, but the method
10 proposed by staff wasn't made apparent to us until
11 March of this year, almost a year after we
12 submitted the final report.

13 Condition Bio-5 and the actual
14 impingement and entrainment study focused on fish
15 and a subset of invertebrates that we refer to as
16 target invertebrates. But the staff
17 recommendation indicates that there's indirect
18 impacts to special status bird species and a
19 habitat that were never part of our study, or
20 asked to be part of our study.

21 John's already summarized the APF points
22 so I'll skip over those. But total entrainment at
23 Huntington Beach is dependent on not only the
24 densities of larvae that are entrained, which no
25 one is disputing, but also the amount of water

1 that flows through the plant, which is dependent
2 on how often the circ pumps run, as well as the
3 duration of impact. And in a few minutes Eric is
4 going to go over some proposed options that take
5 both the actual cooling water flow and the limited
6 license period of the plant, which is ten years,
7 into account without actually limiting the
8 operation of the facility.

9 Pete already summarized the entrainment
10 results. Just to touch on those, there were no
11 threatened or endangered fish or invertebrate
12 species collected. And that the estimates of
13 annual mortality due to entrainment at units 3 and
14 4 at maximum flow averaged less than half a
15 percent for gobies. And then all the other
16 species collectively, there was about nine,
17 averaged less than a third of 1 percent.

18 And this is just the relevant condition
19 of certification that specifies that if
20 significant impacts to coastal fish species are
21 identified, those must be mitigated.

22 The staff recommendation is based, in
23 part, on this hypothetical indirect impact to
24 special status bird species. We could have
25 examined potential effects to bird species as part

1 of this study. It's one of the things my company
2 does. But it was never mentioned during the
3 course of the study plan development, or during
4 the actual course of the study.

5 Staff is also equating the use of once-
6 through cooling to substantial degradation of
7 habitat. And, again, we focused the study on the
8 collection of fish and invertebrates. This is
9 something else we could have studied over the
10 course of the analysis period by looking at
11 affected and nonaffected areas, but this wasn't
12 brought up until recently.

13 And just to summarize we think these
14 interpretations are inconsistent with condition
15 Bio-5, and also the study performed.

16 This is just a graph to illustrate the
17 natural variation that occurs in larval densities
18 off California. This is a time-series graph from
19 the CalCOFI program. Studies larval densities
20 every year from 1951 to 1998, I believe.

21 And you can see that over the course of
22 a year or two years the densities of fishes can
23 vary by as much as 50 percent, 100 percent, even
24 higher than that. And so when we're talking about
25 losses as small as a third of a percent, or half a

1 percent, there's probably no way we could even
2 measure a change such as this, if for some reason
3 the facility stopped operating, or there was a
4 switch to a different type of cooling water
5 system.

6 And just for perspective, entrainment
7 results are often reported in the millions or
8 hundreds of millions. And I just wanted to point
9 out that most of the species that we deal with,
10 not all, but most have high fecundity reproductive
11 rates. And also high mortality rates. And the
12 queenfish, which is one of the most abundant
13 species in both impingement and in entrainment can
14 produce almost two billion eggs per year. Just to
15 clarify, we got 18 million queenfish larvae in the
16 entrainment samples.

17 And I'm not implying that that is
18 equivalent to nine adult queenfish; there's
19 mortality through each life stage and I don't want
20 to incense Pete.

21 And so just to quickly summarize before
22 Eric goes on to present some alternatives, that we
23 think the application of the science is wrong; but
24 we think that we do have the data in hand that can
25 support a really solid restoration project.

1 Thank you.

2 MR. PENDERGRAFT: I will acknowledge
3 that some of this science has been even difficult
4 for me to comprehend. But I think if you take
5 anything away from this it's that, you know, these
6 are all well respected biologists and scientists.
7 They have a lot of expertise in this field, and
8 there is substantial amount of disagreement in the
9 interpretations of the study results and what is
10 being concluded here.

11 I'm going to talk about just some of our
12 concerns and then I'm going to present a couple
13 alternatives of what we think are more supportable
14 by, or supported by the data and the actual
15 conditions of certification and our license
16 period.

17 You know, we have expressed this
18 concern, and I will express it again, in our
19 disappointment with the position that the staff
20 has taken in this certification, and particularly
21 with respect to Bio-5.

22 As we've alluded to, we've been members
23 of the working group and we did participate in
24 developing the study plan and agreed to that. But
25 aside from that, really the process limited any

1 real meaningful input from us. And we think that
2 there are numerous specific characteristics and
3 issues of this certification that were ignored.

4 The limited duration of the permit is a
5 real significant and important issue that was not
6 taken into consideration.

7 As Shane alluded to, our impacts are
8 directly proportional to the amount of circulating
9 water flow we draw into the facility. The numbers
10 presented by staff are based on our maximum
11 permitted operations, assuming we run 100 percent
12 of the time. They ignore the actual operating
13 profile of our generating units.

14 As Shane and John alluded to, there's
15 significant technical flaws with their scientific
16 conclusions. The intent and wording of Bio-5 has
17 been stretched and distorted in order to support
18 their significance findings. And lastly, the
19 pending 316(b) regulation, which is clearly going
20 to have some impact on what happens to the
21 facility and our impingement and entrainment going
22 forward.

23 And really, you know, the process
24 appears to have been conducted, to us, to generate
25 just unfounded and insupportable and

1 disproportionate amount of mitigation when you
2 look at what's been done with similar facilities
3 that have completely different licenses than we
4 have.

5 And absent a real significant
6 modification to the position being recommended by
7 the staff, we are really left with no other
8 options but to pursue all the available remedies
9 we have.

10 Having said that, we are committed to
11 providing appropriate mitigation. We want to
12 fully address our impingement and entrainment
13 losses. And I'm about to go through a couple of
14 proposals that are based on doing that, but
15 they're based on providing full mitigation for our
16 actual impacts over the life of our certification.

17 And I'm going to present two
18 alternatives, but both of them are going to be
19 sort of based on the same underlying fundamental
20 points. And I'll go over them right now with a
21 little more detail on the following slides.

22 Point one --

23 COMMISSIONER BYRON: Mr. Pendergraft.

24 MR. PENDERGRAFT: Yes.

25 COMMISSIONER BYRON: May I interrupt you

1 for a moment?

2 MR. PENDERGRAFT: Sure.

3 COMMISSIONER BYRON: Is this information
4 you presented as well, when we met back in July
5 25th down at Huntington Beach, or is this new?

6 MR. PENDERGRAFT: Elements of this we
7 presented, but there are elements of it that are
8 new, that are more specific to the alternatives,
9 and there are two alternatives presented instead
10 of one that was presented in general without real
11 specifics.

12 COMMISSIONER BYRON: Okay, thank you.

13 MR. PENDERGRAFT: So both of them are
14 based on the following four points. One, we use
15 actual calculated impacts over the first five
16 years, which are now essentially past.

17 We applied conservative estimate of our
18 future operations to determine impacts over the
19 second five years. We clearly considered the ten-
20 year term of this license.

21 And this is a new point here that we
22 didn't really cover. If, for some reason, we end
23 up under-estimating our operations we will commit
24 to provide additional mitigation at the end of the
25 license period at twice the regular ratio, so at a

1 two-to-one ratio.

2 Now, I'm going to go into this in a
3 little more detail. Point one, it is extremely
4 difficult for me to understand personally why we
5 were determining impacts over the first five years
6 of operation based on maximum permitted operation
7 when we know, we know with absolute certainty,
8 that we operated at actually approximately 25
9 percent of that. It is a hypothetical scenario
10 that did not happen. And if the objective here is
11 to really compensate for our actual impacts, I
12 cannot see why we would be using operations that
13 did not occur.

14 COMMISSIONER BYRON: I believe I asked
15 you this question on the 25th of July, as well.
16 Are you indicating that you're willing to accept a
17 lower operating limit for the power plant?

18 MR. PENDERGRAFT: We're willing to
19 discuss any options, and we've been willing. We
20 would prefer not to do it through an actual hard-
21 cap limit in a permit in the event that there are
22 unforeseen circumstances that occur, like a
23 collapse of the transmission system or a nuclear
24 outage, which is why we're proposing the backstop
25 in point four, which is double the normal amount

1 of mitigation if, for some reason, we exceed our
2 limits.

3 These are our actual operating factors
4 over the first five years of the certification.
5 When I presented this slide in the workshop I
6 heard several people comment about putting zeroes
7 in 2002.

8 Because impacts are based on our actual
9 circulating water flow, and we did not operate the
10 circulating water system during the first year and
11 a quarter of our license period, I and we think it
12 is perfectly appropriate to average in zero, since
13 we had no impacts during those two periods, or
14 during that period.

15 So if you look at this and sum it up, we
16 basically operated at 25 percent of our maximum
17 permitted levels over the first five years of this
18 license.

19 Now, point two is that we applied
20 conservative estimate over the second five years
21 of the permit. Now, I believe it was Commissioner
22 Geesman at the workshop said the previous
23 applicants and other projects have made this same
24 request and it has been denied.

25 I will again, reiterate, this is a

1 project unlike any that has probably been in front
2 of you before. It is not a brand new project. We
3 have three and a half years worth of actual
4 operating data that certainly can assist us in
5 providing some reasonable forecasts.

6 Further, we are not trying to estimate
7 our operations over a 30-, 40-year life of a new
8 plant. We're talking about estimating our
9 operations over the next five years. It's a
10 relatively short period of time. I think there's,
11 you know, an extremely low probability of that
12 estimate being off significantly. Particularly
13 when you consider that it's the, you know, it's
14 the characteristics of these units, these 40-year-
15 old units, and the fundamentals of the energy
16 market in California that really drive our
17 operating profile. And those are not expected to
18 change significantly, I don't think, over the next
19 five years.

20 This is a graph over the last year of
21 the daily Cal-ISO peak load. What you see is
22 illustrative of the energy market in California.
23 It is extremely summer peak driven. During, you
24 know, the spring, winter and fall we've got very
25 moderate temperatures; therefore moderate demand.

1 It averages about 30,000 megawatts. During the
2 summer temperatures ramp up and you get these
3 significant spikes.

4 Those plants are in existence; they're
5 there in order to meet demand during the third
6 quarter when the temperature starts ramping up and
7 demand ramps up.

8 Unless you, for some reason, believe
9 that the temperatures are going to dramatically
10 change during the spring, winter and fall, the
11 shape of this load profile is not going to change
12 significantly. It might, you know, go up a couple
13 percent due to just inherent load growth. But
14 these units are there for the summer period to
15 meet that peak. And they don't do much operations
16 during the offpeak season.

17 So our proposal is based on these
18 estimates of future operations; largely
19 concentrated in the third quarter with some
20 generation expected in the other quarters, as
21 well.

22 Point three, and this is another area
23 that makes this proceeding particularly
24 problematic, and that is the ten-year term of this
25 license. You know, we are not Moss Landing, Morro

1 Bay or El Segundo. This is not a new facility.
2 It's not an indefinite license. It, in effect,
3 ends in 2011.

4 And to calculate mitigation beyond that
5 period is just unjustified and unfounded and
6 unsupported. And further, you know, I talked a
7 little bit about the reason for the limited term;
8 and one of the reasons being because people want
9 this plant to go away. I can confirm with you
10 there are quite a few stakeholders in the City of
11 Huntington Beach that want us to replace that
12 facility.

13 And if we limit our mitigation to just
14 the ten-year period it really helps to preserve
15 our options at 2011. Otherwise, we're sitting
16 there in 2011 and we're evaluating a permit
17 extension where we've already essentially
18 mitigated for our impingement and entrainment, and
19 we're evaluating a technology installation, or,
20 you know, elimination of once-through cooling, or
21 we've evaluating a brand new facility.

22 And if we've already paid to mitigate
23 for the life of this permit, assuming that it gets
24 extended beyond 2011, you are making that the very
25 easiest option for us to choose. And I bet there

1 are numerous stakeholders that would prefer that
2 that is made the most difficult option for us to
3 make. And that if we're facing trying to renew
4 that permit in 2011, we're looking at an
5 additional mitigation fee that makes the
6 alternative of a new facility or technology or
7 eliminating once-through cooling that much more
8 attractive. That's how I would be looking at
9 this. And also minimizes the potential for over-
10 mitigation.

11 Point four, we are essentially certain
12 that we're not going to exceed the operating
13 estimates that we've suggested be used. However,
14 things happen. Particularly if something
15 unforeseen happens to the transmission system and
16 a transmission line collapses, or something
17 happens to the nuclear generating units, there is
18 the potential that we could operate more than we
19 are forecasting.

20 So in that event we are proposing a
21 backstop, and that would be that we compensate for
22 any -- we mitigate for any uncompensated losses at
23 sort of twice the regular ratio. I feel like this
24 is a reasonable compromise. It protects the
25 environment. And still accounts for any

1 unforesen events.

2 If you look at the original wetlands
3 restoration schedule that we were provided in the
4 restoration plan, I don't know if it's phase two
5 or phase three or phase four, but there is a phase
6 of the restoration plan that would not occur until
7 after 2011. So there is still a viable
8 opportunity to provide funding that would go
9 directly to the Huntington Beach Wetlands
10 Restoration project. So it's not like there
11 wouldn't be anywhere for this money to go in 2011
12 in the event that we did exceed our estimates.

13 COMMISSIONER BYRON: Excuse me, Mr.
14 Pendergraft. Just to clarify, point four is the
15 item that says the new aspect of your mitigation
16 plan, correct?

17 MR. PENDERGRAFT: Well, we certainly
18 have never proposed a two-to-one ratio, I know.
19 We talked about compensating for losses at the end
20 of the period, but there were no specifics
21 indicated. So there are elements to this that are
22 new, yeah.

23 And we hadn't focused much on the
24 wetlands restoration schedule and the fact that
25 the schedule, itself, lends itself to this sort of

1 staged approach.

2 Now, let's get down to the details.
3 Alternative one is the preferred alternative for
4 us. We believe it is more scientifically
5 supported because it is based on the goby APF and
6 a direct application of the habitat being restored
7 and the species being sampled.

8 We have revised APF calculations that
9 we'll submit to the record that support these
10 numbers that are shown on this slide. But if you
11 use actual operations from our first five years
12 and average that with what we propose for the
13 second five years, you end up with an average of
14 seven wetland acres.

15 Now, when it comes to factoring in the
16 limited permit life, you know, it gets a little
17 more difficult. But the assumption here is that a
18 new power plant has at least a minimum of a 30-
19 year life. So what we've done here is just ratio-
20 ed our ten-year permit with a 30-year life of a
21 typical new power plant, and divided the average
22 APF by three to arrive at 2.3 wetland acres.

23 And as people have alluded to there is
24 some existing functional value with the Huntington
25 Beach wetlands, so we wouldn't, you know, we

1 wouldn't claim to get a direct one-to-one benefit,
2 because we're looking at a wetland-to-wetland
3 comparison here. And so we would suggest using a
4 three-to-one ratio as far as determining our final
5 wetland restoration acreage. And what you arrive
6 at is seven wetland acres. That's based on the
7 goby APF calculation, as summarized by Shane and
8 John.

9 Now, we realize that the science is one
10 of the biggest complicated issues in this whole
11 thing. And we have provided a proposal that is
12 actually based on the science and methodology that
13 was presented and supported by staff, as well as
14 Dr. Raimondi and Dr. Davis.

15 if you basically run through the same
16 calculations, use our actual operations and their
17 APF methodology you get 50, in this case it's open
18 ocean acres or nearshore coastal ocean acres. You
19 divide that by three based on the limited permit
20 life. You end up with 17. And in this case,
21 since a wetland is admittedly more productive than
22 the open ocean, we're applying the same one-to-one
23 ratio that the staff applied. So you end up with
24 17 wetland acres of restoration.

25 Now, I'm a bit confused because we've

1 seen sort of two different restoration plans. The
2 first restoration plan we saw equated to about
3 \$74,000 per acre. A recent plan that was sent
4 last week via email, the cost is lower than that.
5 So this is based on the lower cost.

6 But, if you take the lower cost per acre
7 from the recent plan you arrive at funding
8 requirement on the order of 400,000 for
9 alternative one; and almost a million dollars for
10 alternative two.

11 Now, you know, obviously this gives you
12 an idea of how far off we really think we are from
13 where the staff is, and how unreasonable we think
14 their recommendation is. And why do we think what
15 we propose makes sense.

16 One, as Mr. Steinbeck alluded to, you
17 know, alternative one is based on what we think is
18 a more scientifically defensible assumption as far
19 as the application of the APF.

20 And even if you don't believe that, and
21 even if you don't agree with what Mr. Steinbeck
22 says, alternative two uses the staff's
23 interpretation of the study results and
24 application of APF. It is using the exact same
25 methodology that they're supporting.

1 Both of the options balance
2 environmental protection and, and take into
3 account the unique nature of this license that
4 we've reiterated so many times. Further, they
5 don't distort the analysis, and the correct
6 analysis that will be done in 2011 when this
7 license expires. They don't provide a distinct
8 advantage to just us extending the permit because
9 we've already mitigated for all our impingement
10 and entrainment.

11 You know, the proposals consider that,
12 you know, the 316(b) thing is still up in the air.
13 You got State Lands wanting to get rid of once-
14 through cooling. You've got all kinds of things
15 going on with respect to once-through cooling.
16 And it considers the fact that things may change
17 here in the future.

18 The 2011 decision point, it fits well
19 with the restoration schedule that we were
20 provided. That that project is planned to extend
21 beyond 2011 if you allow the appropriate amount of
22 time for one phase of the wetland project to
23 establish itself before you go on to the next
24 phase.

25 And another important point as you start

1 thinking about funding for the wetlands project.
2 I live in Huntington Beach. The plant overlooks
3 these wetlands. I want nothing more than those
4 wetlands to be restored. But when you come to
5 think about funding, Huntington 1 and 2 are going
6 to be in this same here with 316(b). And I'm just
7 about certain that it will be a source of funding
8 for this project between now and 2011.

9 The options don't unfairly penalize us.
10 We're really doing the right thing and responding
11 to the crisis. I mean that's really what this is
12 all about. There was an expedited process put in
13 place encouraging people to step forward and meet
14 a need. We did that. And, you know, against our
15 objections the permit was limited to ten years.

16 And now when we're basically stuck in a
17 box; we've made the investment; we have limited
18 leverage, you're recommending amount of mitigation
19 that assumes we have an infinite life. And that
20 is just unfair and, you know, don't think it's
21 lawful, actually.

22 Which gets to my last point, if we can
23 reach a compromise resolution on this, which we've
24 tried to do from the beginning, you know, it
25 avoids expensive, disruptive additional

1 proceedings toward I don't think any of us really
2 want to go through. And most importantly, units 3
3 and 4 will continue to be there. They might not
4 need to be running during the fall or winter, but
5 I tell you in July, this last July, we were
6 desperately needed. And that's when we're needed
7 most. And it's important that those units stay in
8 operation.

9 This is the schedule I referred to. I
10 don't know if it's necessary. But that sort of
11 concludes our presentation. I'm hoping we can
12 find some middle ground here.

13 CHAIRPERSON PFANNENSTIEL: Mr.
14 Pendergraft, thank you for your presentation. In
15 fact, thank you for the whole AES discussion. I
16 think it was very comprehensive and helped us.

17 I believe there will be some additional
18 questions from the dais, but we do have some
19 people who have, I believe, remained patiently on
20 the phone. We have Tom Luster from the California
21 Coastal Commission. I would suggest that we hear
22 from everybody and then follow up with some
23 questions.

24 Is Mr. Luster still available?

25 MR. LUSTER: I'm here, thank you,

1 Commissioner.

2 CHAIRPERSON PFANNENSTIEL: Thank you.

3 Did you have some comments you'd like to make?

4 MR. LUSTER: Yes, just a few brief
5 comments. This is Tom Luster with the California
6 Coastal Commission. I have just a few brief
7 comments in support of your staff's
8 recommendation.

9 Basically we believe the mitigation
10 proposed by your staff is both appropriate and
11 necessary for the project. We were involved
12 during the development of the entrainment study
13 during its implementation and during the
14 determination by your staff that the project's
15 entrainment effects are significant and require
16 mitigation.

17 More recently we provided written
18 comments on the staff's proposed mitigation. And
19 largely concurred with their findings regarding
20 both the approach and the scope of the mitigation.

21 Our primary concern at this point is
22 that you insure the mitigation plan is properly
23 implemented, and that it include adequate
24 performance standards, monitoring requirements,
25 contingency plans and other similar features of

1 standard mitigation plans. Because staff has
2 identified a wetland organization with a great
3 deal of expertise in these areas, we believe your
4 decision could easily include these assurances.

5 I'd also like to offer one additional
6 reason the mitigation is needed, to insure that
7 the project conforms to the Energy Commission's
8 LOS requirement; that is to insure the project is
9 consistent with other applicable laws and
10 regulations, which include the Coastal Act.

11 One of the Coastal Act requirements is
12 that adverse effects of entrainment be minimized.
13 The Act does not require a determination that
14 these effects be considered significant; only that
15 where there are adverse effects that they be
16 avoided or otherwise mitigated.

17 The results of the entrainment study
18 clearly show that the project results in adverse
19 impacts. So without this necessary mitigation the
20 project would not comply with the Coastal Act
21 requirement.

22 Just briefly on the recent proposal by
23 the applicant, it would be nice if the working
24 group had time to review this more thoroughly, but
25 because it's coming with just a couple weeks left

1 in the certification period, I don't think the
2 working group will be able to commit a good
3 review, and so the only credible proposal we have
4 in front of us at this point is that that's been
5 provided by your staff.

6 And so with that I'll close. Just a
7 restatement of support for your staff's
8 recommendation. And I'd be happy to answer any
9 questions.

10 CHAIRPERSON PFANNENSTIEL: Thank you,
11 Mr. Luster.

12 MR. LUSTER: Um-hum.

13 CHAIRPERSON PFANNENSTIEL: Are there
14 questions? No.

15 We also have a written statement from
16 the Santa Ana Regional Water Quality Control
17 Board. Was there somebody on the phone from that
18 organization? Thank you.

19 Are there questions, further statements
20 from the Commissioner; Commissioner Byron?

21 COMMISSIONER BYRON: No, I don't have
22 any additional questions.

23 CHAIRPERSON PFANNENSTIEL: Do you have
24 a --

25 COMMISSIONER BYRON: Yes. The only

1 other agency that might be -- is there any other
2 agencies represented that's on the phone right
3 now? Is there anyone else in the audience, any
4 other agency that is represented here? Okay.

5 First I'd like to thank the staff and
6 the applicant and the other parties for all the
7 useful discussion today. Commissioner Geesman,
8 who's the Presiding Member of our Siting Policy
9 Committee, could not be here today and sent his
10 regrets. And I'm the Associate Member of the
11 Siting Committee.

12 We spent an informative day at
13 Huntington Beach in late July, I believe July
14 25th, and heard a much more extensive discussion
15 of these same issues.

16 Commissioner Geesman and I have reviewed
17 the written materials that have been filed in this
18 matter; and held several discussions about it last
19 week. Based upon our review and consideration of
20 the record, as it existed at the end of last week,
21 we issued a Committee order on Friday stating our
22 recommendations to the Commission.

23 If I may, let me read from that order:
24 Upon consideration of staff's analysis and all
25 other information and arguments from the staff and

1 AES, and comments from representatives of the
2 California Coastal Commission, Santa Ana Regional
3 Water Quality Control Board, and members of the
4 public, we find and recommend that the Energy
5 Commission find that the impingement and
6 entrainment impacts are significant. And that the
7 appropriate mitigation for those impacts is the
8 payment of \$7,956,000 to the Huntington Beach
9 Wetlands Conservancy for restoration of the
10 Huntington Beach wetlands."

11 I've not heard anything that leads me to
12 change the recommendation of the Siting Committee
13 that we made on Friday. Because this is a two-
14 part item, the first part's a decision on the
15 amount and use of compensation funds based on
16 condition of certification Bio-5 from the original
17 Energy Commission decision on the Huntington Beach
18 project.

19 As I indicated, the Siting Committee has
20 recommended that \$7,956,000 be paid to the
21 Huntington Beach Wetlands Conservancy for the
22 restoration of the Huntington Beach wetlands
23 consistent with the staff's recommendation in this
24 matter.

25 The second item that we may be taking up

1 relates to the possible approval of the request by
2 AES to find the project in substantial compliance
3 with the Energy Commission's conditions of
4 certification, which will allow under condition
5 emergency-2, the project continue operation
6 through September 30, 2011.

7 For AES to be in substantial compliance
8 it would be necessary for them to have agreed to
9 the mitigation under Bio-5 that we specify here
10 today. So, I think it would be appropriate at
11 this time to hear from AES before we vote on the
12 mitigation recommendation, whether they will, in
13 fact, comply with the Committee's recommendation
14 if it's adopted by the Commission today.

15 So, I was hoping that a representative
16 of AES would speak to the issue of whether or not
17 they'd comply with this item.

18 MR. ROTHMAN: Just one quick question,
19 Commissioner Byron. In terms of your statement
20 you've not heard anything today that makes you
21 change your minute order decision. Does that
22 include the dollar figure that was associated with
23 the per-acre restoration?

24 There was a statement made by Mr.
25 Pendergraft that the staff's recommended dollar

1 figure, which is what this has now been reduced to
2 as opposed to an acreage that will be then applied
3 to a per-acre restoration figure. That that
4 dollar figure may have changed since the last
5 hearing in Huntington Beach, and maybe since the
6 staff's recommendation.

7 CHAIRPERSON PFANNENSTIEL: Let me ask
8 Ms. Stone, has that dollar figure changed?

9 MR. KRAMER: Let me take a stab at that.
10 The \$58 number seems quite a bit lower than the
11 number we were using. We did receive, if you
12 will, a -- I forget what they call those things,
13 but one of the project management charts that
14 showed the different stages. And it had estimated
15 amounts attached to each of those.

16 And we added it up and it came -- it
17 actually came up to, I believe, about \$50,000 less
18 than what we had as of the time we wrote our
19 analysis. But that's not the difference between
20 74,000 and 58,000. That's quite a bit bigger
21 difference. So we're not quite sure about that
22 \$58,000 number at this point.

23 We do have representatives from the
24 Conservancy in the audience. And they may be able
25 to address that.

1 CHAIRPERSON PFANNENSTIEL: If there's an
2 uncertainty in that number that would make a
3 material difference in the total amount approved,
4 I think we should hear that. I did note that you
5 had looked at two different -- that AES'
6 calculation was based on a couple different
7 numbers. Perhaps you can explain to us where you
8 got your two numbers?

9 MR. PENDERGRAFT: The original number
10 came from this restoration plan that was provided
11 by Moffatt and Nichols. Last week, I think at the
12 request of the CEC Staff, Moffatt and Nichols, in
13 conjunction with the Wetlands Conservancy, sent a
14 revised schedule.

15 And if I add up the numbers on this
16 revised schedule I get 7.925 million dollars, or
17 \$7.9 million, which is interestingly extremely
18 close to the number that you're recommending for
19 mitigation.

20 And when I divide that by the fact that
21 it's supposed to cover Talbert, Magnolia nd
22 Brookhurst Marsh, which is 137 acres worth of
23 wetlands, I get \$58,000.

24 I subsequently asked for a clarifying
25 question on that of Mr. Gorman of the Wetlands

1 Conservancy. And he said we have reduced the
2 contingency and engineering costs due to more
3 confidence in the design and our effort to sharpen
4 our pencil and get the cost within the most
5 reasonable amount possible to accomplish the work.
6 We are trying to remain within the Energy
7 Commission's suggested \$7.9 million budget. And
8 we feel that is possible to do. Thus, the lower
9 cost numbers.

10 MR. KRAMER: Madam Chair, I'd suggest
11 that we take a five- or ten-minute break so staff
12 could caucus on that question. If that's going to
13 help resolve this issue, I think it would be
14 helpful for us to have some discussions with the
15 Conservancy representatives.

16 MR. ROTHMAN: To be fair --

17 CHAIRPERSON PFANNENSTIEL: Yes, --

18 MR. ROTHMAN: -- I'm sorry. Counsel for
19 AES again. To be fair I was simply posing that as
20 an initial question. I was not implying that
21 simply by resolving the difference between 58,000
22 and 70,000 that that was going to be determinative
23 of AES' position with respect to an order that
24 would be based on the 104-acre wetlands
25 restoration as being roughly proportional, because

1 we disagree with that determination. And we think
2 that it is inconsistent with the CEQA guidelines
3 requirement of rough proportionality.

4 We've taken the position, as you've
5 heard in our presentations, with respect to why we
6 think it doesn't meet the requirements; and why it
7 is inconsistent with both the actual operating
8 conditions at the facility, the term of the
9 certification, and the science and the studies
10 that were justifying the underlying determinations
11 of the restoration equivalency for entrainment.

12 So, I don't want there to be any
13 misunderstanding. We are not -- I was asking the
14 question because I think it is relevant. It is
15 not going to be determinative of a decision by
16 AES.

17 COMMISSIONER BOYD: Madam Chair, I kind
18 of inferred from the presentation, and I certainly
19 infer from this last answer that I don't see
20 forthcoming a positive response to Commissioner
21 Byron's question regarding item B here. So I
22 don't want to represent the company, but it
23 doesn't sound like we're that close to resolution.

24 CHAIRPERSON PFANNENSTIEL: I have a
25 question of the company. What is the total

1 estimated cost of the Huntington Beach retool of
2 units 3 and 4?

3 MR. PENDERGRAFT: What was it originally
4 estimated to be, or what did it turn out to be?

5 CHAIRPERSON PFANNENSTIEL: The latter.

6 MR. PENDERGRAFT: It turned out to be
7 about \$220 million, which is about three times
8 what we estimated.

9 CHAIRPERSON PFANNENSTIEL: Thank you.

10 MR. PENDERGRAFT: It has not been a good
11 investment. And if you are asking me to say right
12 now whether I want to agree or not to \$8 million,
13 I'd actually request five minutes for us to
14 caucus, if that's acceptable.

15 CHAIRPERSON PFANNENSTIEL: That would
16 certainly be acceptable. What I'm trying to do in
17 my mind is put the questions that I think you
18 legitimately raised before us about the future of
19 the plant and what happens in 2011, and what are
20 the going forward operational characteristic of
21 the plant, in some kind of financial context.

22 You asked when we come up to the time of
23 the license, the 2011 end of the license, and we
24 already have \$8 million sunk, if you will, in the
25 wetlands restoration, won't that drive our future

1 decisionmaking.

2 And I was trying to see that in a
3 context of the total cost. However, that was the
4 reason for my question. If each side would like
5 about five minutes to caucus, why don't we do
6 that, and then come back on the record.

7 MR. PENDERGRAFT: Just one follow-up.
8 Regardless of how much we have invested to date,
9 or how much we may or may not invest in this
10 mitigation, the decision in 2011 will always be an
11 incremental investment decision. It will, you
12 know, not really consider what's sunk, so.

13 CHAIRPERSON PFANNENSTIEL: Okay, we'll
14 be back in five minutes.

15 (Brief recess.)

16 CHAIRPERSON PFANNENSTIEL: All right,
17 we'll be back on the record.

18 Well, let's just see whether either
19 party has some news to convey to us.

20 MR. KRAMER: On the point of the \$58,000
21 per acre versus \$74,000, we spoke to the
22 Conservancy representatives and they can provide
23 more detail if you need it. But they believe that
24 was a misunderstanding. They believe the correct
25 cost upon which to base the mitigation is the

1 \$74,000 per acre. And therefor the number that
2 the staff has in its analysis is the correct
3 number for the mitigation of the 104 acres.

4 CHAIRPERSON PFANNENSTIEL: Thank you,
5 Mr. Kramer.

6 And then, applicant?

7 MR. ROTHMAN: Well, based on our --
8 well, obviously that's off the table. But in
9 terms of our conversation, I'll tell you that it
10 was a -- it's a difficult conversation to have in
11 the hall on the timeframe that we were provided.

12 And it's a disappointing position that
13 we find ourselves in, because as I think we
14 understand it, your next decision is going to be
15 premised on whether we accept a number that is ten
16 times what we think is an appropriate level of
17 mitigation, or eight times, or nine times,
18 somewhere in there.

19 And that is something that the company
20 is not prepared to commit to without at least
21 exploring, and we don't really view this thing as
22 a negotiation. That wasn't the thought process
23 coming to this hearing today.

24 Nor was it the thought process that the
25 presentation that we made would have absolutely

1 zero impact whatsoever in terms of properly taking
2 into account the limited life of the permit. And
3 the actual operations of the facility in terms of
4 scaling of the mitigation.

5 So, we say this with advisedly a lump in
6 our throat, but we are interested in whether the
7 Commissioners an the staff and the people involved
8 in this process would even contemplate a number,
9 whether it be calculated based on staff's numbers
10 and then discounted for some factor associated
11 with the actual operations or associated with the
12 limited life of the permit, so that we're not --
13 so that we're somewhere in between the million-
14 dollar level of mitigation that we think is at the
15 high level of what is appropriate versus the
16 nearly \$8 million proposal.

17 And there are many ways to do that. We
18 would view the proper way of doing that as
19 basically scaling up from our 17-acre number to a
20 number that's probably more like three times that
21 based on that three-time factor. We don't have it
22 all up there, but there's a three-time factor that
23 we took into account that you could undo for the
24 purposes of a different number.

25 And, again, I did not come here

1 prepared, nor did Mr. Pendergraft come here
2 prepared to enter into this as a negotiation.
3 What we did come here prepared to do was let you
4 know that we think that the number that is being
5 presented is not justifiable and is not justified.

6 We'd rather not, just as a general
7 principle, have this devolve into us saying, no,
8 we are not willing to agree to that number. Have
9 you all then decide that that is the basis upon
10 which you will not extend the permit for the next
11 five years, and have all of us running to court on
12 preliminary injunctions and the like.

13 And we'd like to see if, at least know
14 whether there's any openness to exploring whether
15 there's a compromise position. If there's not,
16 then I think we need to talk for another couple
17 minutes because it's going to be a major decision
18 for the company in terms of its legal exposure,
19 and its reporting requirements and its internal
20 reporting, as well.

21 MR. PENDERGRAFT: Just to add, I mean if
22 you throw out the science, which is admittedly
23 confusing and can be interpreted in any different
24 number of ways, we made two other arguments that,
25 you know, were somewhat compelling in my opinion,

1 and that's the limited term of the license and our
2 actual operations.

3 We're willing, you know, maybe it's the
4 term of the license that doesn't really excite you
5 about limiting that. We'd be okay with that. The
6 staff was previously -- they previously accepted a
7 limited flow rate.

8 Commissioner Geesman, at the workshop,
9 said he wasn't interested. But that is a
10 reasonable middle ground compromise that I think
11 would be acceptable.

12 CHAIRPERSON PFANNENSTIEL: Let me ask
13 Mr. Ratliff, what options do we have on timing
14 right now? What are the issues constraining
15 moving forward with this?

16 I fully concur with the applicant that
17 this is not the time and place for a negotiation.
18 And most of what we heard today, I believe, is
19 already in the record of this proceeding. And
20 those of us who followed the record and tried hard
21 to prepare for today had seen a lot of this
22 information before, perhaps in different forms.

23 But, we're now at a decision point both
24 from the whole Commission, we know where the
25 Siting Committee has come down on this. The

1 Commission has two separable decisions to make
2 today.

3 And as I understand, we're sort of the
4 end of our time to make these decisions. But,
5 let's hear from counsel on what our flexibility
6 might be.

7 MR. RATLIFF: Well, because of the
8 conditions that were adopted with the original
9 emergency licensing decision, this license will
10 expire automatically on September 30th unless this
11 agency acts to either -- to basically do two
12 things.

13 The first one being to determine whether
14 there is a significant impact and the degree of
15 mitigation required for that impact.

16 And secondarily, it has to make an
17 affirmative finding that the applicant is in
18 compliance with condition emergency-2, I believe
19 it is, which requires specifically a finding that
20 the applicant is mitigating or has mitigated its
21 impacts from impingement and entrainment.

22 Because the time is so short the only
23 thing that you can do other than make those
24 decisions today is to continue to the next
25 business meeting where -- you can continue either

1 of those decisions to the next business meeting or
2 you can continue one of them if you prefer.

3 But that would be the last scheduled
4 date for this Commission to actually make a
5 decision on either of those items.

6 COMMISSIONER BOYD: Mr. Blevins, what is
7 that date?

8 EXECUTIVE DIRECTOR BLEVINS: September
9 27th.

10 CHAIRPERSON PFANNENSTIEL: And between
11 now and then we would attempt to reach some
12 resolution between the staff number of 7.9 million
13 and the applicant number of something under a
14 million to come back to this Commission with some
15 either compromise number, or at least a narrowing
16 of the two positions on it.

17 I have to say I've heard nothing today
18 that makes me believe that we really can narrow
19 that discrepancy. Because I believe that the
20 underlying factors in both of the calculations are
21 one that both parties believe in quite strongly.

22 I think that the scientific evidence on
23 both sides is what it is, and now it's up to the
24 Commission to decide how to use that evidence in a
25 fair level of mitigation costs.

1 Though if we were to put this off to our
2 next business meeting and allow some discussion to
3 go on, is that a wise use of the remaining two
4 weeks given us? Would that make a difference?

5 MR. ROTHMAN: I can only say that if
6 there is any openness on the part of the
7 Commission or its staff to seek a position that is
8 somewhere in the middle, I can tell you that from
9 AES' perspective there is not only openness but a
10 desire to avoid what will otherwise be, I think,
11 an expensive and time-consuming and cumbersome
12 proceeding.

13 So, we certainly think -- I guess the
14 way to answer that question in the best way I know
15 how, is yes, we have some flexibility in terms of
16 what we are willing to commit to; that there is
17 certainly an openness on our part to discuss
18 alternative, not only mitigation approaches, but
19 alternative justifications for an overall
20 mitigation package.

21 Having said that, there's zero
22 flexibility on the part of the Commission and the
23 staff. And if it's going to be a discussion of
24 104 or nothing, then I'm not convinced that it
25 will get us any further along.

1 CHAIRPERSON PFANNENSTIEL: Commissioner
2 Byron.

3 COMMISSIONER BYRON: Madam Chairman.
4 Just to clarify from the Siting Committee's
5 perspective, contrary to what Mr. Pendergraft
6 said, we're not throwing out the science, the
7 recommendation of the Committee is based upon
8 science. We're not negotiating a dollar figure
9 and when we make our recommendation.

10 I think we are in the final couple of
11 weeks here for the chance for a business meeting.
12 It's going to be very difficult during that time
13 to schedule an opportunity for the Siting
14 Committee to hear and make a determination on any
15 other recommendations you might have.

16 And as the Chairman had indicated, based
17 on the record we really haven't seen anything
18 substantially changed. And as I said, the
19 recommendation of the Siting Committee is based
20 upon science and we think that the staff's
21 recommendation is a good solution to this issue.

22 COMMISSIONER BOYD: Madam Chair.

23 CHAIRPERSON PFANNENSTIEL: Yes,
24 Commissioner Boyd.

25 COMMISSIONER BOYD: I almost think it

1 would be unfair to remand this back to the Siting
2 Committee, so -- but I think I'm prepared to make
3 a motion that we continue this item to the next
4 meeting. And that we, in effect, remand it back
5 to the staff and the applicant to see if there is
6 any daylight that they can see at all.

7 And if not, then we face the inevitable
8 at the next meeting. But I haven't totally lost
9 faith in the human race, and there may be a chance
10 here of the two tribes coming out of their
11 respective caves and actually going out around the
12 bonfire and doing something.

13 And I, for one, am willing to give it a
14 try. And I would say in the spirit of full
15 disclosure to perhaps the applicant, that I'm
16 painfully familiar with this project, having
17 served on the last Governor's generation team. I
18 lived through everything that was involved with
19 the state's trying to get this facility licensed
20 and built. And I don't have a real warm spot in
21 my heart for that experience.

22 But nonetheless, I would be willing to
23 see if some reconciliation could be attained in
24 that we have a couple of weeks.

25 CHAIRPERSON PFANNENSTIEL: Before we

1 vote on your motion, let me ask the staff, what is
2 your sense, Mr. Blevins, on staff willingness to
3 continue discussions?

4 EXECUTIVE DIRECTOR BLEVINS: First of
5 all, Madam Chairman, relative to respect,
6 Commissioner Boyd's statement, just in terms of
7 being, make sure that the information is out there
8 for consideration, from a process standpoint, it
9 is procedurally possible, without looking at
10 anyone's schedule, but it is procedurally possible
11 to, in fact, have a Siting Committee hearing in
12 advance of the September 27th business meeting.

13 And that presumably would be whether or
14 not the Siting Committee would be willing to
15 explore, you know, the issue of a reduced
16 operation, which is would be going back and re-
17 exploring based on the prior record.

18 I think what we are going to need is a
19 little bit more direction, and I'm going to let my
20 friend here ask for that in terms of what the
21 Commission's expectation would be coming into the
22 September 27th meeting in the absence of a Siting
23 Committee hearing.

24 CHAIRPERSON PFANNENSTIEL: Well, let me,
25 first, Mr. Ratliff, is there any need for a Siting

1 Committee altered decision? Is there a need for a
2 Siting Committee hearing on this where the
3 possibility of the Siting Committee to come up
4 with a different conclusion. Or is this now in
5 the Commission's lap, so that we can come in on
6 the 27th with ourselves as hearing any changes
7 that might be?

8 MR. RATLIFF: It's within your
9 discretion to have the Siting Committee hold an
10 additional hearing on this matter.

11 CHAIRPERSON PFANNENSTIEL: Or not?

12 MR. RATLIFF: Or not, yeah.

13 CHAIRPERSON PFANNENSTIEL: Thank you.

14 Mr. Kramer, you had a comment?

15 MR. KRAMER: Well, I didn't have any
16 specific questions. I just wanted to offer that
17 we would appreciate any direction that you could
18 give us at the staff level, if we're to go back
19 and try to work something out.

20 CHAIRPERSON PFANNENSTIEL: Commissioner
21 Byron.

22 COMMISSIONER BYRON: If I may, on behalf
23 of the Siting Committee, I think the staff has
24 done an excellent job. It's not the staff that's
25 put our backs up against the time constraints that

1 we're currently facing.

2 I think the burden here is on the
3 applicant to demonstrate a willingness that goes
4 far beyond what they've proposed here today to
5 meet the desires of the Siting Committee's
6 findings. I should say that differently, to meet
7 the Siting Committee's finding.

8 So I hope that's helpful. I think it's
9 really incumbent upon the applicant to come
10 forward with a much more substantial proposal
11 that's consistent with the Siting Committee's
12 finding.

13 MR. PENDERGRAFT: Can I just clarify.
14 I'm not often in these types of proceedings, and I
15 may have misspoke. I didn't mean to say throw out
16 the science. I meant to say if you agree that the
17 two sides have disagreement over the science, and
18 you accept the staff's position on the science,
19 and you just focus on the two facts of the limited
20 term of the license and the operating
21 characteristics of the units, I think we may be
22 able to reach a compromise.

23 I wasn't meaning to imply that we just
24 disregard the science. I apologize for that.

25 CHAIRPERSON PFANNENSTIEL: For the sake

1 of giving all possible time for consideration, I'm
2 going to second Commissioner Boyd's motion to
3 continue item 2, both parts a and part b, for the
4 purpose of seeing if we can find some common
5 ground to come back to this Commission, to the
6 full Commission. I think it need not go to the
7 Siting Commission for further hearing.

8 I feel that what we heard today was a
9 committee of the whole, if you will, on the fact
10 base. I don't think that we need to re-argue the
11 fact base. I think that the science is in front
12 of us. And had ample opportunity to consider it
13 and ask questions on it.

14 I think now we need to move forward with
15 is there some application of science and the
16 operating characteristics of this plant that
17 brings us back to a, I believe, a very reasoned
18 approach that the staff and the Siting Committee
19 offered to us.

20 We're starting at a point of a lot of
21 time has passed, a lot of work has been done. And
22 now we're at the last Commission conference to
23 make a decision on this before the license just
24 might expire. So I don't think it's incumbent on
25 any of us to let that happen. I think we need to

1 act on this one way or the other at the next
2 Commission meeting.

3 COMMISSIONER BOYD: Madam Chair.

4 CHAIRPERSON PFANNENSTIEL: Commissioner
5 Boyd.

6 COMMISSIONER BOYD: I would like to
7 state for the record that I don't want my motion
8 to be interpreted to preclude the Siting Committee
9 from having the opportunity to have a hearing,
10 should they so wish. I'm just saying I'm not
11 going to -- I didn't mean to include in my motion
12 that it should be remanded back to them, obliging
13 them to have such a hearing.

14 CHAIRPERSON PFANNENSTIEL: So it has
15 been moved, and I've seconded your motion to
16 continue. Is that acceptable?

17 COMMISSIONER BOYD: Um-hum.

18 CHAIRPERSON PFANNENSTIEL: Unanimously
19 approved. So we will be back on the -- what was
20 the date? The 27th.

21 Thank you all for a fruitful
22 conversation.

23 We need to finish this agenda and then
24 we're going into a very brief executive session
25 thereafter.

1 COMMISSIONER BOYD: I'd move approval of
2 the minutes for the meeting of August 30th.

3 CHAIRPERSON PFANNENSTIEL: Second?

4 COMMISSIONER BYRON: I second.

5 CHAIRPERSON PFANNENSTIEL: Minutes of
6 August 30th have been approved.

7 Any Commission Committee presentation
8 discussion, Commissioners?

9 COMMISSIONER BOYD: No.

10 CHAIRPERSON PFANNENSTIEL: Hearing none.
11 Chief Counsel report. Ms. Ichien, is there a
12 report?

13 MS. ICHIEN: Yes, there is. I just
14 wanted to report for the record that last Friday
15 the Federal District Court --

16 CHAIRPERSON PFANNENSTIEL: Excuse me,
17 can people take their conversations outside of the
18 room.

19 COMMISSIONER BOYD: Get close to the
20 mike, Arlene; you're going to have to out-shout
21 these people.

22 MS. ICHIEN: Last Friday the Federal
23 District Court in Sacramento issued an order with
24 respect to the appliance litigation that was begun
25 in 2002. And the order, in effect, dismissed all

1 of the counts that were filed by the appliance
2 manufacturers trade associations against the
3 Energy Commission and individual Commissioners.

4 And in the meantime, in the last two
5 months since the U.S. Supreme Court declined to
6 reconsider the Ninth Circuit's decision which
7 upheld the Commission's regulations, the staff and
8 representatives from the appliance manufacturers
9 trade associations have met to discuss the
10 scheduling of data submittals; and also technical
11 changes that are required as a result of changes
12 in federal law that have occurred.

13 And the order that was issued last
14 Friday endorses the agreement that the parties
15 have reached on those, on the schedule and the
16 technical changes.

17 CHAIRPERSON PFANNENSTIEL: Excellent.

18 COMMISSIONER BOYD: Congratulations.

19 CHAIRPERSON PFANNENSTIEL: Yes,
20 congratulations to you.

21 COMMISSIONER BOYD: And hallelujah.

22 MS. ICHIEN: And big congratulations to
23 Jonathan Blee --

24 CHAIRPERSON PFANNENSTIEL: Yes, very
25 much so.

1 MS. ICHIEN: -- for shouldering the
2 burden the entire four years.

3 CHAIRPERSON PFANNENSTIEL: Any other
4 report? Executive Director's report.

5 EXECUTIVE DIRECTOR BLEVINS: Madam
6 Chairman, I have no report, and I've spoken to Mr.
7 Smith and he has no report.

8 CHAIRPERSON PFANNENSTIEL: Oh,
9 excellent. Public Adviser report.

10 MR. BARTSCH: Madam Chair, Nick Bartsch
11 representing Margret Kim. We do not have anything
12 new to report at this time.

13 CHAIRPERSON PFANNENSTIEL: Thank you,
14 Nick.

15 MR. BARTSCH: Thank you.

16 CHAIRPERSON PFANNENSTIEL: Any public
17 comment? Hearing none, we will adjourn for a
18 brief executive session to discuss the personnel
19 matter in my office.

20 (Whereupon, at 1:02 p.m., the public
21 business meeting was adjourned into
22 executive session.

23 --o0o--

24

25

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 25th day of September, 2006.