

BUSINESS MEETING
BEFORE THE
CALIFORNIA ENERGY COMMISSION

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

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

WEDNESDAY, DECEMBER 2, 2009
10:00 A.M.

Reported by:
Kent Odell

COMMISSIONERS PRESENT

Karen Douglas, Chair
Jeffrey D. Byron
Julia A. Levin

STAFF PRESENT

Melissa Jones, Executive Director
Jonathan Blee, Chief Counsel's Office
Loreen McMahon, Public Advisor's Office
Gary Fay

_____ O'Brien

Joseph Douglas
John Butler
John Kessler
Andrea Covenier
Doug Davey
Debbie Bilder
Doug Anderson
Julie Way

Also Present

Scott Galati, Blek LLP
Jeffrey Benoit, Solar Reserve

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P R O C E E D I N G S

DECEMBER 2, 2009

10:06 a.m.

CHAIRPERSON DOUGLAS: Good morning, everybody.

Welcome to the California Energy Commission Business Meeting of December 2nd, 2009.

Please join me in the Pledge.

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

CHAIRPERSON DOUGLAS: There are two changes to the Agenda. Item 1B, Micropas 8.0 is going to be moved to the 16th, and Item 5, City of Chula Vista, will be moved to December 16th. With that, Item 1, Consent Calendar.

COMMISSIONER BYRON: I move approval.

COMMISSIONER LEVIN: Second.

CHAIRPERSON DOUGLAS: All in favor?

(Ayes.)

That item is approved.

Item 2. Carrizo Energy Solar Farm, 07-AFC-8.

Mr. Fay.

MR. FAY: Good morning, Madam Chair,

Commissioners. The Applicant, Ausra LLC, wrote to the Director on November 4th, basically withdrawing their AFC from our process, and they did so according to Title 20, Section 9.8. And this was responded to by the committee in an Order dated November 18th, terminating the AFC proceeding

1 and referring the matter to the Commission for
2 ratification. The project would have been 177 megawatt
3 sola thermal facility located on the Carrizo Plain in
4 Eastern San Luis Obispo County. The Committee recommends
5 adoption of the order at the Commission level.

6 COMMISSIONER BYRON: Mr. Fay, is the Applicant
7 here? Or even, I should say, the former Applicant?

8 MR. FAY: I do not know if the former Applicant
9 is here? No.

10 COMMISSIONER BYRON: Not represented.

11 MR. FAY: I do not see any -- but I do understand
12 that the purchaser does not plan to add capacity, the
13 purchaser is a photovoltaic company, First Solar, that has
14 an adjacent site, and I believe they will be using the
15 purchased land not for an energy project per se, but
16 engulfing it in mitigation efforts.

17 COMMISSIONER BYRON: Well, of course, I was the
18 Presiding Member on this project and I do not know anything
19 really any more than what we read in the press, having had
20 no contact with the former Applicant. But I believe this
21 looked to be a very attractive project, there were a lot of
22 good aspects to it, and it is unfortunate that it is no
23 longer going forward as a project in this Commission. Do
24 we know the work that the staff put forward in this, which
25 I think was pretty extensive, will that add any value to

1 the Applicant? And maybe you are not the right person to
2 answer, Mr. Fay, and I apologize --

3 MR. FAY: The best person would be Mr. O'Brien
4 because it was his staff that did the work, but I
5 understand that almost all of the work had been done on the
6 project --

7 COMMISSIONER BYRON: Right.

8 MR. FAY: -- not only for this project, but for
9 the fact that there were three projects together, two of
10 which were not within our jurisdiction because they are
11 photovoltaic projects, but all within this area of the
12 Northern Carrizo Plain of San Luis Obispo County. The
13 County will greatly benefit from the Commission's work and
14 the work of other state agencies and federal agencies, and
15 I am told that it is anticipated that this will be a model
16 for other wildlife mitigation corridor issues that
17 inevitably will come up with the large renewable projects
18 in other places. So I think it will be useful, but it will
19 not help this Applicant at all; this Applicant has sold the
20 project and this project is terminated.

21 COMMISSIONER BYRON: Well, we all sound very sad
22 and somber about this. I would like to ask if Mr. O'Brien
23 would like to add anything, given that we probably spent --
24 well, he will tell me -- how many man years worth of effort
25 on a project that is not going to go forward?

1 MR. O'BRIEN: Commissioner Byron, I do not have
2 that number off the top of my head, obviously we spent an
3 awful lot of resources on this project. And as you and I
4 have discussed in the siting committee on previous
5 occasions, the solar projects are taking us -- or, I should
6 say, requiring probably 75 percent more resources to date
7 than the natural gas fired projects, so the expenditure of
8 staff resources was very significant. I will echo what Mr.
9 Fay said in that the work that we were doing on the issue
10 of wildlife corridors in migration, I think, will be
11 beneficial to the county as they go forward with the two
12 solar PV applications. So some good is going to come from
13 that. Clearly, our staff, in working with U.S. Fish and
14 Wildlife Service and the Department of Fish and Game also
15 gain some additional expertise on the issue of corridors
16 and migration issues, which is going to be a significant
17 issue as we develop the Desert Renewable Energy
18 Conservation Plan regarding issues of connectivity down in
19 the Mojave and Colorado Desert. So we have gained some
20 expertise, but the price was pretty high.

21 COMMISSIONER BYRON: Well, thank you. And I am
22 glad to hear that at least the project looks like it will
23 go forward as a photovoltaic project, so the renewables may
24 not be lost to the state. But it is unfortunate that this
25 has essentially had an indirect effect on our other

1 projects as a result. Thank you both very much.

2 COMMISSIONER LEVIN: I am sorry, Mr. O'Brien,
3 before you -- I just want to clarify, so this project, do
4 we know what is going to happen to it? My understanding is
5 the other two projects on the same area are going to go
6 forward, the PV projects. But do we know what is likely to
7 happen with this proposed project?

8 MR. O'BRIEN: That is -- Commissioner Levin, that
9 is my understanding. The other two PV projects are going
10 forward under review by San Luis Obispo County, but this
11 project has been withdrawn. And I do not believe that it
12 is going to be resurrected at some other site. So this
13 project --

14 COMMISSIONER LEVIN: Or at this site, I presume.

15 MR. O'BRIEN: Or at this site, yeah.

16 COMMISSIONER LEVIN: Okay. Thank you.

17 COMMISSIONER BYRON: Madam Chair, I move approval
18 of Item 2.

19 COMMISSIONER LEVIN: Second.

20 CHAIRPERSON DOUGLAS: All in favor?

21 (Ayes.)

22 Item 2 is approved.

23 Item 3. Rice Solar Energy Project, 09-AFC-10.

24 Mr. Douglas.

25 MR. DOUGLAS: Good morning, Chairman Douglas and

1 Commissioners. My name is Joseph Douglas, I am Energy
2 Commission Project Manager for Rice Project. To my right
3 is Christine Hayman, Staff Counsel. I would like to
4 provide a brief background on the Rice Project, followed by
5 staff's data adequacy recommendation.

6 On October 22nd, 2009, Rice Solar Energy, LLC
7 filed an Application For Certification to construct and
8 operate the Rice Solar Energy Project, proposed as a
9 concentrating solar power generating facility with an
10 integrated molten salt thermal storage system rated at a
11 nominal generating capacity of 150 megawatts. On November
12 20th, Rice Solar filed a supplement to the AFC, containing
13 additional information for review in four sections:
14 efficiency, transmission system design, waste management,
15 and worker safety. The Rice Solar concentrating solar
16 power technology consists of a large field of mirrors that
17 focuses the sun's energy onto a central receiver positioned
18 on the top of a 653-foot tower. The project features
19 thermal energy storage, which allows solar energy to be
20 captured throughout the day and retained in a liquid salt
21 heat transferred fluid. When electricity is to be
22 generated, the hot liquid salt is routed to a series of
23 heat exchangers to produce steam. The steam is used to
24 generate electricity in a conventional steam turbine cycle.
25 The proposed thermal storage system utilized by Rice Solar

1 can extend the period of electricity production beyond the
2 normal range of most solar thermal applications, to as much
3 as three to four hours. Given the project's desert
4 environment location, Rice Solar would use a dry cooling
5 system to reduce water consumption. Water would be needed
6 to replenish slowdown of boiler water for proper chemistry
7 control and steam cycle and for washing of the mirrors.
8 The proposed transmission line is a ten-mile generation T-
9 line that would connect with existing western area power
10 administration's (Western) 230-KV Parker Blythe
11 Transmission Line. The generation T-line would be
12 constructed partly on private land and partly on public
13 land managed by the U.S. Bureau of Land Management (BLM).
14 A new substation would also be required at the point of
15 interconnection with Western's existing transmission line.

16 Staff has completed its data adequacy review, the
17 Application For Certification, and the AFC Supplement
18 information and found it to be data adequate. As a result,
19 staff hereby asks the Commission to accept AFC with
20 Supplemental information as complete. Staff also requests
21 that the Commission appoint a siting committee to oversee
22 the Rice Solar Energy Project. Thank you.

23 CHAIRPERSON DOUGLAS: Thank you, Mr. Douglas.
24 Can we hear from the Applicant?

25 MR. GALATI: Scott Galati representing Rice Solar

1 Energy.

2 MR. KNIGHT: Jeff Knight, representing Solar
3 Reserve.

4 MR. GALATI: We would like to take the
5 opportunity to thank staff. Of course, we support the
6 recommendation that we are data adequate. We think this is
7 a very interesting project, the technology we are extremely
8 proud of. I think one of the first projects that you will
9 see in front of you, or have seen in front of you, that has
10 storage as an integral part of this process. Specifically,
11 I would like to point out that Mr. Douglas and Mr. John
12 Kessler were very helpful in telling us the four minor
13 inadequacies that we had, that we could correct them very
14 quickly, and specifically point out that Mr. Kessler came
15 in from his home to be able to hand deliver our submittal
16 to staff, so that we could be here data adequate on our
17 first business meeting, so we are extremely thankful for
18 that, and we have been supported by, I think, a stellar
19 team, people that you have heard before, Andrea Granier
20 leads the AFC preparation team with Doug Davey from CH2M
21 Hill, and specifically Debbie Builder and Bob Anders from
22 Wardy Parson as their engineers, and we were led by Mr.
23 Benoit, as well as Julie Way, who has been before you on
24 the Sunrise Project and on the Highgrove Project. So we
25 are extremely excited to be here today asking for your

1 approval of data adequacy and to assign a committee, and we
2 are ready to get to work.

3 CHAIRPERSON DOUGLAS: Well, thank you very much,
4 and it is a very interesting project, the first one for us
5 to have the storage technology, molten salt technology,
6 which is obviously very beneficial for California in
7 allowing the solar generation to help meet peak demand
8 needs. So we appreciate that, we appreciate your hard work
9 in getting data adequate quickly, and your nod to staff for
10 their responsiveness and their going the extra mile to help
11 make that happen. Are there questions or comments from the
12 Commissioners?

13 COMMISSIONER LEVIN: I do not have a question
14 about the data adequacy, but I will be very interested, as
15 well, in hearing more about the storage, why it is feasible
16 in this particular case, what assumptions you are making
17 about it, how it affects the prospects for a Power Purchase
18 Agreement, all of that. My one just sort of early
19 potential red flag that does leap out is the water use, and
20 while I realize they are on-site ground wells, it does seem
21 like an awful lot of water, even from an on-site source, so
22 I am concerned about that, I will be looking at that issue,
23 just to give you and staff a heads up. I think we will
24 need to be very very careful to make sure that you really
25 are minimizing the use of that, albeit groundwater on-site,

1 it is still a big amount of water in California.

2 MR. GALATI: Yes, we will certainly address that
3 in more detail on the site visit informational hearing. I
4 would like the committee to know that we are dry cooling
5 and we are minimizing water how we can, and we will
6 certainly work with staff to see if there are other
7 possible ways to do that.

8 COMMISSIONER BYRON: Mr. Galati, and forgive me,
9 was it Mr. Knight?

10 MR. BENOIT: BENOIT.

11 COMMISSIONER BYRON: Benoit, sorry. It does look
12 like a very intriguing project, it has got a lot of very
13 positive attributes to it, and I know that there is
14 probably a great deal of work and effort that has gone into
15 it at this point. I am pretty certain -- I am certainly
16 going to vote it data adequate. This is one of the rare
17 opportunities we have to dissect this a little bit here in
18 public. If I understand correctly, the 235 gallons a
19 minute is about -- well, let me ask you, how many acre feet
20 per year is that, so I do not have to embarrass myself with
21 my calculation.

22 MR. GALATI: Well, I will embarrass myself by
23 telling you I cannot tell you that answer, so maybe if
24 somebody could check the AFC, I know we have it there in a
25 table.

1 COMMISSIONER BYRON: Well, we looked it up. I
2 think it is 180-acre-feet per year. Does that sound about
3 right?

4 MR. GALATI: That is about right.

5 MR. BENOIT: I cannot add to that specifically at
6 this point.

7 COMMISSIONER BYRON: It is just a number that we
8 can use to benchmark easily against other projects.

9 MR. DOUGLAS: That is what the AFC indicated,
10 180.

11 MR. GALATI: And one thing I can tell you is it
12 is pretty bad quality water, that is why we are using as
13 much as we are, because we do need to treat it.

14 COMMISSIONER BYRON: And, in fact, Commissioner
15 Levin, yesterday we had a status conference on Bekin Solar
16 where the project Applicant came forward with an
17 alternative and actually they are going to evaluate some of
18 the alternatives put forward by the staff, which will
19 include the use of recycled water now for their cooling,
20 which would be consistent with the policies of this
21 Commission. So on the surface, this looks as though it
22 would be within the confines of that policy, but, of
23 course, we will see how the project proceeds. And, as the
24 Chairman said, I think it is also very interesting that it
25 does have a storage and would match up better with probably

1 the interests of those that would be buying this power,
2 however, I note it does not have a Power Purchase Agreement
3 at this point, correct?

4 MR. GALATI: It does now. It did not a few weeks
5 ago, it does now.

6 COMMISSIONER BYRON: So, unfortunately, this
7 Commission does not get into issues like credit worthiness
8 of companies, and whether or not you are going to see
9 through on your AFC and build this, and so we will, of
10 course, put the staff resources forward once again, Mr.
11 O'Brien, in hopes that this is one of those successful
12 projects. But I have to ask, why is it called Rice Solar?

13 MR. O'BRIEN: It is near the town of Rice. It is
14 also -- this Applicant heard the Committee and heard ready
15 process very clearly, went out and found a large piece of
16 private land, which was previously disturbed, this is the
17 old Rice Air Field. And that is why this project is the
18 Rice Solar Energy Project.

19 COMMISSIONER BYRON: Good. Thank you for the
20 history and geography lesson.

21 MR. FAY: Commissioner, I will just add a little
22 historical context. This site was actually proposed by
23 Southern California Edison for the Calcoal Project in the
24 early '80s, and the site was previously used when it was
25 the Air Field during World War II by General Patton to

1 train his tank corps for World War -- for battle. And at
2 the time of the Calcoal review, aerial photographs of the
3 site showed the tank tracks still in existence throughout
4 the desert. It is a disturbed site.

5 COMMISSIONER BYRON: Ah, maybe those tank tracks,
6 though, given their historical importance --

7 MR. FAY: Well, they are more than 50 years old,
8 and as some of us who are know, that is real precious.

9 COMMISSIONER BYRON: Well, we will not go down
10 that path. Madam Chair, thank you for allowing me to
11 pursue some questions here. I would be more than happy to
12 move approval of Item 3 and accept staff's recommendation
13 for data adequacy for the Rice Solar Energy Project.

14 COMMISSIONER LEVIN: I second it.

15 CHAIRPERSON DOUGLAS: All in favor?

16 (Ayes.)

17 We found the project data adequate.

18 Item 3B, possible appointment of a siting
19 committee for the Rice Solar Energy Project. I would
20 recommend Commissioner Levin presiding and Commissioner
21 Rosenfeld Associate.

22 COMMISSIONER BYRON: Madam Chair, I would be more
23 than happy to move Item 3B.

24 COMMISSIONER LEVIN: Second.

25 CHAIRPERSON DOUGLAS: All in favor?

1 (Ayes.)

2 MR. GALATI: Thank you very much.

3 CHAIRPERSON DOUGLAS: Item 4. City of Clovis.
4 Possible approval of an \$867,200 loan to the City of Clovis
5 for energy efficiency upgrades. Mr. Ehayi -- oh!

6 MR. BUTLER: I am sorry to surprise you, Mr.
7 Butler, my name is John Butler, good morning,
8 Commissioners.

9 CHAIRPERSON DOUGLAS: And I do know your name,
10 John, and I just --

11 MR. BUTLER: I am sorry to be filling in today
12 for one of my staff members, he is in training. My name is
13 John Butler and I am a Supervisor in the Special Projects
14 Office. I am before you this morning to request approval
15 of a loan to the City of Clovis to implement a number of
16 energy efficiency projects. The City of Clovis has
17 requested a loan for \$867,200 to implement a number of
18 energy efficiency measures within 10 facilities, in their
19 jurisdiction. The projects include installation of
20 personal computer management software, retrofit and
21 replacement of lighting fixtures throughout the City, and
22 also replacement of chillers, boilers, and installation of
23 variable frequency drives throughout a number of facilities
24 in their jurisdiction. In total, this project is estimated
25 to save the City annually 890,000 kilowatt hours of

1 electricity and 3,000 therms of natural gas per year.

2 Staff has reviewed this application and this
3 application has been deemed eligible for the 1 percent ARRA
4 loan program, and under the ECCA program, as well, and we
5 are requesting your approval of this loan agreement. I am
6 available for any questions.

7 CHAIRPERSON DOUGLAS: Well, thank you, Mr.
8 Butler. This sounds like a very interesting project and I
9 am glad to see it before us. Assuming approval today, how
10 quickly would this loan be funded?

11 MR. BUTLER: The loan agreement is currently with
12 the loan recipient, who is reviewing it, and once they
13 review and sign, we will be able to execute that agreement
14 immediately, if approved today.

15 COMMISSIONER LEVIN: Thank you. And the Energy
16 Efficiency Committee has also reviewed this and approved
17 it, and recommend it. I do just want to make sure, given
18 all the public interest in money moving out quickly and
19 actually creating jobs, that the Applicant understands the
20 importance of getting this work started quickly and really
21 creating jobs locally, and that they fully understand all
22 the expectations about reporting back afterwards and
23 avoiding waste, fraud, and abuse, that everyone is clear on
24 that.

25 MR. BUTLER: Yes, and we will continue to

1 communicate those expectations to our recipients, as well,
2 as we go through this project.

3 COMMISSIONER LEVIN: Great. Thank you.

4 MR. BUTLER: Thank you.

5 COMMISSIONER LEVIN: I would be happy to move for
6 approval.

7 COMMISSIONER BYRON: Second.

8 CHAIRPERSON DOUGLAS: All in favor?

9 (Ayes.)

10 The item is approved.

11 MR. BUTLER: Thank you very much.

12 CHAIRPERSON DOUGLAS: Thank you, Mr. Butler.

13 Item 6. Department of General Services.

14 Possible approval of Contract 600-09-005 for \$165,000 with
15 the Department of General Services, Contracted Fiscal
16 Services Unit, for year-end closing and accounting support
17 in preparing the annual audit of the Energy Commission's
18 Tax Exempt Revenue Bond Program, which, as I understand, is
19 the ECCA Program. Ms. Heinz.

20 MS. HEINZ: Hello, Commissioners. My name is
21 Jane Heinz and, first off, I want to --

22 COMMISSIONER BYRON: Ms. Heinz, would you please
23 move forward to the microphone?

24 MS. HEINZ: Sure. There, it is lit now. Good
25 morning, I am Jane Heinz, and first off I wanted to give

1 you a number correction on the contract number. It should
2 be 09, the year 09 in the center, not 2000. At any rate,
3 this is an interagency agreement, this is the second such
4 interagency agreement with Department of General Services,
5 Contracted Fiscal Services Unit, for the purpose of doing
6 the year-end closing of our books in preparation for an
7 independent audit. This is a three-year interagency
8 agreement and the purpose of this agreement, as I said, was
9 to assist us for them to provide accounting services for
10 our year-end bond closing of accounts. And the reason that
11 we had originally contracted with them was because our
12 independent auditor said we cannot pull all your books
13 together and then audit them, that would be a conflict of
14 interest. So under federal regulations, we were told we
15 needed to go out and get someone with the expertise and
16 Contracted Fiscal Services was recommended because they
17 provide this service to so many other state bond programs.
18 They work with the State Controller's Office and the
19 Treasurer's Office, as well. Because of that expertise, we
20 are able to pull information together from CALSTART, from
21 Independent Trustee controlled accounts, and also from the
22 Commission controlled accounts, so this is all put
23 together, and then the independent auditors audit that
24 information, that information then goes into our continuing
25 disclosure report that is due in March, to all of the

1 banking repositories for reporting on the bond program. So
2 with that information, I would ask for your approval for
3 this contract.

4 CHAIRPERSON DOUGLAS: Well, thank you, Ms. Heinz.
5 Obviously, it is very important that we continue with
6 getting this audit and ensuring that we demonstrate the
7 effectiveness and clear accounting for the program, so I
8 appreciate your moving forward in developing this proposed
9 contract. Do we have questions or comments from
10 Commissioners?

11 COMMISSIONER LEVIN: Just a point of
12 clarification. Is this also going to be part of the work
13 to review our ARRA spending? Or is this going to be
14 separate from that?

15 MS. HEINZ: No, this is completely separate, just
16 for the Tax Exempt Revenue Bond Program.

17 COMMISSIONER LEVIN: Okay, so this does not
18 relate to Item 4, then, which is ARRA funding?

19 MS. HEINZ: No.

20 COMMISSIONER LEVIN: Okay.

21 COMMISSIONER BYRON: Of course, we welcome the
22 increased oversight that audits bring, we love audits,
23 correct, Ms. Jones?

24 MS. JONES: Yes, we love them.

25 COMMISSIONER BYRON: That is correct. So I

1 believe, as you indicated, this is an annual audit, and so
2 --

3 MS. HEINZ: Yes, and this bolsters our internal
4 controls.

5 COMMISSIONER BYRON: Absolutely. So we are very
6 interested in the results of these. I would be more than
7 happy to move this item.

8 COMMISSIONER LEVIN: Second.

9 CHAIRPERSON DOUGLAS: All in favor?

10 (Ayes.)

11 This item is approved. Thank you, Ms. Heinz.

12 Ms. HEINZ: Thank you.

13 CHAIRPERSON DOUGLAS: Item 7. Collaborative For
14 High Performance Schools. Possible approval of Contract
15 600-09-006 for \$110,734 with the Collaborative For High
16 Performance Schools to update two of its Best Practices
17 manuals and provide an additional training and outreach
18 campaign. Ms. Shirakh.

19 MS. SHIRAKH: Hi, good morning. I am Elizabeth
20 Shirakh with the Fuels and Transportation Division, with
21 the Special Projects Office. Today for your consideration
22 is a possible contract for \$110,734 with the Collaborative
23 For High Performance Schools, also known as CHPS. CHPS is
24 a nonprofit organization dedicated to making schools better
25 places to learn by facilitating the design, construction,

1 and operation of high performance schools. These are
2 school environments that are not only energy and resource
3 efficient, but also healthy, comfortable, and well lit.

4 In 2006, the Energy Commission received \$290,000
5 under the U.S. Department of Energy's State Energy Programs
6 Special Projects Rebuild America solicitation. The Energy
7 Commission issued three sub awards under the solicitation
8 that are now completed. One of the original sub awards was
9 to CHPS for their High Performance Re-locatable Classroom
10 Program. This project was completed under budget by nearly
11 -- or actually a little over \$100,000; in addition, a
12 second sub award was also completed under budget, therefore
13 the Commission has a balance remaining of \$110,734.

14 Staff proposes to award this remaining DOE grant
15 funding to CHPS as a non-competitive bid contract. Because
16 the grant is federally funded, requires federal approval,
17 and the approval specifically names CHPS as the recipient
18 of these funds. Only CHPS organization can receive the
19 balance of these funds. The alternative is for these funds
20 to be returned to the federal government. Now I would like
21 to briefly discuss the proposed contract. First, the
22 contract will update the Best Practice Manual, Volume I,
23 Planning for High Performance Schools. The planning manual
24 describes why high performance schools are important, what
25 components are involved in their design and construction,

1 and how to navigate this process to ensure that they are
2 built. Since the planning manual was last updated in 2006,
3 California has developed incentive grants for high
4 performance schools, therefore, the financing section of
5 this manual will include a detailed description of applying
6 for these funds. The contract will also provide funding to
7 develop selected chapters from the planning manual in video
8 format. The appendix will also be updated with the
9 original case studies, expanded to include updated building
10 performance analysis. And the discussion guide appendix
11 will be updated by creating an online tool that will
12 generate a project specific discussion guide. Second, CHPS
13 will update the CHPS Best Practice Manual, Volume II,
14 designed for High Performance Schools. Six main content
15 updates are identified, references to the 2005 Title 24
16 Energy Efficiency Building Standards will be revised to
17 reflect the new 2008 Title 24 Energy Efficiency Building
18 Standards. Other updates include an overview of interior
19 surfaces and furnishing section, day lighting saturation
20 percentages, expanded moisture control guidelines, and an
21 update to the photovoltaic section. CHPS also plans to
22 organize this technical volume on an online Wikipedia-type
23 format that will allow CHPS approved authorized experts to
24 edit a single web page with a history of these edits. And
25 finally, CHPS will continue the high performance re-

1 locatable classroom work from the original grant by
2 expanding the training and outreach campaign to increase
3 awareness amongst re-locatable classroom manufacturers and
4 school district purchasers.

5 This item was approved by the Efficiency
6 Committee on October 26th, and I would be happy to answer
7 any questions you may have.

8 COMMISSIONER LEVIN: I do not have a question,
9 Ms. Shirakh, so much as a thank you and a comment. Sorry,
10 take public comment first.

11 CHAIRPERSON DOUGLAS: I did not warn Commissioner
12 Levin that we have one member of the public who would like
13 to speak on this item, Bill Orr, the Executive Director of
14 the Collaborative for High Performance Schools. I
15 understand he is on the phone -- or, no, you are here in
16 the room.

17 MR. ORR: I am right here.

18 CHAIRPERSON DOUGLAS: Welcome.

19 MR. ORR: Thank you. Good morning. My name is
20 Bill Orr, I am the new Executive Director for the
21 Collaborative for High Performance Schools, and I would
22 just like to speak briefly in support of this particular
23 item for obvious reasons. In regard to -- I just wanted to
24 highlight three things. First of all, these funds would
25 provide for a much needed update to the content of the two

1 critical volumes of the CHPS Best Practices Manual dealing
2 with the planners, decision makers, and school designers.
3 Secondly, it will allow the transformation of these two
4 volumes of the CHPS Best Practices Manual from being paper-
5 based documents to being a web-based multimedia Wiki-
6 formatted document. So I think that is huge because, in
7 addition to updating the information, it will present a
8 platform for which it will be easier to do continual
9 updates through the Wiki process. And, third, in regard to
10 the re-locatable classrooms, there are finally several
11 manufacturers in California that I have spoken with, that
12 are this close to essentially putting high performance re-
13 locatable classrooms on the marketplace, and I believe
14 that, with this additional funding and outreach, not only
15 will we see re-locatables available for school districts,
16 but we will also increase the demand for them, so we will
17 actually be able to match the purchasers with the
18 manufacturers of high performance re-locatable classrooms.
19 So with that, I am available to answer any questions that
20 you may have. And thank you for your consideration.

21 CHAIRPERSON DOUGLAS: Thank you, Mr. Orr.

22 Commissioner?

23 COMMISSIONER LEVIN: All right, I really want to
24 thank Ms. Shirakh for her very important work with CHPS and
25 also to CHPS, the Collaborative For High Performance

1 Schools. We are a Board member and a supporter of the
2 organization, it is a very important organization now, not
3 just in California, but nationally. And although I am a
4 nominal Board member, Elizabeth is the one who really does
5 all the work and is the connector between us, so I
6 appreciate you doing that, and I think you are doing a
7 great job. I also think that CHPS is doing a great job,
8 and as I said, an important job. I have two minor
9 requests, one of which I made strongly in the last Board
10 meeting, which is really from the Energy Commission
11 standpoint, to ensure the energy efficiency remains front
12 and center in the Best Management Practices. I realize the
13 Collaborative For High Performance Schools goes beyond
14 energy issues, but obviously, from our standpoint, and I
15 would say DOE, that is really critical, and specifically in
16 the area that we now see as hugely important to energy
17 efficiency, cool roofs and other cool surface materials. I
18 think it is in there, but I hope in the coming years it
19 will become a more and more prominent feature of the Best
20 Practices Manual. And then, my other comment based on feed
21 back I have heard from schools is, I think the Best
22 Practices Manual is really really important, and I think
23 the 21st Century tools that you are now bringing to CHPS and
24 to schools are really really important, a great step, but I
25 think schools still lack the capacity in many cases, most

1 cases perhaps, to take advantage of these tools. So I hope
2 that these updates will also be accompanied by even more
3 outreach, which I know you do well, but I think doing even
4 more of it, given the financial situation that schools are
5 in, is going to be critical for these tools to be fully
6 used, which is everyone's goal. With that, as Ms. Shirakh
7 said, the Energy Efficiency Committee did review this and
8 strongly supports it and recommends approval by the
9 Commission.

10 CHAIRPERSON DOUGLAS: Is that a motion?

11 COMMISSIONER LEVIN: Yes, so moved.

12 COMMISSIONER BYRON: Second.

13 CHAIRPERSON DOUGLAS: All in favor?

14 (Ayes.)

15 This item is approved. Thank you.

16 MS. SHIRAKH: Thank you very much.

17 CHAIRPERSON DOUGLAS: Item 8. California
18 Department of Water Resources. Possible approval of
19 Contract 500-09-016 for \$95,000 with the California
20 Department of Water Resources to provide specific values
21 for sea level rise in California, as a result of climate
22 change and recommend planning guidelines for state and
23 local governments. Ms. Pittiglio.

24 MS. PITTIGLIO: My name is Sarah Pittiglio. I
25 work in the PIER Environmental Group. Executive Order

1 S1308 was signed by the Governor in November of 2008 and it
2 requested that the Department of Water Resources, the
3 Energy Commission, the State Water Resources Board, the
4 Ocean Protection Council, and Caltrans all work together to
5 convene a panel of experts through the National Academy of
6 Sciences to write a report on the California sea level
7 rise. Currently, there is a lack of consensus on sea level
8 rise, globally, and there has not been a clear study on the
9 effect of sea level rise in California because sea level
10 rise actually does not rise uniformly across the globe. So
11 obviously sea level rise poses a threat to energy
12 infrastructure along the coast and in the Delta. But, in
13 addition, the combined effects of subsidence of land in the
14 Delta and increased runoff from the Sierras in combination
15 with sea level rise poses threats to natural gas
16 transmission lines and power plants and energy transmission
17 lines in the Delta. So the experts from the National
18 Academy of Sciences will complete four main tasks, they
19 will provide a consensus on a global sea level rise, then
20 they will also analyze sea level rise for California, and
21 then they will provide planning guidelines for adaptation
22 to be used by state and local government, and then,
23 finally, they will do one case study in California,
24 applying those adaptation plans that they develop to one
25 specific area, which most likely will be the Bay Area. But

1 that will be up to them. Each of the five state agencies
2 will be contributing \$95,000 for a total of \$475,000. I am
3 happy to answer any questions you might have.

4 COMMISSIONER LEVIN: I just want to say I think
5 this sounds like incredibly important work and I am glad
6 that a number of state agencies are contributing because,
7 when I first saw the \$95,000, I thought this is the biggest
8 bargain I have ever heard of, we are getting this done for
9 \$95,000. I think this is invaluable, and timely, and would
10 happily move for approval.

11 COMMISSIONER BYRON: I will second the item.

12 CHAIRPERSON DOUGLAS: All in favor?

13 (Ayes.)

14 The item is approved.

15 MS. PITTIGLIO: Thank you.

16 CHAIRPERSON DOUGLAS: Item 9. CALSTART.

17 Possible approval of Contract 500-09-019 for \$3 million
18 with CALSTART, Inc. to establish a research center for
19 developing clean and efficient technologies for medium and
20 heavy duty vehicles. Mr. Misemer.

21 MR. MISEMER: Good morning, Chairman Douglas,
22 Commissioners. My name is Philip Misemer. I am
23 responsible for the transportation subject area in the
24 Energy Research and Development Division. Before you is a
25 proposed sole source contract with an organization called

1 CALSTART to develop a research center dedicated to
2 increasing the efficiency of medium and heavy duty
3 vehicles. CALSTART was created in the early '90s as a
4 nonprofit 501(c)(3), dedicated to helping to solve the
5 severe air pollution issues in Southern California by being
6 a central developer and demonstrator for alternative fuels
7 and advanced vehicle technologies. CALSTART has a very
8 successful history in assisting not only the development,
9 but the market transfer for new technologies for vehicles,
10 and this is exemplified, for instance, by their creation
11 and guidance of an effort called the Hybrid Truck Users
12 Forum, which has very successfully transferred through
13 primarily an original DARPA arrangement with the U.S. Army
14 some of the technologies that that organization, Department
15 of Defense, is creating to improve the efficiency of their
16 fleet, and getting that into civilian use.

17 Staff sees an advantage in establishing a center
18 in Southern California for these technologies because
19 Southern California has fairly unique needs. There, you
20 will encounter the use, for instance of Class 8, the big --
21 we call them semis that you typically see in long haul, but
22 in very short haul applications, largely due to the huge
23 influence of the Ports of L.A. and Long Beach. While these
24 are efficient means of moving a lot of tonnage, they are
25 unfortunately highly polluting vehicles. Not only are they

1 typically older vehicles, but they are in highly congested
2 lanes of travel, and we need better ways to move this
3 freight and not encounter the localized emissions problems
4 and the high use of petroleum. This project has four major
5 features to it, 1) the CALSTART will lead the development
6 of a research roadmap that will provide technology
7 development guidance for these classes of vehicles. They
8 will convene a stakeholder group that will consist of OEMs,
9 up-fitters, end users, South Coast Air Quality Management
10 District, we expect, will be on this, as well as
11 universities and organizations such as the Electric Power
12 Research Institute, which has its own expertise in, for
13 instance, hybrid drive trains. Concurrently to developing
14 the roadmap, CALSTART will also perform initial research in
15 these classes of vehicles. They will get baseline data for
16 Class A trucks in the situations unique to Southern
17 California, particularly port trade, to provide baselines
18 that will feed into the research roadmap and guide
19 appropriate technology development to provide the
20 efficiency improvements to this class of vehicle. They
21 will also perform research with medium duty, specifically
22 plug-in technology and parcel delivery trucks, and will
23 apply plug-in drive trains specifically to a number of
24 parcel delivery trucks and analyze their performance in
25 specified routes in Southern California. They will also

1 have a project that will examine optimization of
2 alternative fuels with plug-in drive trains. Different
3 alternative fuels such a natural gas, or biodiesel, or
4 others, have different power and therefore driving
5 characteristics. And not all are suitable to work
6 optimally with the power train like hybridization, so this
7 research will provide us this optimization, as well.

8 Finally, as I mentioned before, CALSTART has had
9 a huge success in transferring technology, and not only
10 developing, but making sure that these new technologies are
11 applied. And part of this research center will be
12 dedicated to technology transfer that will focus on the
13 outreach, education, and industrial support, using many of
14 their existing contacts, and abilities in this area, but
15 enlarging them to this specific effort in medium and heavy
16 duty. And with that, I will hopefully be able to answer
17 your questions on this, Commissioners.

18 CHAIRPERSON DOUGLAS: Go ahead.

19 COMMISSIONER BYRON: Thank you. Mr. Misemer, the
20 work looks like it is extremely valuable in helping us move
21 towards some of our goals. The red flag always goes up,
22 however, when I see a contract of this side that is
23 procured under a sole source arrangement. The first
24 question is, what committees were involved in vetting this
25 project?

1 MR. MISEMER: This has been vetted within the
2 Research and Development Committee, which approved it, I
3 believe, in April.

4 COMMISSIONER BYRON: And the Transportation
5 Committee?

6 CHAIRPERSON DOUGLAS: Commissioner, it did not go
7 through the Transportation Committee, but there is 100
8 percent overlap between the R&D Committee and the
9 Transportation Committee, so --

10 COMMISSIONER BYRON: Yes, but I am not --

11 MR. MISEMER: Thank you, Chairman Douglas.

12 COMMISSIONER BYRON: Okay, thank you, Madam
13 Chair. So, Mr. Misemer, then the question is why did you
14 not put this out for competitive solicitation?

15 MR. MISEMER: The nature of the work and the
16 abilities that CALSTART brings to not only this technology,
17 but the physical location, when staff analyzed this
18 situation, came to the conclusion that there was really no
19 other reasonable organization that could compete for the
20 purposes of this center. The closest competitor might be
21 the Electric Power Research Institute, but while they have
22 done excellent and very important work in medium duty
23 hybrid drive trains, they still do not have the breadth of
24 alternative fuel experience that CALSTART brings to the
25 table. So we have insisted that, as we go forward, that

1 EPRI is one of the partners. I have to talk speculatively
2 somewhat about the development of the center because, of
3 course, it will really get rolling once approved, but one
4 of the benefits that we are certainly looking toward is
5 participation of the Ports of L.A. and Long Beach, and
6 considerable co-funding as we ramp up the research and
7 prove that this is a viable venture to that local
8 community. Aside from that, though, I guess the short
9 answer is that we saw no viable competitor for the purposes
10 of this research.

11 MS. JONES: And I guess that I would just add
12 that this was an unsolicited proposal that CALSTART
13 provided to the Commission, and because they were unique,
14 and because of the quality of the work that was being
15 proposed, staff viewed it very favorably and the Committee
16 was quite impressed with the ability that CALSTART
17 outlined.

18 CHAIRPERSON DOUGLAS: That is right, Ms. Jones,
19 and I will just add, as a member of the R&D Committee, we
20 do not encourage unsolicited proposals, although we
21 occasionally get them and we do review them on their
22 merits, and this proposal was very strong, it both put
23 forward work that we agreed was very much in the public
24 interest, and it seemed to us that CALSTART was the best
25 entity to carry this out, and carrying it out through a

1 stakeholder process that would allow the other entities
2 that have a lot of stake in the issue, or expertise in the
3 issue, to be full partners and be deeply engaged. So that
4 was the reason why we felt as though it was in the public
5 interest to move ahead on this contract.

6 COMMISSIONER BYRON: Well, thank you. I am
7 familiar with CALSTART and their meritorious organization
8 and I also, having spent about 10 years of my working
9 career at the Electric Power Research Institute, I tend to
10 agree with your assessment, that they are not going to
11 quite have the breadth of expertise in this area.

12 Nevertheless, I would still encourage PIER to pursue
13 solicitations whenever and wherever possible. Let me ask
14 one last question. Did the amount of additional time it
15 takes to do an RFP have anything to do with the effort to
16 do a sole source contract here?

17 MR. MISEMER: No. In fact, we in general run an
18 advertisement for the program, I think, as a program we are
19 getting a lot better at that. In this particular case, I
20 think certainly the time and staff effort that is involved
21 in the competitive solicitation has to be an important
22 consideration in these decisions. In this particular case,
23 though, there was a lot of attention paid to, okay, what
24 organizations are out there that could create, manage, and
25 run a credible research center, and this technology, again

1 that addresses what we feel are very unique circumstances
2 in the greater Southern California area? And overlaying
3 those requirements really pointed to the kind of work that
4 CALSTART has a lot of experience doing, and the fact that
5 they already bring in many important partners, one of
6 which, by the way, is CSERT, which is a excellent research
7 institution, part of U.C. Riverside, that brings tremendous
8 instrumentation and emissions expertise to the party here.
9 So we enjoyed the possibilities of CALSTART bringing in
10 very important partners into this effort, that we did not
11 feel could be achieved by running a competitive
12 solicitation, but creating that magnetism, if you will,
13 through the sole source contract with this organization and
14 bringing these other players in was important.

15 COMMISSIONER BYRON: Madam Chair, thank you.
16 Thank you for the answers, Mr. Misemer and thank you for
17 your answers, as well. I am satisfied and am happy to move
18 the item.

19 COMMISSIONER LEVIN: Second.

20 CHAIRPERSON DOUGLAS: All in favor?

21 (Ayes.)

22 This item is approved.

23 MR. MISEMER:

24 CHAIRPERSON DOUGLAS: Thank you, Mr. Misemer.

25 Item 10. University of California, Irvine. Possible

1 approval of Contract 500-09-015 for \$300,000 with the
2 Regents of the University of California, Irvine, to provide
3 data and analysis tools on a fuel flexible turbine system
4 for distributed generation combined heat and power. Mr.
5 Koyama.

6 MR. KOYAMA: Thank you, Commissioners, good
7 morning. I am Ken Koyama, I am with the Public Interest
8 Energy Research Program. This proposed \$300,000 will help
9 fund the development of a micro-turbine for CHP that will
10 have the flexibility of using different fuels such as
11 natural gas, syn gas, biomethane, and hydrogen. More
12 important, our \$300,000 will leverage \$2 million of federal
13 funding into California for this project at U.C. Irvine,
14 and this is an important area that we feel will help us in
15 our CHP development. Staff recommends approval of this
16 project.

17 COMMISSIONER BYRON: I do not get to see all
18 these projects until pretty close to Business Meetings,
19 this one also looks very interesting to me, and the fact
20 that you are leveraging so much federal funding, I think,
21 makes it a pretty clear opportunity for us to invest in
22 this on behalf of the benefits that it will bring to
23 California. So I certainly would endorse this program.

24 CHAIRPERSON DOUGLAS: Motion -- or comments from
25 Commissioners?

1 COMMISSIONER BYRON: I would be happy to move the
2 item.

3 COMMISSIONER LEVIN: Second.

4 CHAIRPERSON DOUGLAS: All in favor?

5 (Ayes.)

6 MR. KOYAMA: Thank you.

7 CHAIRPERSON DOUGLAS: Thank you, Mr. Koyama.

8 Item 11. Lawrence Berkeley National Laboratory.
9 Possible approval of Contract 500-09-017 for \$500,000 with
10 Lawrence Berkeley National Laboratory to develop a model
11 that depicts the interaction of water and hydro-electric
12 energy in the American River System, and how these
13 interactions will respond to future changes in water energy
14 supply and energy demand. Mr. O'Hagan.

15 MR. O'HAGAN: Good morning, Chairman Douglas,
16 good morning, Commissioners. My name is Joe O'Hagan. I am
17 in the PIER Environmental area of that program. The
18 proposal before you is for \$500,000 for a contract with
19 Lawrence Berkeley National Lab to develop an integrated
20 water and energy model for the American River region. As
21 you know, water and energy in California are closely
22 intertwined and in the 2005 IEPR, it identified that just
23 energy demand by the water sector accounted for about 19
24 percent of the state's total energy consumption. That IEPR
25 also encouraged that water and energy be integrated in

1 future planning efforts. And so the purpose of this
2 project is to try to meet that goal by developing a linked
3 model that incorporates a hydrologic model of the American
4 River area, would look at surface water flows,
5 impoundments, water demand as effected by land use and
6 consumption, also groundwater, groundwater percolation,
7 losses from evapo-transpiration, with an energy model that
8 would look at water consumption, energy sources like
9 hydropower generation, other energy sources imported into
10 the area, and to try to characterize the interaction of
11 water and energy in the American River System, and then
12 also to run scenarios looking at how these factors would
13 change under different climate change scenarios, as well as
14 also look at how changes in water, the cost of water, or
15 the cost of electricity, would change these factors. We
16 have gotten support from the Sacramento Municipal Utility
17 District, the El Dorado Irrigation District, we have gotten
18 support from the Sacramento Water Authority, which is a
19 consortium of 20 water agencies in the area, and we have
20 also got support from the Sacramento Water Forum, and an
21 offer of match funding of \$10,000. Thank you.

22 CHAIRPERSON DOUGLAS: Thank you, Mr. O'Hagan.
23 Questions?

24 COMMISSIONER BYRON: If I may, Mr. O'Hagan, this
25 subject of water in the state keeps coming up, it is of the

1 utmost importance. I believe I heard this morning Mr.
2 Snow, the Director of the Department of Water Resources, on
3 the radio, describing that the state water system
4 allocation will be about 5 percent this year, which is the
5 lowest it has ever been since the State Water System began
6 flowing, I guess, in the early '60s. Does this project
7 have any bearing on this? I am sorry about the vagueness
8 of the question, but does it have any bearing on the
9 potential to help influence the allocation of this scarce
10 resource?

11 MR. O'HAGAN: Not directly. I think that it would
12 be a useful tool for water and energy planning, and given
13 the reduced supplies that would be associated with a
14 warming climate, I think that the allocations for
15 Sacramento for Folsom, the outflows from Folsom, are used
16 to control water quality parameters in the Delta. The
17 models would take those type of factors into account. Now,
18 in terms of how water is allocated, I do not think it would
19 have a direct effect on any of that. But I think
20 additional information and understanding possible outcomes
21 would certainly inform that process.

22 COMMISSIONER BYRON: Right. I mean, all these
23 issues do come together eventually, even given some of the
24 earlier items on today's agenda with regard to water use
25 come into play as we move towards renewable energy. Madam

1 Chair, thank you. I would be more than happy to move Item
2 11.

3 COMMISSIONER LEVIN: I will second in just a
4 moment, or at least I assume I will, but I do have a couple
5 of questions.

6 COMMISSIONER BYRON: Oh, I am sorry.

7 COMMISSIONER LEVIN: It is all right. It is
8 probably here somewhere, but I do not recall seeing a
9 description of how the model really will be developed in
10 collaboration with the entities that you said are
11 supporting it, and I assume there are others that would
12 support it if they become aware of it. And my question,
13 which is also probably somewhat vague, not being a
14 technical person, but I have every faith in Lawrence
15 Berkeley National Lab from a scientific standpoint, but I
16 assume as a public entity, the model would be publicly
17 available for other entities to use, once it is developed,
18 making sure that it is user friendly for those other
19 entities, and particularly that it can be used beyond the
20 American River System, I think this is going to maximize
21 the value of it. I do not question at all the underlying
22 importance of the issue. But what mechanisms, or process,
23 or advisory board are they going to put in place to ensure
24 that it is a very user friendly model with widespread
25 application after it is done?

1 MR. O'HAGAN: Well, the two models that I
2 discussed have actually been available and have been used
3 quite a bit, and they are for public agencies, universities
4 and things like that, free, and there is sort of reduced
5 versions that the public can download from the Web, free as
6 well. So the models are out there. What would be new
7 would be linking the two models and then also populating
8 and specifically for the American River region. And to do
9 that, certainly on the energy side, we need to work closely
10 with the El Dorado Irrigation District and the Sacramento
11 Municipal Utility District. We have had a lot of
12 communications with staff, they are very supportive. There
13 would be an advisory group involved in this from them, we
14 would like to include PG&E, DWR, as well as others, to
15 comment and review as the project develops. One condition
16 of approval by the R&D Committee was to have a letter once
17 the project -- if the project is approved -- have a letter
18 from the Chair asking for these different utilities, asking
19 for their participation and support of the project. I can
20 say, at the staff level, they have been really responsive.
21 As I said, the water agencies are very very interested in
22 this project, as well.

23 COMMISSIONER LEVIN: So that is great to hear on
24 the Advisory Committee, your group, and I see at least one
25 utility representative in the back of the room, so

1 hopefully he will participate, but what about the utility
2 of the link between the models, if that is what is being
3 created, for other water sheds?

4 MR. O'HAGAN: I am sorry, the ultimate goal of
5 this was to demonstrate that such an approach is feasible
6 and provides great utility, so the intent is to make it
7 user friendly, that is will be accessible to people.
8 Ideally, we would like to see this transferred to other
9 water sheds. It is why the data put into the models will
10 be specific to the area that the underlying models will be
11 applicable anywhere else.

12 COMMISSIONER LEVIN: Great. With that, I
13 strongly second the motion for approval, then.

14 CHAIRPERSON DOUGLAS: All in favor?

15 (Ayes.)

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

17 CHAIRPERSON DOUGLAS: The item is approved. Item
18 12. California Energy Demand 2010-2020. Possible approval
19 of the staff final report, *California Energy Demand 2010-*
20 *2020, Staff Revised Forecast, Second Edition*. Mr. Kavalec
21 -- oh, Mr. Jaske?

22 DR. JASKE: We are going to do a tag team, so my
23 name is Mike Jaske with the Electricity Supply Analysis
24 Division. And Chris Kavalec will also be making a direct
25 presentation following my opening remarks.

1 So we are here to present the Electricity and
2 Natural Gas End Use Demand Forecast that has been worked
3 through the 2009 IEPR process. I first want to say a
4 little bit about the forecast team that worked on this
5 project. Chris was the leader of the project team in the
6 Demand Analysis Office. He could not do that job without
7 our strong supporting staff, some of which are in the
8 audience today and others are acknowledged in the
9 acknowledgments of the Staff Report. When I did his job
10 for 15 years, back in the '80s and '90s, I was similarly
11 dependent upon such a team and, for some of these folks,
12 the biennial cycle of a demand forecast and the product
13 that results from that is their essentially sole work
14 activity, they are dedicated to this effort.

15 For the 2009 IEPR cycle, there was a significant
16 focus on energy efficiency that had arisen from how the
17 2005 and 2007 Demand Forecasts were used at the PUC.
18 Concerns were raised about how much energy efficiency was
19 in the base forecast and, then, how much further could be
20 subtracted from it on the basis of additional policy
21 initiatives. So from the outset, starting the '08 IEPR
22 update and sort of morphing continuously into the 2009 IEPR
23 process, doing a better job on energy efficiency was our
24 goal.

25 This forecast retains the concept of committed

1 vs. uncommitted energy efficiency, as has been the
2 Commission's practice for a long time. That practice was
3 reviewed in the 2008 IEPR update and it was specifically
4 ratified to be continued, but, given the interest in
5 additional energy efficiency initiatives beyond those that
6 are considered committed, staff undertook a project to
7 develop a capability to actually generate incremental
8 effects of such policy initiatives as part of the IEPR.
9 That project is trailing behind and will be presented to
10 the Commission in January of this year. That is a schedule
11 that was worked out with the PUC staff because they are the
12 primary client for that, and it will go into their
13 forthcoming 2010 LTPP proceeding, which has not actually
14 yet been formally initiated.

15 The focus on improving our energy efficiency
16 analysis, particularly for utility programs, and then this
17 new effort to develop a capability for incremental
18 uncommitted projections has been greatly aided by the PUC.
19 The PUC has made available to us the resources of the
20 consulting firm, Itron, and we have benefitted greatly from
21 essentially a collaborative effort between Energy
22 Commission staff, PUC staff, and the consulting firm Itron.

23 Our work in this sort of planning and forecasting
24 area has to be as objective, and unbiased, and transparent
25 as possible. There were three public workshops for various

1 versions of the demand forecasts in this IEPR cycle, they
2 continued off of two workshops in the 2008 IEPR update
3 process. As was discussed in the 2008 IEPR update, we
4 decided there would be merit to forming a working group,
5 and so roughly one year ago, we initiated what is now
6 called the Demand Forecast Energy Efficiency Quantification
7 Project Working Group; it consists of staff, of Energy
8 Commission, PUC, all the five major utilities, the three
9 IOUs, SMUD, and L.A., and various other interested parties
10 like NRDC, who want to be better informed and contribute to
11 energy efficiency analysis. That working group has met
12 eight times in the ensuing year; we have another meeting
13 coming up in two weeks from now to talk about the initial
14 results of our incremental, uncommitted project. And we
15 have had numerous conference calls and in-person meetings
16 with the PUC staff, both in the procurement unit, as well
17 as in the Energy Efficiency Measurement and Evaluation
18 Group, to built those linkages, and to make sure that we
19 are both taking advantage of the data that exists, and that
20 the products that we are developing are useful to them.

21 Staff also stretched itself in assessing both
22 higher and lower economic and demographic projections
23 which, of course, turned out to be a major issue with this
24 recessions, we had not anticipated that a year and a half
25 ago or so, when we were developing a focus on energy

1 efficiency, so Chris and his team had to really scramble to
2 quantify the impacts of alternative economic and
3 demographic projections, and try to see how it is
4 California's economy will recover from this recession and
5 what assumptions we should make for the long-run forecast.

6 Beginning last year in 2008, staff started a
7 process to reexamine its forecasting methods, which was in
8 part connected to the obvious increased attention to energy
9 efficiency, and along the way we have received a number of
10 comments that say conducting that sort of review is very
11 appropriate. U.C. Energy Division, for example, is
12 suggesting that we should have models that are less data
13 intensive and more transparent, and more adaptable to
14 making multiple projections. On the other hand, NRDC has
15 been pushing us to focus a lot on energy efficiency program
16 evaluation and attribution issues between programs,
17 standards, what we call naturally occurring energy
18 efficiency through price response. ISO, for a number of
19 years, has been asking for more geographic disaggregation,
20 which is essential to their use of these results in
21 transmission planning and local reliability assessments.
22 And, of course, staff has some of its own desires, for
23 example, these models and gray-haired people like myself --
24 and Tom Goren was in the room earlier -- you know, wrote
25 them in Fortran years ago; we need to update them to more

1 modern computer language, you know, let some of the newer
2 capabilities help us out.

3 So there is a lot of interest in not only the
4 forecasts, but the methodology and the assumptions of
5 generating forecasts. It is not likely we are going to be
6 able to transform all of these models overnight, or to
7 satisfy all of these desires with perhaps a single model,
8 so the Demand Analysis Office may need to be moving in a
9 direction of having multiple models that, you know, are
10 customized to do particular purposes, and yet we would have
11 to make those consistent and support multiple platforms for
12 specialized purposes.

13 And finally, after Chris makes his presentation
14 and we get more to the formality of introducing the
15 forecast report itself, we have an Errata Sheet that is an
16 attempt to clarify some issues about how energy efficiency
17 program evaluation and attribution was designed, and I will
18 speak to that once Chris does his presentation.

19 DR. KAVALEC: Good morning, Chairman Douglas and
20 Commissioners. I am going to make a very brief slide
21 presentation basically to do two things, present the main
22 results at a statewide level, or a forecast for the benefit
23 of those who have not been able to share in our joyous
24 forecasting process to this point. And I will also talk
25 briefly about some final changes that we made to the

1 forecasts since we last presented a forecast publicly in
2 September, which are in the final report, the changes, but
3 we have not formally presented them at a public meeting
4 yet.

5 Okay, Statewide Electricity Consumption -- the
6 blue line with the squares is our final forecast for 2009,
7 the red line is the 2007 forecast, the previous forecast,
8 and the solid line to the left is historic consumption.
9 You will note an initial drop in consumption from 2008 to
10 2009, and it looks like this is actually happening in 2009.
11 For example, Southern California Edison reports a sales
12 drop of almost five percent in 2009 relative to 2008, and
13 our prediction was a little bit over a 4 percent drop, so
14 it may be that we are actually under-estimating the drop-
15 off in 2009. Anyway, after 2009, from 2010 to 2020, the
16 growth rates for consumption in the two forecasts are
17 almost identical, around 1.2 percent. For the peak, this
18 is a non-coincident statewide peak, meaning it is just the
19 sum of the individual planning areas. Unlike the
20 consumption case, there is no drop-off from 2008 to 2009,
21 you see it remains level, and that is because we adjusted
22 our peak forecast based on peak observations in the state
23 through the summer of 2009. And basically it looks like
24 the peak is not dropping like consumption is, so while
25 energy use is going down, folks are still using their air

1 conditioners. However, it is not going up, so the peak
2 forecast is below that of 2007 throughout the forecast
3 period. But, again, like consumption, the growth rate is
4 almost identical from 2010 to 2020, relative to the
5 previous forecast.

6 Okay, so a hot issue, as Dr. Jaske mentioned in
7 this forecast, in the future is measuring the amount of
8 efficiency savings in the forecast. So this slide shows
9 efficiency/conservation impacts incorporated in the
10 forecast, broken out by category. Standards, utility
11 programs, and naturally occurring savings, which means
12 basically the impacts from increasing rates. Folks use
13 less electricity as rates go up. You will notice in 1990,
14 the beginning there, the savings are greater than zero and
15 that is because our models track savings back to 1975.
16 And, as Dr. Jaske mentioned, we are only including in this
17 committed savings, meaning savings from programs that have
18 either already been implemented, or have firm funding and a
19 specific program plan. We are also doing what we are
20 calling an uncommitted forecast for the CPUC long-term
21 procurement process, which incorporates uncommitted
22 savings, savings that are reasonably expected to occur, but
23 are not yet committed.

24 Okay, so this is basically telling us, this
25 slide, that a rough approximation of the world without all

1 our efficiency efforts would result in consumption around
2 50,000 gigawatt hours higher by 2020, and 80,000 gigawatt
3 hours higher if you added in the naturally occurring
4 savings. And I will say that I believe we have done all
5 humanly possible in this forecast cycle with respect to
6 efficiency, given our time constraints and other priorities
7 that have developed, for example, the economy and the
8 recession rising to the forefront and us thinking it was
9 important to do an economic scenario analysis.

10 But there is still more work that needs to be
11 done here. We made some simplifying assumptions that we
12 will need to revisit for the next forecast. So for the
13 2011 version of the forecast, we will be refining this
14 efficiency work, improving on it, as well as potentially
15 the methodologies we used to do the forecast.

16 Okay, some last minute changes that we made in
17 the forecast since the September 21st workshop, that we made
18 out of necessity, and in response to public comments, and
19 because of our own internal concerns, we updated the
20 forecasts to incorporate the shift in program cycle from
21 2009 to 2011 to 2010 to 2012; we added the electric vehicle
22 forecast brought to us by our Fuels Office into the
23 forecast; and we revised slightly downward photovoltaic
24 self-generation impacts, basically the adjustment here was
25 going from nameplate capacity for photovoltaic to what is

1 called PTC, or Performance Test Conditions capacity. This
2 is akin to adjusting mileage estimates for a car and a
3 truck from EPA lab results to actual on road results, so it
4 was an adjustment downward.

5 And the results of these changes, first of all,
6 for consumption, the red curve shows the final forecast and
7 the blue shows the forecast from September. Initially,
8 consumption is lower in our final forecast, and that is
9 because of the shift in program cycle from 2010 to 2012, so
10 there are more savings in 2012, therefore less consumption.
11 And then, beyond that point, as electric vehicles begin to
12 accumulate in the forecast, we have higher consumption,
13 around 1 percent by 2020, relative to the September
14 forecast.

15 Finally, the impact on peak is up slightly
16 throughout the forecast period from reduced projections for
17 photovoltaic systems. When we say "peak" here, we are
18 talking about peak demand that has to be met by utilities.
19 So if you have less PV systems, then you have more peak
20 demand for the utilities to meet, so less PV means a higher
21 utility peak. Also, adding into that, electric vehicles
22 give us a roughly 1 percent increase in peak in 2020 versus
23 the previous forecast we presented in September.

24 So with that, we can go into -- or, Mike, you had
25 the Errata.

1 DR. JASKE: Yes. You should have a one-page
2 Errata. Staff is proposing to modify its Staff Report by
3 essentially inserting the entirety of this page, other than
4 the header information, into page 236 of the Staff Report,
5 so it is a large staff report and there is this one-page
6 insert. The essence of this insert is to clarify that
7 there are remaining issues about the attribution of savings
8 among principally utility programs and naturally occurring
9 energy efficiency. These various bullet points in effect
10 highlight things that are already stated to some degree in
11 the body of Chapter 8, which is the energy efficiency
12 discussion of the report, and sort of make more clear that,
13 as Chris said, while we made significant strides in this
14 cycle, there is still work to do, and part of that is this
15 issue of attributing savings, either to programs or to
16 naturally occurring effects. And these points stem from
17 comments that were filed earlier this month from NRDC that
18 thought this dimension of the forecast report just needed
19 more clarification, so we put forward this page Errata to
20 make it clearer how to understand the results that are
21 presented in the report.

22 So with that, I believe we are now available for
23 questions.

24 COMMISSIONER BYRON: Madam Chair, if I may, I
25 would just like to ask the staff to clarify a couple of

1 things. First of all, gentlemen, has it occurred to you
2 that maybe the reason that there is so much controversy
3 around your demand forecast is that we do not like the
4 results? I count myself among that group, Drs. Kavalec and
5 Jaske. We have drilled down on this a great deal, and I
6 have kind of gotten past the fact that I do not like the
7 results and tried to understand why I do not like them.
8 Dr. Kavalec, what is the biggest reason I do not like these
9 results? Why is the forecast so low?

10 DR. KAVALEC: Well, you have a combination of
11 efficiency impacts that have a large effect in the near
12 term, plus the economic recession.

13 COMMISSIONER BYRON: Isn't it really the economic
14 issue that drives this?

15 DR. KAVALEC: Yeah, and most of that impact, that
16 dip, comes from the recession. And then, afterward, we are
17 basically going back to the rate of growth that we had in
18 the previous forecast, when everything is "normal" again.

19 COMMISSIONER BYRON: We spent a lot of time
20 discussing this, so I am being a little rhetorical when I
21 ask you this, but I want to make sure everyone understands
22 that I think we have conducted three workshops this past
23 year, and a couple even last year on this issue. We do not
24 like the results, it is not very exciting to see demand
25 down the way it is, given when we occasionally have the

1 enormous heat storms and such that we do, such as in July
2 of 2006, when demand was so high, and of course we see some
3 of the utilities not being very excited about seeing their
4 procurement numbers going forward into the future coming
5 down somewhat, so these are troubling issues. And I have
6 some comments I will make with regard to that later on.
7 But let me ask another quick question or two. One of the
8 issues that is raised or requested is that we make this
9 model available so that others can do independent
10 verification and/or run their own scenarios, so I am
11 reminded of the Public Utilities Commission contracting to
12 create a model that they made available publicly to
13 calculate the GHG reduction that from various cases you
14 could input. Why can't we make our model available so they
15 can do the same thing?

16 DR. KAVALEC: We can. The problem is, as Dr.
17 Jaske mentioned earlier, is the model is still in a very
18 arcane language that most people do not use anymore, so one
19 likely possibility going forward is to put that model in a
20 new, more modern platform, and that by itself will make it
21 more accessible. But it should be noted that these end-use
22 models are relatively complex and relatively data
23 intensive, so it would take some work on the part of the
24 person interested, the user, to come up to speed, which we
25 are always happy to help with.

1 COMMISSIONER BYRON: How many working group
2 meetings did we have this past year?

3 DR. JASKE: I believe I have counted eight.

4 COMMISSIONER BYRON: Okay, and can you just give
5 us a sense of the participation in those working groups?

6 DR. JASKE: Usually we have 15-20 people around
7 the table. As I mentioned earlier, most of the five major
8 utilities, Southern California Edison has probably been our
9 most devoted participant.

10 COMMISSIONER BYRON: "Devoted," I like that term.
11 And wasn't the National Resource Defense Council involved,
12 as well?

13 DR. JASKE: Oh, yes. Miss Edison and other NRCD
14 staffers have participated in many of them.

15 COMMISSIONER BYRON: Okay, and Dr. Jaske, I just
16 want to make sure I understand the Errata that you
17 circulated, that primarily is as a result of comments we
18 received from NRDC. Is that correct?

19 DR. JASKE: That is correct. I understand they -
20 - well, I know that they filed comments and I understand
21 they visited a number of Commissioners and expressed some
22 concerns, and so this insert is an attempt to both clarify
23 things that may not have been as clear as they ought to
24 have been, and also to respond to their concern.

25 COMMISSIONER BYRON: I have a lot of other

1 questions that I am going to forego because I do not want
2 to drag this on any longer than is necessary, but suffice
3 it to say to my fellow Commissioners that, as we drilled
4 down into this over the course of the last two years, there
5 are a great number of assumptions that staff must make.
6 Where they get the information that they use to create this
7 forecast is rather extraordinary, I am looking at a table
8 that you provided me in a previous correspondence, and I
9 cannot even begin to explain how complicated it is to pull
10 together all the different annual, monthly, and quarterly
11 reports from various sources. Suffice it to say this model
12 and the analysis does not lend itself easily to
13 distributing it and providing the data sets; however, could
14 we do that? Could we provide data sets going forward if
15 those folks were as interested in that level of detail?

16 DR. JASKE: I believe there are no barriers to
17 releasing the input data sets and the model codes
18 themselves. As Chris said, it would take a rather
19 sophisticated team to be able to assimilate and try to
20 actually run them successfully.

21 COMMISSIONER BYRON: It is much easier to say we
22 think it should be more transparent and be made publicly
23 available. So the last question is, what are we going to
24 do going forward to make sure that we improve this model in
25 the next forecast? I know you have covered that in a bit,

1 but if you would give me the short version, I would
2 appreciate it.

3 DR. KAVALEC: Yeah, as Dr. Jaske mentioned, we
4 have an effort going on within the Commission, examining
5 our methodology, determining what we need going forward,
6 given the outside environment, and in conjunction with
7 that, the GFEEQP working group has formed a subgroup
8 specifically to look at modeling methodology issues, so
9 there is going to be a connection there, and that
10 connection, we are hoping, will ensure because that
11 subgroup includes members from the CPUC, that our forecast
12 is going to be meeting all the needs that the CPUC has,
13 going forward. So we have internal effort going on with
14 assistance from GFEEQP. So, as Dr. Jaske mentioned, not
15 everything will be revamped by 2011, but I think a
16 significant part of our modeling methodology may be
17 modified or changed by then.

18 COMMISSIONER BYRON: Madam Chair, thank you for
19 allowing me to just ask a few more questions. I have some
20 comments that I would like to make when we close, but I
21 prefer to open it up at this time if any others have
22 questions. Maybe I will ask one more thing. Gentlemen, is
23 there anything else we need to add here, that you wanted to
24 add that maybe I did not ask you about?

25 DR. KAVALEC: The one thing I will add is that,

1 while we are focusing on modeling methodology, I want to
2 say that the input data that we get, the continued quality
3 input data and surveys are just as important to our
4 forecasting process.

5 MS. JONES: And I think I would just add that,
6 having been through IEPR since the first in 2003, I believe
7 that this year there has been a marked improvement in the
8 release of assumptions and the explanation of assumptions
9 that go into those models, and so I think that helps with
10 the transparency issue.

11 COMMISSIONER LEVIN: I agree with that, Ms.
12 Jones, and I think that is really important going forward.
13 I had many similar questions, I am glad Commissioner Byron
14 asked them first. As you know, the Energy Efficiency
15 Committee has also been looking into this and has had a
16 number of meetings recently. I appreciate all the work
17 that staff has put into this, and staff's willingness to
18 review things and take input -- I would say kind of late
19 input from NRDC and others, and I think the IEPR Committee,
20 the IEPR staff, as well as the Demand Forecast staff,
21 really, to their credit, were very open to late comments
22 and feedback, and I think that is exceptional and
23 important. My comments, really more than questions, are
24 sort of two-fold. I think one of the other assumptions, if
25 I understood correctly from Ms. Bender, is we do not

1 include assumptions that the Building Code and other
2 standards will be updated. Is that correct? So we only
3 build in the efficiency gains from the current Title 24 and
4 current laws that are already being implemented?

5 DR. JASKE: Yes, that is correct. And --

6 COMMISSIONER LEVIN: You do not have to say more.

7 DR. JASKE: -- given the --

8 COMMISSIONER LEVIN: I am sorry, go ahead.

9 DR. JASKE: -- I almost sort of feel compelled
10 to. And given the emphasis on not only the consequences of
11 existing programs, but the prospects of new programs, that
12 is where the necessity for developing an incremental impact
13 assessment capability for those new initiatives comes from.
14 So we, in effect, made a bargain, or made a decision in the
15 '08 IEPR update that we would continue the committed-
16 uncommitted paradigm and only include committed things in
17 the Base Forecast. But we would create this capability to
18 evaluate going forward policy initiatives, whether they are
19 our own ratcheted building standards, or federal appliance
20 standards, or continued utility programs, and that is what
21 will be coming forward in January as an initial product,
22 evaluating three scenarios that the PUC staff have
23 identified, and for use in their procurement proceeding,
24 and beyond that initial effort, we will continue to be
25 looking for adaptations of the existing models, or new

1 models that let us take on that task on an ongoing,
2 permanent basis.

3 COMMISSIONER LEVIN: I think that is really
4 critical because I think a large part of the public
5 perception and, to some extent, misperception of the demand
6 forecast is that we do not build in things. Chairman
7 Douglas just asked me about television standards, which we
8 have now adopted, and we know the Building Code will be
9 updated every so many years. I mean, I think that there
10 are different categories of extremely likely scenarios, and
11 then the stretch scenarios that may or may not happen, and
12 somehow the ones that are on the books now, or virtually
13 certain business as usual will be on the books every so
14 many years, somehow -- maybe separately, but somewhere we
15 do need to build those in because I think that is a really
16 critical gap. And another starting place would be the
17 assumptions built into AB 32 on energy efficiency and what
18 that model looks like. So I think these are important gaps
19 that we do need to fill in quickly. And for me, it is
20 actually more about the assumptions, and this goes back to
21 the transparency issue. I think the more we clarify the
22 assumptions, what is really in and what is not, the better.
23 And I think you have done a good job with the Errata, that
24 is really important, and I think we probably need to
25 continue to do that as a matter of course so that the

1 stakeholders, including other policy makers, understand
2 what is in and what is out. I did also want to say, I
3 think the staff have done a great job of working with the
4 Public Utilities Commission on this, again, including some
5 of these late kind of developments and concerns that were
6 raised, coordinating with the PUC, because I think it is
7 important to separate out what our role is in terms of the
8 demand forecast, generally load all of that compared to the
9 PUC's role of attributing this to specific programs and
10 compensation. But for all these reasons, in looking at the
11 assumptions, I think there is a lot of work still to be
12 done on this and I look forward to hearing more in the not
13 very distant future because this is critically important.
14 Anyway, those are my comments. But, thank you.

15 CHAIRPERSON DOUGLAS: Well, thank you,
16 Commissioners Byron and Levin. You have asked most, if not
17 all, my questions. I did want to verify, the TV Standards
18 that were recently adopted are not assumed in the demand
19 forecast. Is that right?

20 DR. KAVALEC: They are not.

21 CHAIRPERSON DOUGLAS: So, you know, I appreciate
22 your work on this and the changes the demand forecast has
23 gone through, the increased transparency, the release of
24 the input assumptions. I think that moving forward we will
25 be able to continue to move in that direction and continue

1 to provide ever greater openness about the tool, while
2 obviously also maintaining its effectiveness as a forecast
3 and the methodology that is needed to do a sound forecast,
4 and so I know that you are moving in that direction and
5 will continue to. And, obviously, the demand forecast is
6 one of a number of very important analytical exercises or
7 products, this one coming out of the Energy Commission, but
8 there are a number of analytical products coming out of the
9 ISO and the PUC, and increasingly it is, of course, I
10 think, increasing important and helpful for us to be
11 closely coordinated with other agencies so that, when we
12 look at our analyses vs. theirs, we are comparing apples to
13 apples, and we can create in that way greater transparency
14 for stakeholders and for each other in analyzing
15 California's energy system in its many and various
16 manifestations. So I appreciate your hard work on this and
17 I am strongly supportive of it. I think that is all I
18 wanted to say. I have no blue cards. Is there any public
19 comment on this item?

20 COMMISSIONER LEVIN: I do have one question
21 before there is a motion. Is it possible, still, to add
22 one more point to the Errata from the Dais? Because I
23 think that adding as part of the caveats, it would be
24 helpful now to explicitly -- the television -- energy
25 efficiency gained from the Television Standards is not

1 included. I would propose adding that if that is possible
2 procedurally and if my fellow Commissioners agree.

3 COMMISSIONER BYRON: I believe so, in fact, it
4 probably should be made more general, should it not, you
5 know, given that these forecasts take time to do and there
6 is probably -- there may be other things that are not
7 addressed here, other standards perhaps? Or is it just the
8 TV Standards that have happened since we began the
9 forecast?

10 DR. KAVALEC: Well, we have the 2008 ratcheting
11 up of Title 24 that is actually not going to happen until
12 2010, so that should probably be mentioned, too, since that
13 is a near term standard change.

14 COMMISSIONER BYRON: So, Commissioner Levin, my
15 suggestion would be that they add a caveat that makes it
16 clear that certain information -- certain action by this
17 Commission with regard to updating standards since a
18 certain date or something has not been included, and that
19 would cover it, wouldn't it? Unless you explicitly want to
20 say TV Standards?

21 COMMISSIONER LEVIN: Only because we have
22 formally adopted those already, I think it is appropriate
23 to call them out, but then also with a more general caveat
24 of upcoming standards.

25 COMMISSIONER BYRON: Then let's list those, as

1 well.

2 CHAIRPERSON DOUGLAS: It sounds like you have
3 some work --

4 COMMISSIONER BYRON: Any difficulty?

5 DR. JASKE: No, that is fine.

6 DR. KAVALEC: That is okay with us, I do not know
7 about the procedural part.

8 COMMISSIONER BYRON: We will give you latitude to
9 add that additional caveat. If it is all right, Madam
10 Chair, I would like to make a few closing comments with
11 regard to the effort on behalf of the IEPR Committee.

12 We have been working on this for a long time.
13 You know, this California Energy Demand 2010-2020 staff
14 revised forecast is extremely important. I count at least
15 three places that the document is used. At the Public
16 Utilities Commission, they rely on the forecasts for the
17 utilities procurement, as well as their 33 percent RPS and
18 GHG planning, going forward; the ISO uses the forecast for
19 its transmission planning purposes, and the way that energy
20 efficiency is treated in the forecast is key, given the
21 importance of this resource in our loading order and the
22 influence those demand side assumptions have on the need
23 for investment in other supply side infrastructure.
24 However, historically our forecast has always, it seems,
25 been somewhat contentious, it does not lend itself to easy

1 dissection and independent verification. The results are
2 not always embraced by those that read the results;
3 sometimes they are too high, sometimes they are too low.
4 It is fair to say that we probably will never get it
5 completely accurate. And the attribution of the energy
6 efficiency savings is a deficit that the Energy Commission
7 has begun to address with more detailed assumptions going
8 forward. But these have always, it seems to me,
9 contributed to the contentiousness of the results. The
10 report's energy consumption and peak forecast are lower
11 than the forecast from the previously produced IEPR in
12 2007, and as we discussed earlier, primarily because of the
13 worsening economic situation. In my estimation, this is
14 the most important driver in our forecast, and there is a
15 lot of discussion around the others, but this is really the
16 key. And as Dr. Kavalec reported, consumption is down.
17 Our forecast shows it is down by more than 5 percent and
18 peak demand is down by almost 4 percent in 2018. This is a
19 slight increase from the projections that we did earlier in
20 the summer, and they were revised based upon less
21 pessimistic economic projections. We have had the staff
22 look at this very carefully because of the implications of
23 under-estimating demand. We had a lot of workshops, as we
24 have indicated, we also have the working group that has
25 been meeting a number of times over the course of the last

1 year, and will continue to meet. We encourage the Public
2 Utilities Commission, the utilities, and other constituents
3 such as NRDC to participate, we welcome their input and
4 their oversight.

5 In addition to the electricity and natural gas
6 system assessments, this forecast includes a major staff
7 effort to improve the measurement and attribution of
8 efficiency impacts within the forecast. This expanded
9 staff effort was initiated in response to stakeholder
10 comments received in previous IEPRs. Also, revisions to
11 the forecast reflects the valuable input, including adding
12 projections for electric vehicles, impacts of photovoltaic
13 systems, and re-running the model to include the recent PUC
14 adopted energy efficiency programs for 2010 to 2020 have
15 been included.

16 So we have received a number of public comments.
17 If I could summarize, the comments in the last two weeks
18 have focused in two specific areas, one is on more
19 transparency and the second on questions on the attribution
20 of energy efficiency. Now, that is primarily allocating
21 the savings to utility programs, building in appliance
22 programs pricing and market effects, and other things that
23 I do not understand, not being an economist.

24 Let me summarize, I welcome the suggestions for
25 continued improvement on the forecasts, and I believe that

1 we should continue be committed to conducting a transparent
2 process, as I believe we have, and I encourage the parties
3 to participate in the working group, which I will properly
4 call out as the Energy Efficiency Quantification Project
5 Working Group, an acronym that we do not like to use. With
6 regard to attribution, our staff has initiated significant
7 effort to account for energy efficiency savings in the
8 forecast and to attribute savings to the various efficiency
9 initiatives, including standards, utility programs, and
10 those price and market effects I mentioned. And this
11 initial effort has produced results and new questions have
12 been generated. We agree with the parties' comments that
13 more work is needed in this area and, again, I solicit
14 their active participation. We also see greater
15 opportunity to collaborate on the measurement and
16 verification studies that are being conducted by the PUC,
17 which can shed new light on the market transformation
18 effects of both utility programs and standards. It is not
19 enough to forecast and take the utilities at their words,
20 we need to do the measurement and verification. It is also
21 advantageous to us to only adopt one state demand forecast,
22 it would be a waste of public and stakeholder resources to
23 have separate forums, and good public policy decisions on
24 renewables are the net short of renewables calculations,
25 the GHG reduction targets, and needed new infrastructure

1 depend on getting a forecast that can be relied upon. I
2 believe one forecast is the right approach. Demand model
3 methodology evaluation project, the staff has committed and
4 has begun an intensive and in-depth demand modeling
5 evaluation that is probably the most intensive since the
6 Commission's inception, and that is according to the
7 Electricity Supply Analysis Division Deputy Director. So
8 that will address modeling and process improvements, it
9 also should be, and will be, done in close consultation
10 with the PUC and the Energy Efficiency staff here at the
11 Energy Commission. And it will be matched to the PUC's
12 Long-Term Procurement Planning process. So, to conclude,
13 the demand forecast that we are about to put out is most
14 certainly wrong, no forecast except the one in hindsight,
15 will be correct. I inherited this task two years ago and I
16 have come to appreciate the complexity of the problem,
17 there continues to be room for improvement, but I am also
18 satisfied that the staff has done a thorough and objective
19 job of creating this forecast. Gentlemen, to you and your
20 staff, I think it is a job well done.

21 I recommend the adoption of the forecast with the
22 Errata as modified by Commissioner Levin, and I also
23 recommend that we get to work on improving the next demand
24 forecast. We will conduct our first workshop next month.

25 If there are no further questions, I move

1 approval of the staff's Demand Forecast in Item 12 on the
2 Agenda.

3 COMMISSIONER LEVIN: Just to clarify before I
4 second, with the Errata and the addition to the Errata,
5 correct?

6 COMMISSIONER BYRON: Correct.

7 COMMISSIONER LEVIN: Second.

8 CHAIRPERSON DOUGLAS: All in favor?
9 (Ayes.)

10 The item is approved. Thank you.

11 Item 13. Minutes. Approval of the November 18th,
12 2009 Business Meeting Minutes.

13 COMMISSIONER LEVIN: Move for approval.

14 COMMISSIONER BYRON: Second.

15 CHAIRPERSON DOUGLAS: All in favor?
16 (Ayes.)

17 Item 14. Are there any Committee presentations
18 or discussion today?

19 COMMISSIONER BYRON: Just a quick item if I may.
20 The State Water Resources Control Board, and really, this
21 is for the benefit of my fellow Commissioners, held a
22 workshop yesterday on their proposed ruling on once-through
23 cooling. Staff was in attendance and provided support of
24 the approach that the Board is taking. I believe the
25 Chairman of that Board also directed the three energy

1 agencies of the state to work together going forward, one
2 of those agencies had the audacity, namely the Independent
3 System Operator, to propose that they should be able to
4 usurp the rule at any time and identify a power plant that
5 might be needed for reliability purposes, and should not be
6 shut down or retired as a result of this rule. Needless to
7 say, that was not very well received by the Board. But I
8 think that our staff has taken the right approach here, we
9 will continue to provide leadership on the working group of
10 these three energy agencies, and the State Water Resources
11 Control Board. I also believe the director may have
12 directed us to proceed with a Memorandum of Understanding,
13 I have not verified that yet, but they seem to feel the
14 need for some sort of long-term assurance that, over the
15 next eight to 10 years, these agencies will continue to
16 work together and address the appropriate shutting down,
17 repowering, or re-cooling of these coastal plants without
18 affecting reliability.

19 The other thing I wanted to mention, and I
20 suspect that our Executive Director will bring it up, but I
21 was just shocked and outraged to read about this recent
22 audit that was conducted of our ARRA spending efforts, but
23 I will reserve my comments around that until the Executive
24 Director reports.

25 CHAIRPERSON DOUGLAS: Thank you, Commissioner

1 Byron. All right, we are nearly there.

2 Item 15. First, is there a Chief Counsel's
3 Report?

4 MR. BLEES: Yes, thank you, Chairman Douglas,
5 Commissioners. A brief report on transitions in the legal
6 office. This past Monday, we said a sad farewell to Mr.
7 Television, Bill Stack. We intend to have his replacement
8 on board by the first week of the New Year. I am also very
9 pleased to introduce to you today, on her very first day
10 here, Renee Webster Hawkins. Renee served in the Armed
11 Forces immediately upon graduation from high school, then
12 attended Sierra College, then obtained a BA with Honors in
13 History from U.C. Davis. She then attended the Stanford --
14 no, Leland Stanford Junior University School of Law. We
15 had to wait until Bill Chamberlain retired in order to sign
16 her papers. Following her graduation from Stanford, she
17 clerked for Judge Carlton of the Federal District Court.
18 She has worked for the State Department of Fish and Game,
19 has worked as well for one of the leading environmental law
20 firms in the state, Remy, Thomas, Moose and Manley.
21 Recently, she has served as both Chief Counsel and
22 Executive Director of the Department of Community Services,
23 which, as you know, has been, like our agency, distributing
24 a fair amount of ARRA funds, and I believe that Renee has
25 already done some work this morning on the MVE ARRA

1 contract, so no rest even for the newbie's. I want to
2 thank Gina Tossi Smith and her staff, there were a few
3 unexpected potholes along the way to bring on Renee,
4 unfortunately, some of the potholes were dug by my own
5 office, and thanks to Renee's patience and Gina's work, we
6 were able to navigate around them and finally welcome
7 Renee.

8 COMMISSIONER BYRON: Ms. Hawkins, welcome. My
9 office is open, if you ever need a respite for whatever
10 reason, downstairs.

11 CHAIRPERSON DOUGLAS: Absolutely. Welcome.

12 Item 16. Executive Director's Report.

13 MS. JONES: Good morning, Madam Chairman and
14 Commissioners. I wanted to report on a couple of things
15 related to ARRA. I will go to the issue that was raised by
16 Commissioner Byron. The Bureau of State Audits did release
17 a report addressing our preparedness to distribute ARRA
18 dollars. It was not actually an audit, although that is
19 how it has been cast, it was officially called a "Review
20 for Preparedness." The BSA's findings concluded that the
21 Energy Commission has made little progress with the State
22 Energy Program, that the contract money has not been spent,
23 and that there is a lack of internal controls to ensure
24 funds are used appropriately. We strongly disagree with
25 many of the findings of BSA in the report. We did file a

1 Letter of Comments rebutting some of the assertions that
2 were made, which is attached in the back of the report, and
3 we have distributed the report to all your offices. I
4 would like to note that, in our response, we did point out
5 that one of the reasons why it is taking longer than we
6 originally anticipated to distribute ARRA funds is because
7 we have an open, transparent public process that we have to
8 go through. We also had to get legislative authority to
9 develop guidelines, rather than regulations. And then
10 again, we have internal controls with control agencies.
11 And so all of these things have led to some delay, but we
12 anticipate that the majority of SEP money will be
13 encumbered in April of this year, and several months in
14 advance of when it needs to be. We do agree that we could
15 document our internal controls better and we are actually
16 seeking assistance on our internal controls and on the
17 issues of fraud and abuse. We have an RFP out on the
18 street to assist us in taking on these new responsibilities
19 and to beef up our internal controls and meet the fraud and
20 abuse requirements that are fairly stringent from the
21 Federal Government. And if you have any other questions, I
22 would be happy to answer them.

23 CHAIRPERSON DOUGLAS: I believe that there are
24 either questions or comments, or both, from all of us at
25 this point. Commissioner?

1 COMMISSIONER LEVIN: I just have one question. I
2 have not had a chance to read the report word for word, but
3 I did notice it seemed to be assuming that the only monies
4 we have spent so far are the agreement with GDS, and the
5 green workforce training money, but I did not see any
6 inclusion in the report of the ECCA loans that we have made
7 with ARRA funds, which seemed like a fairly significant gap
8 in money we have already gotten out the door.

9 MS. JONES: They did not include ARRA funds for
10 ECCA loans, the ARRA funds that we are using. Mark, do you
11 by any chance know the total?

12 MR. HUTCHISON: Yeah, we actually identified
13 during their audit, and we provided I think Minutes from
14 the Business Meetings where the loans were approved, and we
15 also clarified in our rebuttal, in our response back, that
16 not only did we have something on the order of \$6 million
17 in ECCA loans approved, but we had -- I think we had
18 reported back at the time it was \$35 million in
19 applications in-house. By the time we finalized that
20 response, that number had actually gone up to almost \$46
21 million. So we provided information, but they chose for
22 whatever reason, perhaps because they had been to a
23 business meeting, but it had not been executed, in other
24 words, signed by both parties, and that may be the reason
25 why they did not include that. But we certainly provided

1 that information to them.

2 COMMISSIONER LEVIN: Well, and with today's
3 approval, I assume that the number of actual approvals is
4 also much higher, in addition to the number of applications
5 received?

6 MR. HUTCHISON: Correct.

7 COMMISSIONER LEVIN: Okay, thank you.

8 COMMISSIONER BYRON: I will be very brief, Madam
9 Chair. Call it an audit or an assessment, I think it was
10 poorly poorly done and I am completely satisfied, after
11 recent briefings from staff, from you, and the updates that
12 I have read as a result of the response to the assessment,
13 that this Commission is conducting this process in as
14 expedited and thorough and with the best oversight I think
15 we can possibly provide. I do appreciate the
16 recommendations that you have embraced in the assessment,
17 and I take it as a Commissioner that the intent of this
18 assessment, for me, is to make sure we provide complete
19 oversight, and we will continue to request you provide us
20 with updates on a regular basis, if not at these meetings
21 and other briefings. I will pay even closer attention to
22 this than I have in the past. But, again, I want to
23 reiterate my assessment that this was poorly conducted and
24 really did not get at anything new that we are not fully
25 aware of, and the conclusions I find wholly inaccurate.

1 CHAIRPERSON DOUGLAS: Thank you. I did take that
2 audit home with me -- or the assessment home with me, and
3 got through a fair amount of it, not quite all of it,
4 although certainly the major assertions that were made
5 there. I think that, as our Executive Director has just
6 said, the recommendation, or the observation by BSA that
7 internal control at the Energy Commission for expending
8 this new chunk of money could be better is a fair point to
9 make and, in fact, we know we agree with it because we are
10 moving forward to put those controls in place, and I do not
11 think that was adequately acknowledged. Beyond that, I
12 think my main criticism of the report is its narrow focus
13 on speed and its, I think, overblown concern that we might
14 miss deadlines for obligating expending the money, where
15 frankly we have a fairly comfortable margin of error for
16 getting that money out. And we are looking at spending the
17 money several months -- four or five months, at least,
18 before the actual deadline. As we move forward -- or as we
19 have developed these programs, I will say I think there is
20 also a lack of recognition of other factors that need to be
21 balanced and that are being balanced, besides speed, as we
22 move forward to develop these programs. We need to move
23 quickly and we want to get jobs. We want to get the money
24 into the economy ASAP. We need to have controls,
25 accounting, metrics, and in fact the stimulus requires

1 controls that go well beyond anything that has been
2 required in the past from federal grants. So there are new
3 controls that have to be put in place, and, in fact, I
4 compliment staff for looking to keep those controls and
5 institutionalize them in many cases, and apply them to our
6 other programs. So I think that this exercise will leave
7 us much stronger once we are through it, in terms of our
8 internal controls, and I think that is all for the better.
9 We also have to ensure that the programs we put in place to
10 expend this money bring real and lasting benefits to the
11 State of California. We can move quickly and we could
12 account for every single job and every single dollar, but
13 if all we are doing is paying people to dig holes and fill
14 them in again, we have not done anything, we have not
15 created any lasting benefit, and that is where I believe
16 that the Commission and staff through our public process
17 has done a very good job. I think that we have put in
18 place programs that will over the long term increase the
19 efficiency of the California economy, save local
20 governments and private parties, homeowners, depending on
21 who wins in public solicitations for the money, money on
22 their electricity bills and on their fuels costs, over the
23 long term I think there are opportunities to create not
24 only lasting efficiency benefits, but programs that create
25 a lasting demand; in other words, a sustainable higher

1 level of demand for certain types of jobs that will also
2 increase the efficiency of our energy economy and bring
3 lasting benefits to Californians. I was concerned and felt
4 that it was a weakness of the report that the quality of
5 the programs in place was not mentioned or a consideration.
6 Beyond that, there is the concern for fairness and
7 integrity of the process. It is important to all of us
8 that the benefits of the stimulus are distributed on the
9 basis of merit as opposed to, say, political connections
10 for other means of accessing this one-time money, state
11 contracting laws that put forth requirements for contracts,
12 state laws that require us to put in place rules for how we
13 will distribute the money, develop those rules through a
14 public process, provide stakeholders with sufficient time
15 to have real input, going above and beyond, in our case, by
16 making sure that we went up and down the state to diverse
17 areas, Central Valley, Central Coast, Southern California,
18 Northern California, to get input was part of setting up a
19 fair and open process, and it is also part of ensuring that
20 there is some reasonable amount of geographic diversity,
21 that programs are set up with recognition of the diversity
22 of this state, that those most in need, both hardest hit
23 regions and hardest hit populations, wherever they are in
24 the state, have some ability to actually access the
25 benefits of stimulus, and that state laws requiring us to

1 develop rules and guidelines through processes and obligate
2 money through processes are followed. You know, obviously
3 when we respond to concerns about speed by saying, "Well,
4 we had to follow the process, we had to follow the
5 process," there is a danger of sounding bureaucratic, there
6 is a danger of sounding less responsive, but I believe, and
7 I think this institution has internalized and believes the
8 public benefit of these requirements, both the public
9 benefit of having a fair and open public process, and the
10 public benefit of having rules that guide our contracting
11 and distribution of money, and oversight agencies that
12 ensure that this is done according -- in an above-board way
13 is really important. And it is okay. In some cases it
14 costs us weeks, and in some cases these requirements may
15 cost us a month, but they are an important part of the
16 system, they are part of the world that we operate in. And
17 we do operate under a system of state law, federal law, and
18 in our own interpretation of our process, and in many cases
19 I know we have gone above and beyond in looking for ways to
20 shave a week off here, or a couple weeks of there, and
21 still meet these policy goals and still comply with state
22 law. I do not think that was acknowledged. And I do not
23 think the public benefits that were served by going through
24 a public process and complying with sometimes challenging
25 requirements for expending funds were fully acknowledged.

1 These laws are not an inconvenience to be circumvented,
2 they add value, and they protect the public interest. It
3 is possible to develop programs in a reasonable timeframe,
4 quickly, with controls, that provide real and lasting
5 benefits through a fair and open process and in accordance
6 with state contracting requirements, it is possible. And,
7 Commissioner Byron, I agree with you when you say, "I
8 believe that we are doing it." There are trade-offs, when
9 you think about whether we need to work in an additional
10 workshop, an additional part of the state, because we are
11 not sure if we have heard from that constituency, or when
12 we get comments in on proposed guidelines and we think,
13 boy, we might need to make changes, but if we make changes,
14 that means we have got to put it out for another 15-day or
15 10-day review period and take more comments, so that there
16 are trade-offs between these different factors. But
17 nevertheless, I think it is possible to move forward in a
18 reasonable way that fundamentally achieves these goals, and
19 I think the Commission is on track to do that, and so I
20 want to compliment staff. And I hope that we continue to
21 work with BSA and other oversight in auditing functions,
22 and move forward to articulate what we are doing, why we
23 are doing it. I am not frankly surprised at the narrow
24 focus on speed, but I think in the long run we are not just
25 going to be judged on speed, and we are not just going to

1 be judged on whether we counted the dollars right, we are
2 going to be judged on whether we have created a legacy of
3 benefit for the State of California while acting quickly
4 enough and creating as many jobs as we can, and through a
5 process that has integrity, and hopefully providing
6 benefits to a diverse constituency geographically and so
7 on. So I want to compliment you for your work and also
8 welcome, and I think from the Commission, we are very
9 engaged and very focused on this, and I think we will need
10 to be increasingly so as we move forward here because it is
11 fair that questions will be raised, and it is inevitable
12 that questions will be raised, and I think the values of
13 this institution and the way that we work is to address
14 them in the open process, and that is obviously what we
15 will do and what we will continue to do.

16 CHAIRPERSON DOUGLAS: So anything else, Ms.
17 Jones?

18 MS. JONES: I just wanted to mention that there
19 is a legislative ARRA hearing that is scheduled on December
20 9th, the Department of Finance is taking the lead on that,
21 and all departments and agencies administering ARRA funds
22 are expected to be there, so we will be planning for that.

23 On the Energy Efficient Appliance Rebate Program,
24 I wanted to let you know that the Negative Declaration and
25 Proposed Guidelines for the Rebate Program will be coming

1 to you at the December 16th business meeting, and we expect
2 to issue RFPs for the rebate services following the
3 approval of those guidelines in that environmental
4 statement. That is a \$35.2 million program that is aimed
5 at clothes washers, refrigerators, and room air
6 conditioners. We tentatively are assuming that the rebate
7 purchase period will be from March 10 through late April.

8 On the California Energy Work Force Training
9 Program, today there is a meeting going on, it is an
10 interagency meeting here at 2:00 in our hearing room, and
11 so we are moving forward with our work force investments.
12 And then I would just note one other thing that, at the
13 Energy Action Plan Meeting between the Energy Commission
14 and the PUC and the ISO, which is scheduled for December
15 15th, we will be bringing forward summaries of all of our
16 ERRA work and a number of other ongoing efficiency and
17 other efforts within the Commissions.

18 CHAIRPERSON DOUGLAS: Thank you. Item 17.
19 Public Advisor's Report?

20 MS. McMAHON: Good morning. I have a couple
21 items, as well. Next week we have two site visits and
22 informational hearings which I will be attending, as well
23 as a new staffer that I have in my office, Jim Davis. The
24 first one is Abengoa Mojave Solar, that is going to be on
25 the 9th in Barstow; the second is Genesis Solar, that is

I, KENT ODELL, 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 _____ day of December, 2009.

KENT ODELL