BUSINESS MEETING

BEFORE THE

CALIFORNIA ENERGY RESOURCES CONSERVATION

AND DEVELOPMENT COMMISSION

CALIFORNIA ENERGY COMMISSION

HEARING ROOM A

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COMMISSIONERS PRESENT

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James Boyd, Vice Chairperson

Jeffrey Byron

Arthur Rosenfeld

STAFF PRESENT

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William Chamberlain, Chief Counsel

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Linda Kelly

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Sharon Jane Matthews

Bradley Meister

Christopher Meyer

Steve Munro

Joe O'Hagan

Jamie Patterson

Bill Pennington

Mark Rawson

Mike Smith, Director, Governmental Affairs

Terry Thompson

Karen M. Van Egdon

APPEARANCES CONTINUED

STAFF

Ram Verma

Joseph Wang

Robert Worl

PUBLIC ADVISER

Nicholas Bartsch

ALSO PRESENT

Rocky Bacchus, Freus Air Conditioning

Linda Bond, LDBond & Associates

Merwin Brown, Ph.D

Amy Chastain, BayKeeper

Ben Eidenberg, Stanford Environmental Clinic

Scott Galati, AES Highgrove Power Plant Project

Ramiro Garcia, High Desert Power Project

Dave Hawkins, Cal ISO

Gary Ledford

Mike Mahan, California Water League

Robert Mendonca, representing Gary Ledford

Ken Nitler, Enercomp

Thomas Pape, California Urban Water Conservation Council

Jeff Russell, Mirant

Stephen Shulder, High Desert Power Project

Julie Way, AES Highgrove Power Plant Project

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PROCEEDINGS

CHAIRPERSON PFANNENSTIEL: Good morning. This is the Energy Commission business meeting. Please join me in the Pledge of Allegiance.

(Thereupon the Pledge of Allegiance was recited in unison.)

CHAIRPERSON PFANNENSTIEL: None of the mics are working.

Sorry. For the purposes of both people on the phone and for the sound volume in this room, we'll have to wait until we get some mics that work.

(Thereupon a recess was taken.)

CHAIRPERSON PFANNENSTIEL: We're good. Thank you.

Okay. We will begin with the consent calendar. Is there a motion to approve the consent calendar?

COMMISSIONER ROSENFELD: I move the consent calendar.

VICE CHAIRPERSON BOYD: Second.

CHAIRPERSON PFANNENSTIEL: In favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: Thank you.

Item 2, possible approval of a petition from High Desert Power Project, LLC to modify condition Soil and Water-4 which will extend, from 5 to 15 years, the period

to inject 13,000 acre feet into a groundwater bank used as backup water storage.

Mr. Munro.

MR. MUNRO: Yes. Thank you, Chairman Pfannenstiel.

I'm here today with Linda Bond who is our staff consultant who prepared the staff analysis. She's a well-recognized water expert in the state. And she actually has been involved with the project pretty much from the beginning. And I'd also like to introduce Paul Kramer our staff attorney and Ramiro Garcia from High Desert Power Project.

Ramiro, would you like to say a few words.

MR. GARCIA: Yes. I'm here to support in any way I can and answer any questions. And I have also Steve Shulder in the back and Chris Milner who are going to help us answer any questions on the project.

MR. MUNRO: Thank you. High Desert Power Project has submitted a petition to the Commission because they're unable to meet the backup water supply injection requirements due to higher than anticipated levels of total dissolved solids, known as TDS, and trihalomethane, known as THM, in the water during significant portions of the year.

The constituents of TDS are salts, and THM is a

chlorine byproduct from disinfection of the injected SWP water and the injection piping system.

To summarize the proposed amendment, the proposal is to change condition Soil and Water-4 to extend the allowable period to inject 13,000 acre feet of State Water Project water into the regional groundwater aquifer, and extend it from 5 to 15 years. This is to provide a backup water supply for plant operations in case State Water Project water becomes available.

State Water Project water is the primary source, and it is subject to interruption from time to time, both from maintenance and unplanned interruptions which might occur due to natural disasters and that sort of thing.

High Desert will -- as part of this proposed amendment, High Desert will install and ultraviolet treatment system to minimize the need for chlorimination and reduce THM, trihalomethane to nondeductible levels.

If necessary, a reverse osmosis system will be installed if TDS levels, that is total dissolved solids, prevent High Desert from meeting their 13,000 acre feet bank requirement no later than 15 years from the start of the commercial operation.

Staff has analyzed this proposal and made recommendations of it as follows:

Staff recommends approval of the proposed

amendment based on the following:

We conclude that there will be no significant impacts to water quality because all limits on water constituents will remain unchanged.

We recommend that the requirement for water banking be extended to 15 years from the commercial operation day. This allows for ample time to meet the injection requirement, even if there are State Water Project water disruptions and water must be extracted for a period of several months during 15 years.

The staff analysis recommends annual milestone reports of water banking progress that will trigger reverse -- the requirement for reversed osmosis installation beginning in year 8 if needed to reduce TDS and maintain the 15-year injection schedule, if milestone targets are not met.

The petition with staff recommendations will need current LORS, including the regional water quality control board permits and California Department of Fish and Game permits. I do have a message from the Regional Water Quality Control Board that they have no opposition to this amendment.

It's gone through a lengthy public review process. On May 26th staff analysis had noticed a public comment period was sent to interested public and agencies.

That comment period ended on June 26th.

On June 12th a staff workshop was held in Victorville, which was attended by 2 members of the public. And those 2 members asked questions. And one of those members submitted written comments.

On July 10th, 2006, staff issued a response to comments that was sent to the 2 commenters and posted on the web. And all significant documents were posted on the web. No comments were made that changed the staff analysis or conclusions.

And on July 14th, 2006, a reply to the response to comments was received from one of the public members, Mr. Ledford. And I was just handed something a few minutes ago, which was titled supplemental brief that I have not had a chance to look at from Mr. Ledford also.

So that is my presentation. I'd be happy to take any questions.

CHAIRPERSON PFANNENSTIEL: Thank you, Mr. Munro. I know Mr. Ledford is on the line and his counsel is here, but let's see if there are comments from the applicant before we turn over to comments from Mr. Ledford.

Anything additional?

MR. GARCIA: No. No comments at this moment.

CHAIRPERSON PFANNENSTIEL: Are there questions for Mr. Munro from the Commissioners before we ask

intervenors to come on?

Commissioner Byron.

COMMISSIONER BYRON: Just couple of questions. Thank you. Just a couple of questions.

I've read all the material and of course we also reviewed all the staff material at the siting committee meeting. Does the water to be banked have to be cleaner than the water that's needed for plant operations? In other words, are the standards higher for the banking than they are for plant operation?

MR. MUNRO: That's correct.

COMMISSIONER BYRON: And at the moment it seems as if there is about 6 months worth of water banked?

MR. MUNRO: I will turn that over to Ramiro.

COMMISSIONER BYRON: That's not really the question, but I think that's --

MR. MUNRO: I think it's a year.

COMMISSIONER BYRON: Okay. Well, then my question is if there's a year banked and the operator were to deplete that bank of water, would they be required to shut down?

MR. MUNRO: They would have no water to operate with.

COMMISSIONER BYRON: Okay.

MS. BOND: If surface water was not available.

MR. MUNRO: If surface water was not available.

COMMISSIONER BYRON: All right.

MR. MUNRO: Because right now they're using surface water. And it would have to be an interruption or something that would cause the surface water to become unavailable.

COMMISSIONER BYRON: Thank you.

MR. MUNRO: You're welcome.

CHAIRPERSON PFANNENSTIEL: Perhaps then Ms. Mendonca who is the attorney for Mr. Ledford, who is on the phone.

MS. MENDONCA: Good morning. I'm Roberta Mendonca. And I'm here this morning to assist Mr. Ledford who is opposing this petition to amend Soil and Water Condition number 4. And he will be adding in or making comments. He was the intervenor in that case and has a wealth of knowledge that he would like to make available if asked.

He began participating -- Mr. Ledford began participating when the application for certification was first submitted in 1997. And the issues in the licensing case were complex, and especially in the area of water, mainly because the site for the power plant was in the Mojave Desert. And the Mojave Desert aquifer was experiencing already severe over-drafting.

The High Desert project did not propose dry cooling. And instead came to the Commission and selected a complicated water purifying and banking scheme. And that proposal by the applicant ultimately ended up as the Commission's Condition number 4.

The water issue at that time was extensively modeled and studied. And for almost 3 years there were hearings on the question of water. Mr. Ledford wishes to restate for you all that he never has opposed the construction of the High Desert Power Plant, but rather he has been intimately interested and very concerned about the 100 percent consumptive use of the State Water Project water, because that water was intended to replace the overdraft in the aquifer.

When the Commission adopted Soil and Water Condition 4, the transcript -- and normally I would never read anything to you all, but since you were not sitting when that decision was made, I'll briefly cite a segment of that transcript.

> "The project's water supply as defined in conditions of certification will not cause or contribute to the depletion of water resources in the area and actually result in a slightly beneficial effect."

And to respond to the Commissioner's question, the reason that the water has to be treated before it's put in the aquifer is that the water to be banked is not to diminish the water quality. And the water quality in Mojave Desert aquifer is quite high.

So Mr. Ledford's questions for you today revolve around the fact that when is a condition of the Commission a condition that shall be complied with and when does it just become a recommendation? And when does the Commission used the word "must" and really mean "must" and how can the public rely on a Commission promise?

The condition that was placed in the license was that the applicant and that High Desert Power Project bank 13,000 acre feet of water at the end of 5 years of operation. And, in fact, has been noted that by the second year virtually no water was banked at all.

It's really important at this juncture that you understand that the applicant and the staff fully agree that it is possible to comply with the condition -- existing Condition 4 in far less than the 15 years the amendment proposes. And all that would be required would be for the applicant to perform the proposed water training plan, which was reverse -- install reverse osmosis.

The Commission's record also reflects that Mr.

Kramer in January of 2002 talked about the concept of reverse osmosis. And in that discussion, which was a meeting held before the Commissioners, he stated that okay we don't see reverse osmosis read into Condition 4, but what we do see is a performance standard. And what the applicant must meet is the performance standard, which is stated again, 13,000 acre feet of water in 5 years of operation.

The Commission does speak in the language of Conditions of Certification, that's what everybody comes to look for, and that language becomes the terms of the license to operate the power plant. At the same time, when the Commission adopts the Conditions of Certification, they make promises that monitoring a regulation will be thorough so that the power plant is in compliance with the condition.

And so Mr. Ledford is before you asking that you carefully examine this request by High Desert Power Project. And he wants you to see that the evidence in the record of certification stated that several conditions must be complied with.

One of those was the banking of 13,000 acre feet of water by the end of the 5th year of operation. They agreed to bank 13,000 acre feet of water and that time frame is April 21st, 2008. Applicant and staff have also

agreed that the technology does currently exist to meet this condition, which was later termed a performance standard. And reverse osmosis, which is the technology that would meet this condition, was originally proposed by the applicant.

And furthermore, everybody agrees that High Desert would have met the condition by April 21st, 2008, which was the banking date in the condition if they had elected to use the reverse osmosis. And now even at this late date they can meet the mandate sooner than April, 21 in 15 years, which is the flexible time line currently being proposed by High Desert.

In their submission for an amendment, High Desert did say we have some other alternatives for everyone to consider. None of these alternatives proposed by the applicant discussed reverse osmosis or dry cooling. Both would be viable alternatives.

Mr. Ledford who scanned the record would assert today that there is nothing new. There are no changes. There are no circumstances that were unforeseen at the time of certification and that the evidentiary record explored all of these issues that are currently before you today. And, in fact, again in the 2002 hearings, the Commission held that that evidentiary record and the conditions imposed were res judicata, exploring changes to

the conditions.

During 2002 and during the evidentiary hearings, High Desert stated they could complete the water bank in 3 years. So Mr. Ledford has a problem today, when we are now here talking about a 15-year time span.

With this problem the Commission's answers should be that the staff's water experts have testified at the time that the license was adopted that compliance with the conditions did require that if they could not meet the conditions, the plant would shut down. Today, it's Mr. Ledford's position that the Energy Commission should reject the amendment, and, at a minimum, the Commission should hold evidentiary records on a feasible way to comply with the Condition of Certification, including options that the High Desert Power Project did not propose.

The Commission's compliance goal should be to arrive at the best possible plan and treatment system for compliance as close to the original date as possible, so that California will have power -- reliable power throughout the life of the project. And, again, High Desert had considered in their options before you both the dry cooling and reverse osmosis, you would be presented with an option that would allow for faster compliance with -- no water banking and in reverse osmosis with

completed water banking.

And I'm sure Mr. Ledford would love to respond to your questions.

CHAIRPERSON PFANNENSTIEL: Thank you, Ms. Mendonca. I understand that there is a problem with the phone connection and so we're going to just take a minute and reestablish that connection to make sure that we get Mr. Ledford on the line.

(Thereupon a phone is ringing.)

MS. MENDONCA: Doesn't sound like Mr. Ledford's on the line. He's not John O. He might be Gary O.

Would like me to just wait until you get the connection and then we can take it up?

CHAIRPERSON PFANNENSTIEL: No, I'd like to see if we could get him on now and continue this.

(Thereupon a recess was taken.)

CHAIRPERSON PFANNENSTIEL: Mr. Ledford, are you there?

EXECUTIVE SECRETARY KALLEMEYN: Mr. Ledford has apparently disconnected.

MR. LEDFORD: Hello.

CHAIRPERSON PFANNENSTIEL: Mr. Ledford?

MR. LEDFORD: Yes.

CHAIRPERSON PFANNENSTIEL: We finally brought you in. This is the Energy Commission business meeting. And

I understand that you have comments to share with us on the High Desert Power Project petition for modification?

MR. LEDFORD: Correct.

MS. MENDONCA: It might be helpful for him to -- for us to know what part of this he heard?

MR. LEDFORD: I heard it all.

MS. MENDONCA: Oh, okay, fine. Thank you.

MR. LEDFORD: I was on your website. I didn't have video, but I did hear the presentation and I was logged on. I guess I got cutoff somehow.

I don't really have too much to add from -- I think that Roberta covered all of the germane issues. We filed -- we did file an opposition and I hope the Commissioners had an opportunity to read it.

These conditions weren't done lightly. They were developed over many, many hearings, and we argued over what the conditions said and what they meant. And I raised the issue that the plant they were building would not provide -- would not provide an adequate treatment train in order to meet the conditions. And basically it was said that they were dismissing the complaint because it wasn't right, because they didn't know if it wouldn't work.

And so it doesn't work. And I think it's just not a proper -- first of all, it's not proper to

administratively do this. If, in fact, that there was going to be something like this done, it should be done in an evidentiary hearing because we certainly have a strong difference of opinion as to what the record says. Regardless of what any of the rest of us say, this is not an evidentiary hearing. So the best that we can do is present what the record said.

I mean that's my comments. I don't know if you're hearing me or not.

CHAIRPERSON PFANNENSTIEL: Yes, we are. Thank you, Mr. Ledford.

Let me ask Mr. Kramer or if Mr. Chamberlain would prefer to comment. I think on -- the key question here is when the Commission would consider a petition for modification of conditions on a case. And I understand that there are certain conditions that need to be met, and perhaps Mr. Kramer could advise us on what those are and whether they've been met in this proceeding.

SENIOR STAFF COUNSEL KRAMER: Well certainly from staff's perspective the conditions are conditions and they're all must in our eyes. But we also recognize that there's the ability to amend them, and that's what this proceeding today is about.

One of the requirements in our Regulation 1769 is that there be changed circumstances. And I believe it's

mentioned in the staff report and Mr. Munro alluded to it again this morning that here the TDS component of the State Water Project water, as it was estimated at the time of the original siting case turned out to be lower than what it has been in recent years. And that's a change that was necessitated in the applicant's eyes and the staff's eyes a need to revise the schedule to allow -- to accommodate that and allow for the water to be -- the water injection goal to be met.

One of the other requirements is that there be some benefit to the public or to the applicant or to some other -- or to an intervenor who's requesting an amendment. In this case, obviously the applicant would be benefited because they would be allowed to continue to operate and with this new schedule.

And then another finding that the Commission needs to make is that the project remains in compliance with all applicable LORS, laws, ordinances, regulations and Standards, and further, that there would be no environmental impacts.

And although there's talk in this case about the water quality in the area, remember this is a project to store water. This requirement to put water in the ground isn't to make up for something that -- to mitigate something that happened in the past. They are simply

trying to store water in the ground. It's a convenient large storage tank in this case so that they can use it later if they need to.

So to answer Commissioner Byron's question, the reason that the standards are -- and it was alluded to earlier, the reason the standards for the injected water are rather high or perhaps more than what the power plant would need, although I think a power plant would filter the water, and they use pretty clean water in many of their systems anyway. But they didn't want to degrade what was already in the ground.

Some of that water will leach out of this basin and go to the Mojave River. But the point again of the banking was not to provide water for other uses. It was to provide it for this user and make sure that it wasn't compromising the rights of other users of the basin.

So did that adequately answer your question?

CHAIRPERSON PFANNENSTIEL: Yes, it did. Thank you. And then -- but a follow-up question. There was, as I understood it, both from the material that I reviewed and earlier discussions, a public workshop or a public hearing on the petition?

SENIOR STAFF COUNSEL KRAMER: Correct. There is no requirement to have evidentiary hearings on amendments. In theory, the staff could have brought this to you

directly without any public hearing at all.

CHAIRPERSON PFANNENSTIEL: But there was, in fact, a public hearing?

SENIOR STAFF COUNSEL KRAMER: But there was a public workshop. Mr. Ledford made comments. His staff responded to those comments. He's made further comments. And, at this point, we feel it's for you to decide.

CHAIRPERSON PFANNENSTIEL: Ms. Mendonca.

MS. MENDONCA: The reason that the evidentiary hearing would be very helpful is that the setting for which the reason the higher standard for the water was created is simply that the State Water Project water could have been used in the Mojave area by other users, which would not have resulted in a 100 percent consumptive use.

And so in order to make up for the fact of the use of fresh water, this banking system was arranged as a way to facilitate what was considered a loss to the area and to the community. And that aspect has not been addressed in this amendment or in the process that we're going forward.

And as far as the change in circumstances, that's presented to you as a conclusion without any opportunity for the existing record to be explored. It is Mr. Ledford's position that in fact the condition of the TDS and all of these water issues were forecasted and fully

known at the time that the condition was adopted. And Mr. Ledford may have something to add at that point, too.

SENIOR STAFF COUNSEL KRAMER: Well, I don't think -- you can certainly discuss those points at this meeting. In amendments we do not have the requirement of the formalities of evidentiary hearings. Any testimony that somebody wants to raise about the fundamental underpinnings of the findings you have to make is appropriately made at this hearing today. And I believe you've heard that theme from Mr. Ledford. So I think you're able to decide it on -- you don't have to hold formal evidentiary hearings in order to hear that thought and act upon it.

CHAIRPERSON PFANNENSTIEL: Mr. Ledford, did you have an additional comment?

MR. LEDFORD: I do thank you. And it is focused on that this is not a change. The issue of removal of TDS out of the State Water Project was the primary reason that reverse osmosis was the proposed plant. There was several hearings. The Bookman Edmondson people prepared 3 separate reports, all 3 of them addressed reverse osmosis, and a removal of TDS out of the system.

And the reason for that was because TDS in the State Project Water was above the requirement for injected water. And they realized that they would have to remove

TDS in order to inject the water. And the original plan that High Desert Power submitted and had approved by the Commission was a reverse osmosis plant. After they submitted that plan, they changed the plan to an ultra-filtration system. That was the purpose of my raising that issue in 2002, and saying that the process that they were going to use would not treat that water in that they would not be able to meet their objective.

And if the record is reviewed, you'll find that they said well, there was no -- there was no condition that required TDS. There was only a condition that required that they meet the standard and that they get the water into the system by the end of the 5-year period. And the Commission wasn't going to dictate to High Desert Power what type of process that they used, only that they meet the condition.

So while it may be true that there's more TDS at various times in the State Project Water today than there might have been then, the issue of removing TDS over the injection period of time was clearly a part of the record, clearly a part of the testimony, clearly apart of all 3 reports done by Bookman Edmondson.

So the fact that there's maybe some more TDS in the water, it just -- what they tried to do is develop a plan to work around times when the State Project Water

would have lower TDS as opposed to being able to use a system that they could treat water year-round. And I think that's the significant piece of this equation.

Thank you.

CHAIRPERSON PFANNENSTIEL: Thank you. Do the Commissioners have any other questions?

VICE CHAIRPERSON BOYD: Yes. I'd kind of like to hear from the staff and/or the applicant. I guess primarily to staff though, why we didn't -- why you don't recommend the reverse osmosis as the fall-back position, since option 1 that they chose seems not to work? Why did we -- you know, why did we fall all the way to a new Option 3, let's say, i.e., extending the time of period for injection. Is the reverse osmosis not -- can it not be accomplished and therefore as argued they could meet the original deadline and we wouldn't have to go out 13 years?

MR. MUNRO: We haven't found a really good reason why we can't extend that period of time. So there's nothing that compels us to stick with the original 5-year period. We do have new information that shows that that TDS level could not be met that we didn't have.

VICE CHAIRPERSON BOYD: Utilizing reverse osmosis?

MR. MUNRO: Utilizing reverse osmosis. Now

utilizing reverse osmosis is questionable whether they would have met the 5-year period because of the THM problem which was completely unforeseen. The THM problem is what prevented them from being able to inject for an entire year. So that would not be affected at all by reverse osmosis.

So this is a very complex issue with, you know, many different facets. It's not just a question of TDS.

VICE CHAIRPERSON BOYD: And I want you to put it all in the record, so its; clear today.

MR. MUNRO: Yes. So essentially with reverse osmosis, yes, they would be able to inject at a faster pace. However, we are requiring reverse osmosis in year 8 if the progress towards the 15 years is not satisfactory. And that is a definite requirement starting in year 8 and again in year 9, 10 and so on.

So reverse osmosis is part of this amendment. And also for the THM problem, which, as I say, was completely unforeseen, they are going to be installing ultraviolet treatment system to disinfect the water. So this amendment covers reverse osmosis. It also covers THM, but it does provide some additional time to get the water into the ground, which we reviewed and which we believe is reasonable.

MR. GARCIA: I'd just like to add, if I may, that

the use of reverse osmosis is limited right now to how much water we can treat by the process that we have in place. And, Steve, you want to elaborate a little more on that.

MR. SHULDER: My name is Steve Shulder and I'm representing the applicant as their chemistry consultant water treatment manager.

The issue with regards to installing reverse osmosis to remove the total dissolved solids from the State Water Project water would in deed allow for faster injection. However, you have to understand that reverse osmosis also has a waste stream, about 25 percent of that water, which is an increase in salt.

Since the process that we utilize at the plant is a 0 liquid discharge facility, all water that comes in can't leave the site, so we have to treat that reject stream, which is additional loading to the facility. So in addition to a cooling tour blow down which we treat and reuse about 90 percent of that water, this water would impact the ability for the plant to operate. So you have to understand that all salts that come into the facility have to be removed in one way or another.

So utilizing an RO system and the reject stream that would come from this process has to be treated by the facility. So there is a limitation for what the plant

could do and still meet a 0 liquid discharge requirement.

And to reiterate what Steve Munro said is that the issue that we had and what's limited our ability to inject our water for an extended period of time is the issue of trihalomethanes and not TDS.

CHAIRPERSON PFANNENSTIEL: Further discussion?

MR. LEDFORD: This is Gary Ledford. Can I chime in for a half second?

CHAIRPERSON PFANNENSTIEL: Of course.

MR. LEDFORD: All those things that the representative from High Desert Power just mentioned are completely covered in the reports done by Bookman Edmondson, the reject stream, the fact that in order to treat 4,000 acre feet of water per year they have would to treat 4,500 acre feet -- if each and every one of those issues was studied and that was the reason that they -- that High Desert Power originally proposed to use the reverse osmosis process, not withstanding the fact that they may have had to use some additional processes that they didn't know about in order to take care of other issues that came up along the way, we're talking about here is how could they meet the requirement with a condition, and the condition was one that they agreed to, and it was one that they proposed the evidence of how they were going to do it. It was only High Desert Power that

elected to change that at mid-stream.

I think that the only other thing that I would like to add is that I received last week a copy of the 2005 annual monitoring report that was submitted to Steve Munro on January 13th of this year. And on page 19 of that report there's something called the 2006 action plan. And that states as follows:

"In an effort to improve the performance and monitoring of the aquifer banking system, HDPP and WWDD proposed the following activities: HDPP will submit and application for a waste discharge permit requesting the revised annual treatment levels of TDS and THM to 322 megaliters and 2.0 ug/L respectively.

"Higher values will allow more continuous operation of the ADS and optimization of the chlorimination feed system. The original equipment manufacturer will perform preventative maintenance to ensure proper correlation between on-line samples and verify chlorine data and review and revise layout procedures to extract water."

And then the last part of this is, "HDPP will submit petitions requesting use of reclaimed water for plant cooling water makeup not to be used for ADS, reclaimed water will reduce the amount SWP water required for plant operation, reduce the banking water requirement based on reclaimed water use on a 1 to 1 basis, and reduce banking water requirements based upon actual SWP water to support the plan operation."

All of these proposals are in conflict with the Condition 1. I just think that there's a whole lot of things going on relative to water that are before the Commission today.

CHAIRPERSON PFANNENSTIEL: Thank you.

Commissioners, further discussion or is there a motion on this item?

COMMISSIONER BYRON: I'd like to move the staff recommendation?

CHAIRPERSON PFANNENSTIEL: Is there a second?

COMMISSIONER ROSENFELD: I'll second.

CHAIRPERSON PFANNENSTIEL: Thank you.

VICE CHAIRPERSON BOYD: Second.

CHAIRPERSON PFANNENSTIEL: Thank you. Moved and

seconded.

All in favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: Thank you all.

Item 3, Highgrove Power Plant Project. Possible approval of the Executive Director's data adequacy recommendation for the AES Highgrove Power Plant Project application for certification and possible committee assignment.

Mr. Worl.

MR. WORL: Good morning, Commissioner Pfannenstiel and Commissioners. My name is Bob Worl. I'm the project manager for staff of the AES Highgrove Power Plant Project. This project is proposed for the City of Grand Terrace in San Bernardino County and it's a 300 megawatt natural gas fired 3 turbine LMS 100 power plant project.

The project was originally deemed data inadequate at your business meeting on the 5th. The applicant has since come forward with additional information on air quality and transmission system, which makes the project currently data adequate according to the recommendation of staff and which came to you in the form of a recommendation from the executive director.

We would entertain any questions. By the way,

Ms. Julie Way and Scott Galati are representing the applicant in this case.

CHAIRPERSON PFANNENSTIEL: Thank you, Mr. Worl. We also have somebody on the line.

EXECUTIVE SECRETARY KALLEMEYN: Mr. Pelote has disconnected.

CHAIRPERSON PFANNENSTIEL: Mr. Pelote has disconnected. Thank you.

Any comments from the applicant?

MS. WAY: Good morning, Commissioners. My name is Julie Way as Bob said and I'm the project director for the AES Highgrove Project.

I would just like to thank the staff for all their efforts in reviewing our application for data adequacy. And I'd also like to extend our appreciation to Bob Worl, Eileen Allen and others for their communication during the process and responsiveness in answering all of our questions.

So we look forward to working with you more as we go forward.

Thank you.

CHAIRPERSON PFANNENSTIEL: Are there questions of the Commissioners on the data adequacy recommendation?

We need to take this Item in 2 parts, the data adequacy approval and then there's committee assignment.

Any questions of data adequacy?

VICE CHAIRPERSON BOYD: Madam Chair, I intend, in a moment, to make a motion to approve the data adequacy and the rest of my question here is not going to bear on the issue, but having all these people around gives me an opportunity to ask a question.

There's been a lot of press lately about failures in G.E. turbines. And I frankly do not recall what model of turbine they've had some failures in. Is anyone on staff able to address that and does that affect the LMS 100s or is that a different variant?

MR. WORL: The LMS 100 is a relatively new turbine. There's currently 2 in operation, 1 at G.E.'s experimental facility in Houston and the other one recently brought on line in South Dakota, part of Basin Electric's Program also as a peaking facility. I don't believe that these turbines have suffered any adverse mechanical or other problems to date.

This particular turbine is uniquely designed to be used as a peaking turbine. It has a very rapid on-line time. It can go from cold start to full operation in a very short period of time. And when it is -- when it's operating it can also be used very efficiently at low output as low as 10 megawatts and it can go from there to --

VICE CHAIRPERSON BOYD: I'm pretty familiar with the capability of the unit. But they are having turbine blade structural failures to the point that recalls are been being talked. I'm just kind of curious.

MR. WORL: I don't believe this --

CHAIRPERSON PFANNENSTIEL: Mr. O'Brien.

MR. O'BRIEN: Mr. Boyd, you're referring to the 7F turbine that G.E. is having some problems with. They have been out here in California in the last week talking to the ISO. Quite a number of plants in California are impacted by this. I think 18 -- many of those have been licensed by the Commission. G.E. is working to resolve this issue. And I think they have a game plan per their discussions with the ISO to replace the blades that they're having problems with.

VICE CHAIRPERSON BOYD: Thank for alleviating my concern.

CHAIRPERSON PFANNENSTIEL: Well, I'm --

VICE CHAIRPERSON BOYD: It's a different model unit then.

CHAIRPERSON PFANNENSTIEL: May have heightened my concern.

(Laughter.)

CHAIRPERSON PFANNENSTIEL: So perhaps since G.E. has a game plan, they could share that with the

Commissioners. We'd certainly like to see what that looks like.

ASSISTANT EXECUTIVE DIRECTOR MATTHEWS: We can provide you more information. Terry and I and other staff have been on conference calls every single morning this week, as you might imagine, given the current heat storm. And one of the issues has been the replacement of the blades to get those in. And ISO has been tracking that. I have asked if there's anything the State needs to do to hurry the situation along. And it's based upon their assurances from the ISO we're in pretty good shape, but it is a concern.

CHAIRPERSON PFANNENSTIEL: And we'd like to know more about it.

Thank you.

ASSISTANT EXECUTIVE DIRECTOR MATTHEWS: Sure.

VICE CHAIRPERSON BOYD: Then I'll revert to my earlier comment and move approval of the data adequacy.

CHAIRPERSON PFANNENSTIEL: Is there a second?

COMMISSIONER BYRON: I'll second.

CHAIRPERSON PFANNENSTIEL: In favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: So this project is now data adequate.

And committee assignment, I understand there's

proposed committee assignment, which would have myself as the presiding member of this committee and Commissioner Byron as the associate member of the Committee. Is there a motion for that committee assignment?

VICE CHAIRPERSON BOYD: I'll move approval of that.

COMMISSIONER ROSENFELD: I'll second that.

(Laughter.)

COMMISSIONER BYRON: That's why you showed up today.

(Laughter.)

CHAIRPERSON PFANNENSTIEL: In favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: So the Committee is assigned. Thank you, all. We'll be seeing much of you I'm sure.

MR. WORL: Thank you very much.

CHAIRPERSON PFANNENSTIEL: Item Number 4, possible approval of a petition to amend the Energy Commission's decision on Contra Costa Power Plant Unit Number 8 project to add Pacific, Gas and Electric Company as an owner, extend the construction time frame and conduct 4 facility enhancements to the 530 megawatt project.

Before we begin discussion, I want to note that I

will recuse myself from discussion and voting on this project because of an ongoing relationship I have with Pacific, Gas and Electric Company's parent company.

But having said that, let me ask Mr. Meyer to present.

MR. MEYER: Good morning, Madam Chairman and Commissioners. As you're aware, this was discussed briefly at the July 5th meeting and it was continued here to address a few minor concerns.

Unless you have objection, I'll skip the preliminaries and go right to the revised petition -- or, excuse me, the revised analysis?

On Friday you received a revised staff analysis which incorporated the minor changes proposed in the errata from the previous meeting and describes PG&E's revised verification that was filed on Thursday.

The revised statement from PG&E outlined the understandings -- or PG&E's understanding of the 2003 water use policy and its commitment to continue investigating treated water or waste water as an alternative water source for coolant.

Also, PG&E agreed to comply with both the Conditions of Certification and the 3 understandings that were listed in the staff analysis. The third one being from the errata at the last meeting.

Thirdly, PG&E stated its desire to close the asset transfer agreement with Mirant as soon as possible and to start construction as soon as the asset is required -- is acquired. And that's the outline of the revised statement from PG&E.

The staff recommendations. We recommend approving the modifications and a change of ownership with the following understandings/expectations, and have them stated in the order:

First would be that PG&E and Mirant must come up with a new mitigation program acceptable to the federal and state resource agencies and associated permits prior to the start of operation. And this would be in addressing the biological concerns.

If a mitigation program which mitigates the cooling system impacts to a less than significant level is not developed, Unit 8 will switch to an alternative cooling method -- reclaimed water is one of the ones that we looked at -- prior to the beginning of operation. And, you know, such a change would require them to come back in front of the Commission with a new petition.

And also in the third understanding is until the biological permits are obtained, Unit 8 will be designed and constructed in such a manner that will not preclude the switch to an alternative cooling technology in the

future.

And our recommendation is to allow the resumption of construction under the above understandings, and, you know, when a new mitigation program is worked out or to decide to switch to reclaimed water, as I said, you know they'll come back with a new petition to amend at which point we will look at the changes, you know, to get away from the aquatic filter barrier that Mirant and PG&E stated they do not intend to install.

And that's the end of my presentation. I'll answer any questions.

CHAIRPERSON PFANNENSTIEL: Questions of the Commissioners?

COMMISSIONER BYRON: Madam Chair, I'll just add that staff did present this material to Commissioner Geesman and myself at July 14th siting committee meeting. We reviewed it at that time. I would like to just add the comment that PG&E seems to have acknowledged that seriousness of the situation or our concerns in their July 13th letter, and that I'm satisfied with the level of their commitment.

So I would be willing to move the item at this point.

CHAIRPERSON PFANNENSTIEL: Are there comments from applicant?

MR. RUSSELL: Madam Chair and Commissioners, I'm Jeff Russell. I am president of Mirant, California LLC, and its subsidiaries, which include Mirant Delta LLC, the current owner of this project.

Once again, we appreciate the expeditions and thorough work that the staff has done in a very responsive fashion. We support the staff's recommendation, which we believe addresses the Commission's concerns and ensures that all of the remaining biological conditions will be addressed in a manner which is consistent with Commission policy and all laws, ordinances, regulations and standards.

Approval of this amendment today will be a big step toward closing our commercial transaction with Pacific Gas and Electric and the completion of a much needed resource for the state. We appreciate your consideration and I'm available if you had any further questions.

CHAIRPERSON PFANNENSTIEL: Thank you. There are also 2 other parties who have asked to comment. Amy Chastain from Baykeeper.

MS. CHASTAIN: Good morning, Commissioners and thank you for the opportunity to address you today. My name is Amy Chastain and I am an associate at Baykeeper. Baykeeper is an environmental nonprofit group that is

dedicated to improving water quality in the San Francisco Bay and Delta. We are also a member of the California Coastkeeper Alliance and the National Waterkeeper Alliance.

We're here today and are interested in your decision today for 2 reasons. First we support the phasing out of once-through cooling technology, which does continue to have substantial impacts to our nation's fisheries and potentially our own Delta fisheries.

Second, we are concerned that the power plants which may eventually provide cooling water to Unit 8, as you're aware, have operated for years and may continue to operate without -- in a manner that's inconsistent with both the State and federal endangered species acts.

As you are aware from the staff's analysis, the Army Corps of Engineers and the U.S. Fish and Wildlife Service have both recommended initiation of Section 7 consultations. The reason for this is, and I quote from a letter that was sent from -- it was sent by the U.S. Fish and Wildlife Service to the Army Corps of Engineers earlier this year, "That Mirant is not covered for take of Delta Smelt at the Pittsburgh and Contra Costa power plants through the November 2002 biological opinion because the aquatic filter barrier was not implemented to exclude Delta smelt from entrainment."

And I emphasize that portion of that that says that Mirant was not covered and is not covered for take of Delta smelt.

Similarly, neither the Contra Costa nor the Pittsburgh plan appears to be covered under state law because in 2003 the Department of Fish and Game found that the federal biological opinions were inconsistent. They made this inconsistency determination for several reason including the fact that the biological opinions that authorized Unit 8 did not in their minds adequately mitigate the potential impacts of the unit and also the fact that the unit would be relying on cooling water that was drawn from Units 6 and 7.

As you are aware, Baykeeper finds this unacceptable but we're especially concerned given the dramatic decline in the Delta smelt population that's been documented both in your staff's analyses and in the reconsultation letters issues by U.S. Fish and Wildlife Service and the Army Corps of Engineers.

As we state in our comments, though, we do commend, you and your staff, for carefully considering the impacts of Unit 8 at this time. And this is a very good point in the proceedings to consider it and we really are appreciative of that.

We hope that you will adopt your staff's

recommendations today, including the changes proposed in the errata and we do hope that you continue to monitor the progress of any Section 7 Consultations and any work that Department of Fish and Game does with Mirant and PG&E related to this issue. So thank you very much.

CHAIRPERSON PFANNENSTIEL: Thank you Ms. Chastain.

Also, Ben Eidenberg from Stanford Environmental Clinic.

MR. EIDENBERG: I was here last time. My name is Ben Eidenberg from the Stanford Environmental Clinic.

The biological opinion issue for once-through cooling 6 and 7 along with mitigation measures were not -- are still incomplete and have not been completely met, and also been somewhat ineffective as shown by, I think, the staff and as my colleague stated earlier.

It appears now that Unit 8 is going to be added on top of that and using the same once-through cooling system that 6 and 7 were using, which presents an interesting problem, because it looks like 6 and 7 will be phased out, at some point in the near future. So it means that Unit 8 will be a new power plant using old technologies or grandfathered in, practically speaking, but not legally speaking.

I think that that should be something that should

be a consideration. I just wanted to point that out to the panel.

We also support the staff recommendations and I think that the new mitigation programs will involve the kind of review that I think are necessary to see what construction, if waste water -- if Mirant and PG&E end up applying the waste water solution, what that construction will mean along the 3-mile pipeline what that will mean as well as what the alternatives to that waste water will be, I think, cooling tours something like that would be an alternative that should be considered at least because it won't be dumping heated water back into the Delta, which has additional environmental impacts. Even though the waste water would mean that there would be no fish entrainment and aquatic organisms wouldn't be taken into the power plants, it would still cause that heated water to be discharged and that should be considered as well.

CHAIRPERSON PFANNENSTIEL: Thank you. Are there questions or further discussion?

The item has been moved. Is there a second?

VICE CHAIRPERSON BOYD: Madam Chair, I'll second this, but I just want to note we've been dealing with water all morning and now we're dealing with environmental protection, which I think is upper most in the concerns that all us up here have. And water is gold in

California, so I do look forward to seeing, you know, the mitigation plan that hopefully -- and I know the staff will be addressing those very issues.

I see this water issue significantly different from the prior water issue we acted upon. And this one is, to me, far more critical. The Delta is far more important and critical and is under threat, the Delta Smelt have all but suddenly disappeared. And I spent quite a few years in Fish and Game and the Resources Agency and it's a concern to me.

So I will second this item. And I know the staff is going to watch this water use very carefully because it's a quite sensitive issue these days.

CHAIRPERSON PFANNENSTIEL: Okay. Thank you. Moved and seconded.

All in favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: The item is approved.

Thank you.

Number 5, possible approval of I $39,170 loan to the City of Santa Barbara to install a 15.3 kilowatt photovoltaic system at Fire State number 2.

Mr. Wang.

MR. WANG: Good morning, Commissioners. My name is Joseph Wang, and I'm the project manager for this loan.

The City of Santa Barbara has been very proactive in implementing energy efficiency projects in the city buildings. They installed new energy efficient lights and upgraded HVAC controls in the past.

Now, the City would like to install a 15.3 kilowatt photovoltaic demonstrating project at Fire Station number 2. The total project cost is about $161,000. And the City's applying for a $39,170 loan from the Commission. And they will fund the remaining project costs with City funds and the utility rebates.

This project will reduce the fire station building's energy use by about 60 percent, save about $3,997 a year, and have a simple payback of 9.8 years based on the loan amounts.

The staff has reviewed the project and the Energy Efficiency Committee has approved the project and we would like to recommend approval of this loan.

Thank you.

CHAIRPERSON PFANNENSTIEL: Thank you.

Are there questions?

COMMISSIONER ROSENFELD: I move the item.

COMMISSIONER BYRON: I'll second it.

CHAIRPERSON PFANNENSTIEL: All in favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: It's approved.

Thank you, Mr. Wang.

Item 6 possible approval of PIER work authorization MR-048 for $534,788 with the University of California, Berkeley under UC Master Research Agreement 500-02-004 with the Regents at the University of California Office of the President for the Life-Cycle Energy Assessment of Alternative Water Supply Systems in California.

Mr. O'Hagan.

MR. O'HAGAN: Thank you. My name is Joe O'Hagan. I'm the project manager for this proposed work authorization in the PIER environmental area.

The proposed work authorization before you is to enhance and demonstrate a life-cycle model to serve as a decision support tool for local water districts and waste water districts in analyzing alternative water supply opportunities as well as water conservation here in California.

The proposal is to enhance an existing life-cycle model that was developed through the PIER environmental areas exploratory grant program. That's a one-year $70,000 grant effort. The original model was developed by Dr. Arpad Horvath and Dr. Jennifer Stokes at UC Berkeley Department of Civil Engineering. The original model was actually Dr. Stokes' Ph.D dissertation. And the idea --

the focus of the model was to develop the basic model to compare alternative water supply systems, which in the original effort was importing water, recycled water or water desalinization.

And it was evaluated looking at 2 water districts. One, the main Marin Water District in Sonoma county and then the Oceanside Water District down in southern California, and then took a look at what the energy and the environmental benefits and costs were with the alternative approaches for these districts meeting the water requirements.

Of course, a life-cycle analysis looks at the energy environmental effects from cradle to grave and they utilize more construction project operation and maintenance costs. They didn't look at decommissioning the facility because there's generally a very small element.

And so my proposed -- the proposed work authorization is to greatly enhance that model. The original could only address several air quality emissions, and some greenhouse gas emissions. What we want to do is make the model so you can address a wider suite of air emissions, but also water and solid waste emissions as well.

We also want to be able to address, in a

sophisticated manner, waste water issues. We also want to provide some probability and certainty evaluations so that people can run different scenarios, if you will.

And then also provide a more comprehensive air quality emissions list in there. And then more importantly, we're really making a major effort to do an outreach and demonstrate of this project. One of the main considerations enhancements that we're proposing is that the model be able to address water conservation metrics, what are the energy savings or costs associated with different water measures and what does that mean in terms of air, water, emissions, greenhouse gas emissions. And this is the major thrust of the model. And we have proposed several workshops throughout the life of the project to have input from the water sector as well as to outreach to them.

My hope is that this model will be used broadly. We've received a number of interests from water districts about this. And that, you know, I think is a sign of success is that this model is actually used by the waste water districts.

Thank you.

CHAIRPERSON PFANNENSTIEL: Thank you. So my understanding is that this is a 36-month, as I read it, work authorization. So at the end of 36 months, there

will actually be a tool available for any water district in the state to use in their planning, in their assessment of water systems?

MR. O'HAGAN: That is correct.

CHAIRPERSON PFANNENSTIEL: Sounds great.

COMMISSIONER ROSENFELD: Madam Chair, this went through the R&D Committee, of course, and so I am pleased to move it.

CHAIRPERSON PFANNENSTIEL: Is there a second?

COMMISSIONER BYRON: I'll second it.

CHAIRPERSON PFANNENSTIEL: All in favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: Thank you.

MR. O'HAGAN: Thank you very much.

CHAIRPERSON PFANNENSTIEL: Item 7 is the first of 3 transmission related PIER projects. Possible approval of PIER work authorization MR-049 for $1,158,430 with the Consortium for Electric Reliability Technology Solutions under the UC master research agreement 500-02-004 for the Western Electricity Coordinating Council Load Modeling Transmission Research Project.

MR. PATTERSON: Good morning, Commissioners. I am Jamie Patterson, the manager for the Transmission Research Program under PIER. This program was developed in response to legislation of 2003 to enhance the

capabilities of the transmission system. What we did when we developed this program was we brought in the CIE team from the University of California, Office of the President, to perform the administration, implementation and planning effort for us under Commission guidelines and oversight.

To that end, we've been fortunate in having Dr. Merwin Brawn be the director of our transmission program, and we are very fortunate that he happens to have some very good expertise in planning.

In planning for how we were going to operate our program he has come up with 4 strategies in response to various policy documents here at the Commission, specifically the Integrated Energy Policy Report, its associated action plan and the Governor's 10 point energy plan.

These 4 strategies are ones to accelerate new transmission through new planning tools and technologies; number 2, to expand the capacity of transmission corridors; number 3 to enhance the ability to operate transmission under uncertain and complex conditions; and number 4, to enhance transmission integration of intermittent renewables.

All 3 of these projects actually address these strategies. Item number 7 address strategy number 3. It

is our operating strategy to enhance the ability to operate transmission under uncertain and complex conditions. Items 8 and 9 both address strategy number 1, which is to accelerate new transmission through new planting tools and technologies.

When we develop these projects, we like to get champions for them, because our legislation also said that we were to provide for market utilization of the research results.

So today with us happens to be Dave Hawkins of the CAISO and he is here today to show his support for these and to answer any questions the Commission may have regarding the operations and capabilities of the CA ISO as these 3 projects actually address their capabilities.

So Dr. Brown will now present the 3 items.

DR. BROWN: Thank you, Jamie, and thanks for having me here this morning. I'm Merwin Brown the director of the PIER Transmission Research Program Jamie, said I'm going to give you a summary of the 3 projects that are brought to you today.

The first one that was mentioned already is the Western Electricity Coordinating Council Load Modeling Transmission Research Program and we use the acronym WECC for that to shorten the discussion.

And this particular project is addressing an

issue that affects the entire western part of the United States electric generation and transport system that is the transmission system. This goes back to the point that the operation of this huge grid requires that there be the ability to model 3 fundamental things about it. One of them has to do with being able to model the generation. And the other one has to do with modeling the actual transmission itself and then load modeling.

Of these 3, load modeling right now is the one that suffers the most as far as being accurate. The accuracy of these models has changed over time due to a number of events. In particular, for the load model, there's probably 2 fundamental things that have changed. One of them is that the load composition has changed. And in that sense there's 2 aspects. One, growth changes the geographic distribution of the load patterns, which, of course, will affect the distribution -- the transmission, you know, network design and its operation. And then the other one has new consumer technologies. And some of those are, as we know today, some of the new pyroelectronic technologies have changed the behavior of way load reacts when it uses power.

But one of those that have raised some significant concern recently are the new air conditioning units that are going into the large residential areas.

Southern California Edison is one of the utilities who first experienced some of the difficulties with these units, in which they exhibited some unusual and disturbing behaviors when there were voltage problems on the system, in which the recovery of these units to a voltage drop was extremely long and difficult to pull out of. And that's raised concern about the future stability of the grid from that point of view.

And so this particular project is going to focus on 2 things. One of them, in general, we want to improve the accuracy of the load model in general, looking at all of the changes that we can find in the composition of the load. Secondly, we want to investigate specifically this air conditioning problem.

To do that involves a fairly significant number of players, both in California and throughout the western United States. But the 2 focus points, you might say, is for the air conditioning unit involves primarily southern California Edison's lead and Bonneville's lead in this area, because they've already begun an investigation early on in looking at these phenomena for air conditioning.

And then the WECC itself, the coordinating council, will be involved in helping us lead the effort for improving the general model itself. And to bring this all together, we have engaged the services of the CERTS or

Consortium for Electric Reliability Technology Solutions, to pull all the players together, because it also involves as part of the research participants, 2 national labs and normally -- namely Lawrence-Berkeley National Laboratory and Pacific Northwest National Laboratory, and also electric -- EPRI solutions, and so they're the one that is going to pull this all together for us.

It's a 24-month project. And the PIER number that was mentioned is roughly half of the total cost of this project with the participants, and I mentioned some of them already, contributing roughly the other half.

CHAIRPERSON PFANNENSTIEL: Thank you. Just a question. As I asked on the prior project that came up, at the end of the 24 months, will this tool be available for use by presumably the Cal ISO.

DR. BROWN: In general, yes. There's actually a number of things that will become available. One of them would be these improved models that would go in to the general model the everyone in the WECC uses, including Cal ISO. Also, we hope to have a better understanding of these AC units and may come up with some solutions that we could recommend. And also we're going to be looking at in this project some -- the possibility of increasing the monitoring of load in the future so that we don't get in to a situation again where the model gets so far, so to

speak, out of synch with what's really happening.

CHAIRPERSON PFANNENSTIEL: Thanks.

Other questions?

COMMISSIONER ROSENFELD: This, of course, went through the R&D Committee and I move Item 7.

VICE CHAIRPERSON BOYD: Madam Chair, before we move on that, perhaps I would like to hear from the ISO representative just how they're going to --

CHAIRPERSON PFANNENSTIEL: Certainly. Dave.

VICE CHAIRPERSON BOYD: -- what they see the future for this is and how much better a few years from now we'll be as we sweat through another hot summer.

MR. HAWKINS: Thank you. Dave Hawkins with the California ISO.

COMMISSIONER ROSENFELD: Thanks for coming.

MR. HAWKINS: Thank you. It's always interesting to me that we model generation of transmission to about 5 decimal places and we just do the wild guesses as to what we think the loads are actually doing.

CHAIRPERSON PFANNENSTIEL: I don't think we quite want to characterize it that way, David.

(Laughter.)

MR. HAWKINS: Well -- anyway, it's -- the models for loads certainly have evolved and they change really every 10 years. There's really a dramatic change in all

the types of appliances. So we're very interested in both the dynamic response as well as static responses to loads. And as they put in more solids state control equipment, the characteristics really do quite dramatically change.

So these results will be used by the WECC load modeling task force. And the fact that we collaborate with everybody in the west to do interconnection-wide studies and use the same types of load models is really critical.

So we 200 percent support this project. We think it's absolutely critical for future reliability and success.

CHAIRPERSON PFANNENSTIEL: Thanks.

VICE CHAIRPERSON BOYD: And I would presume Mr. Chamberlain who sits as our representative in the WECC arena sees this as a great benefit, but I'll ask him.

CHIEF COUNSEL CHAMBERLAIN: Yes. Actually, it is on the WECC's consent calendar next week. But I would also like to comment that I think it's extremely important for the Energy Commission's program, because the air conditioners they're talking about are the high efficiency air conditioners that we want to be installed. And if they're causing voltage problems, we need to figure out why and we need to figure out what solutions there are besides eliminating high efficiency air conditioners.

CHAIRPERSON PFANNENSTIEL: Commissioner Byron, did you have a question?

COMMISSIONER BYRON: I was just going to add Don Kondoleon stopped by yesterday and briefed me on this as well and how it ties into the WECC. So I would also be inclined to second this if we're ready for that.

CHAIRPERSON PFANNENSTIEL: We are.

Moved and seconded.

All in favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: Thank you.

Item 8.

DR. BROWN: Thank you.

CHAIRPERSON PFANNENSTIEL: Let me read it for the record. Possible approval of PIER work authorization MR-051 for $455,000 for the Consortium for Electric Reliability Technology Solutions under UC master research agreement 500-02-004. The Transmission Cost Allocation Methodologies Project will research and develop methods to assess strategic transmission benefits and then use these methods and planning tools.

Mr. Brown.

DR. BROWN: Thank you, again. This second project addresses an issue that we sort of call the elephant in the room. And this is cost allocation

methodology. This particular issue in being able to determine the benefits of the transmission project and the cost and who should bear those costs according to who receives the benefits has been the focus point of many hearings on the siting of new transmission projects that many times have led to either a long delay or to the project not being approved at all.

And yet it's not a very good science. It's a very difficult thing to determine these relationships. And so we rather bravely or foolishly are going to attempt to bring some science that is to bring a technical basis to help the dialogue that takes place in the public when it comes to trying to make these decisions about on-cost allocation. And so therefore, we're attempting this project.

It will be again performed or organized for us through the CERTS organization, primarily deploying the services of some of their people through the electric power group who have been looking at this particular situation.

What we're going to do, first of all, is to determine what the current experts know around the nation or even throughout north America if we can find them. But since this issue has been tackled so many times, there are a lot of people who study it, so we want to gather all the

information we can of how people do go about a methodology for determining how you would do cost allocation for the purposes of cost recovery.

Then we want to do from that, once we've determined that information, is put it together and see what we can come up in a way of some methodologies that could be applied for this process. And then with that, hopefully put together a recommendation of either these processes look like they may work or as we actually suspect, we will probably have to look in to further research in to this area based on what we find.

So one thing I would like to state with this particular project is a little bit of manage and expectations here. We are tackling an extremely tough subject, but we're comfortable that we will be able to bring some science to bear to this question. And as Commissioner Rosenfeld may remember, when we worked on the X squared project, he was fond of saying that what we'll be doing is raising this to a higher level of confusion here.

And that means is that we hope that we'll actually be reducing the uncertainty here by bringing some technical basis for determining cost allocation.

CHAIRPERSON PFANNENSTIEL: Will there be other sharing the cost of this?

DR. BROWN: In this case, no.

CHAIRPERSON PFANNENSTIEL: And I didn't see -- the write-up was a little sketchy. You didn't talk about whether this is focused on, for example, renewable projects, is that what you have in mind?

DR. BROWN: No. This is going to be looking at any kind of transmission project. Now, it may turn out to have some of its greatest value in this particular area, because, as we know transmission -- any transmission for the purposes of integrating renewables into the California grid is one of an important issue. And, number, 2 it does have some special subject with it. But, no, we do not intend to isolate that particular project.

CHAIRPERSON PFANNENSTIEL: It's not going to be isolated particularly, but it will cover renewable transmission to interconnect renewable facilities?

DR. BROWN: To the degree that we can do that, yes.

CHAIRPERSON PFANNENSTIEL: And you said there was no cost sharing under this. And, yet, I see that it will be used by the utilities for their transmission justification, and yet they're not cost sharing in this?

DR. BROWN: Not at this stage. This is pretty high risk research. It's very fundamental with a potential long-term payoff. I would suspect that if other

research comes out of this based, on what we learn with the fundamentals here, then, yes, we would then expect heavier participation from the stakeholders.

Now, I might add these stakeholders will likely be involved from the point of view of helping us with collecting information, because that's been their position all along. And they also have been involved in the, if you will, design of this project, at least conceptually through our stakeholder advisory committee, the policy advisory committee that Commissioner Geesman chairs.

CHAIRPERSON PFANNENSTIEL: So this is a 15-month project. Where do you see the results being at the end of the 15 months?

DR. BROWN: Is it 15 or 24? I got -- no, no, it's 15 months. I'm sorry, you're right.

The end result of this would be, one, we would have documentation of the existing processes for transmission project approvals and case histories that we gather from survey and experts around the country.

We hope to then identify cost allocation and cost recovery methodologies that would come out of that. And then we want to produce and document a report that would put that in to place, and then come up with a potential research road map for future development in this area.

CHAIRPERSON PFANNENSTIEL: I see.

Discussion, questions, motion?

COMMISSIONER ROSENFELD: I'll move. I'll just emphasize the point that Commissioner Pfannenstiel just made. I'm proud of it, but PIER is putting a lot of money in this transmission now. I mean you're going to come up with that again, in a moment. And the utilities can apply for R&D funds on their own, too. And I'm hoping that maybe if this project goes ahead and has a phase 2 to it, that you'll suggest to our fellow IOUs that they'll be coming with some matching money.

DR. BROWN: Certainly. And as A matter of fact our standard procedure is to always involve the utilities where it looks like there's a very rational reason to do so. And in deed, as you probably know, they are attempting now to get R&D money through their rate cases. And so I wish them the best, because it's actually very important to us that they do get that money, because you will see other projects coming forward that does involve, and you've already seen some in the past, that heavily involves these stakeholders. And so they are putting, so to speak, skin in this case, if you look at our whole transmission research program as a whole.

COMMISSIONER ROSENFELD: Well, we'll keep reminding you. I think Jamie wants to say something.

DR. BROWN: Yes, I saw him there.

MR. PATTERSON: This particular project is part of our focus area in the planning area here in our transmission research program. What we're looking at in the planning areas are ways to bring out greater investment in transmission corridors. Primarily this particular project directly addresses Item number 3, the Governor's 10-point energy plan and was supported by Joe Desmond who voiced all of his support for this, because he felt that by figuring out your cost allocation -- currently, under -- when you site the transmission, there basically are only 2 ways to do it. They look for reliability and -- Dave, they primarily look for reliability of transmission and also efficiency?

MR. HAWKINS: Economics.

MR. PATTERSON: Economics. Okay, good. And so by -- there are other societal benefits, of course, to transmission that we are exploring here. And if we can capture the benefits and who the beneficiaries are, I believe it would probably be great -- it would probably really advance the ability of people to encourage that greater investment in transmission not only by the current number of utilities but perhaps by outside investors as well. And that is part of our planning for this research.

COMMISSIONER BYRON: May I ask a question?

CHAIRPERSON PFANNENSTIEL: Yes, Commissioner

Byron.

COMMISSIONER BYRON: The gentlemen before, I'm really glad to see that we're sticking our toe in the water on this particular issue. I didn't see anything in the write-up though about perhaps involving our friends at the PUC. Is there any workshops planned or anyway of communicating some of the findings of our results here with the Public Utilities Commission?

DR. BROWN: Yeah. There's a number of ways. I guess you could say that it's going to happen. And, first of all, the CPUC to the Office of Rate Payer Advocacy is one of the members of our policy advisory committee, Scott, who has taken a strong interest in these particular kinds of projects. We have a handful of these kind of projects that you would call planning tool development for the acceleration of new transmission siting.

And, for example, I and my research coordinator, Virgil Rose, in this area recently spent a part of a morning over to PUC talking to a cross section of people on these very subject matters, and they were very interested in it. So the answer is, yes, we will continue to keep them involved and keep them informed of what happens here.

But this particular project and the one on -- that you haven't seen yet that we come down -- is looking

at extreme events analysis and planning, those were extremely high on their interest list.

COMMISSIONER ROSENFELD: I'm ready to move the item.

CHAIRPERSON PFANNENSTIEL: Is there a second?

VICE CHAIRPERSON BOYD: I'll second.

CHAIRPERSON PFANNENSTIEL: Moved and seconded.

All in favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: Thank you.

Item 9, possible approval of PIER work authorization MR-052 for $250,000 EPRI, under the UC Master Research Agreement No. 500-02-004. The Transmission Probabilistic Congestion Forecasting project will develop and apply mathematical approach using probability to more accurately describe load and generation time dependence and forecasting uncertainties to predict transmission congestion in California.

Mr. Brown.

DR. BROWN: Thank you.

Well, until we're able to get enough investment in transmission and in power plants, we're apparently going to suffer from congestion costs for some time to come in California. And right now it's a fairly high figure, and it ranges anywhere from 500 million even to a

billion dollars at times. But it varies because we manage to occasionally put some investment in to relieve it.

But as population growth continues, we'll probably continue to see a significant congestion for some time to come.

Right now current planning methods have a difficult time handling that particular item in their planning as to where we should be putting transmission lines. And so what we wanted to do again is to bring a certain amount of science to this capability to see if we can improve the ability to plan for congestion and therefore help with the planning activities.

And one of the things we had to deal with is of course the future has great uncertainty, great uncertainties toward generation plants we've built, great uncertainty as to where we can build the transmission lines and also where the load will be and what kind of load it will be, and then how much will we rely on imports and/or perhaps exports and where will they come from. All of these lend a great deal of uncertainty and, therefore, the approach that we are looking at taking here is to apply probabilistic techniques to improve the accuracy beyond the single point methodologies that are used right now.

And we have engaged the services of primarily Dr.

Stephen Lee, who works at the Electric Power Research Institute, and his colleagues, who have done quite a bit of fundamental work in this area. And they're going to look at two different possible or promising probabilistic techniques here that we'll put together -- or try to develop a model or models that can be used for these planning purposes.

And, let's see, that's -- well, what we will fundamentally get out of this when it's all said and done is that we hope to be able to come up with some models that would allow entities such as the Commission here and the Cal ISO and/or utilities to be able to incorporate the congestion question in their planning activities. And, therefore, one of the things that we're going to do in this particular project, EPRI has agreed to fund part of this project, up to about $50,000, to help with outreach and communicating and transferring the results of what we learn in this project to the stakeholders here in California.

CHAIRPERSON PFANNENSTIEL: And so at the end of the 12 months we will have the models available to us?

DR. BROWN: As this research works we will have at least the fundamentals of the models. They will probably, as usual, require some further definition. And we hope that we'd get to the point that we can develop

specifications that we can then say some commercial entity would take this up and turn it into a commercial product that would be supported. But, yes, we would hope to have fundamental models for this.

COMMISSIONER ROSENFELD: Again, I'm ready to move the Item 9.

COMMISSIONER BYRON: I'll second it.

CHAIRPERSON PFANNENSTIEL: All in favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: Thank you.

Thank you.

MR. BROWN: Thank you.

CHAIRPERSON PFANNENSTIEL: Item 10, possible approval of Contract 500-06-002 for $599,625 with the University of Florida to draw up a model that will realistically estimate how rising sea levels due to climate change may change California shorelines.

Mr. Franco.

MR. FRANCO: Good morning, Commissioners. My name is Guido Franco. I'm the technical project manager on Climate Change Projects in the Public Interest Energy Research Program.

I'm here to ask you for approval for a project like Commissioner -- this is going to be used to substantially improve the methods that we use to estimate

how shorelines in California will change in the future due to sea level rise.

Several recent studies in the technical literature indicate that existing methods or models used to estimate evolution of coastal areas are far from being technically sound.

On this contract the researchers will enhance and apply a new model that will realistically simulate the transport of sediment along the shoreline and to and from the shoreline to the ocean. In addition, the model would take into account the transport of sediment by regions to the coastal areas and the effects of waves of the ocean on cliffs. Only a model with these characteristics would be able to realistically simulate how the coastal areas might change in the future in response to sea level rise.

The combustion with natural gas in California contributes about 30 percent of the total in-state greenhouse carbon dioxide emissions in California. This contribution is similar in magnitude to the amount of carbon dioxide emitted from the combustion of motor gasoline.

Since natural gas is therefore a major source of greenhouse gas emissions in California, we believe that a natural gas research fund -- or natural gas research program -- research program should invest funds on climate

change status like this.

The RD&D Committee approved this project. And this project also listed as one of the projects approved by the Public Utilities Commission when they approved our research plan.

I respectfully request you approve this project. And I'm ready to answer any questions that you may have.

CHAIRPERSON PFANNENSTIEL: Thank you, Mr. Franco.

Are there questions?

COMMISSIONER ROSENFELD: Ready to move Item 10.

VICE CHAIRPERSON BOYD: Second.

CHAIRPERSON PFANNENSTIEL: In favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: Thank you.

Number 11, possible approval of the $140,000 grant to PRCI to develop a comprehensive set of guidelines and recommended practices that can be used by natural gas pipeline industry for evaluating and siting pipelines in areas subjected to large-scale ground movements.

Good morning.

MR. MAGALETTI: Good morning, Madam Chairman, Commissioners. My name is Mike Magaletti. I am the lead for the Strategic Analysis Research area in the Public Interest Energy Research Natural Gas Program.

I'm bringing to this meeting a $140,000 grant to

the Pipeline Research Council International for your approval. This is the Energy Commission's contribution to a nearly $1 million research project to revise and reissue natural gas pipeline siting guidelines for mitigating ground movement hazards.

As called for in our current annual program plan, strategic analysis seeks ways to mitigation risks to the state from catastrophic damage to the state's gas infrastructure. This project will do exactly that by developing a set of guidelines that can be used by the natural gas pipeline industry for locating pipelines in areas subjected to large scale ground movements, like California.

The project manager for this project, the Pipeline Research Council International, is a tax exempt nonprofit corporation comprised of energy pipeline companies first organized in 1952.

Although originally focused on technology development for the gas transmission industry, the PRCI has evolved and broadened its research program to include all oil petroleum products pipelines as well. As a result, PRCI is now a critical resource for all types of energy pipelines, both in this country and internationally.

This project will entail the development of a

number of items. It will involve new methods to predict pipeline mechanical response for complex pipeline/soil interactions and events. It will involve improved models for evaluating local geotechnical and pipeline mechanical response to geohazards. And it will development new technology for estimating strains in a pipeline displaced by ground movement. California benefits from all this for less than 15 percent of the total project cost, while the federal government picks up half and the energy pipeline industry supports the rest.

CHAIRPERSON PFANNENSTIEL: Thank you.

Are there questions on this?

Commissioner Byron.

COMMISSIONER BYRON: Thank you.

In a prior life I was associated in indirect ways with the Piping Research Council. And I see they've gone international since then.

I think this work is very important. I think it's very clever the way we've leveraged our funding the way we have. And so I'm very much in support of this.

CHAIRPERSON PFANNENSTIEL: Do --

COMMISSIONER ROSENFELD: So I move Item 11.

COMMISSIONER BYRON: I will second it.

CHAIRPERSON PFANNENSTIEL: In favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: It's approved.

Thank you.

Item 12, possible approval for PIER to administer a $150,000 grant from the U.S. Department of Energy's State Energy Program to augment an existing grant for the PRAC operation.

MR. THOMPSON: Good morning, Commissioners. My name is Terry Thompson with the PIER program.

I am seeking approval to have PIER administer $150,000 grant from the U.S. Department of Energy's State Energy Program to the University of California, Berkeley. This grant will augment an existing $299,985 grant for the operation of the Pacific Regional Combined Heat and Power Application Center Network, hereafter known as the PRAC.

The PRAC is one of seven combined heat and power (CHP) application centers supported by the U.S. Department of Energy. The PRAC supports the Energy Commission and the PIER program by promoting the adoption of CHP. The 2005 Energy Policy Report identifies CHP as a viable end-use efficiency strategy for California businesses.

The PRAC also sponsors workshops that will provide a forum for PIER staff and PIER contractors to discuss state energy policy and to present results of PIER's funded programs.

I am recommending approval of the grant

augmentation.

I am ready to answer any questions at this time.

CHAIRPERSON PFANNENSTIEL: Thank you.

Are there questions?

COMMISSIONER ROSENFELD: I'm ready to move Item 12.

VICE CHAIRPERSON BOYD: I'd like to second the motion and just say that I'm pleased to see this project here and I'm pleased that there's recognition of the hyper-strong recommendations in this area. And I'm pleased that Commissioner Byron has joined us, because I know he joins others of us who are really strong fans of combined heat and power, et cetera, and I'm sure he'll become a champion of this subject.

But, anyway, this is a very good piece of work to see underway.

Thank you.

CHAIRPERSON PFANNENSTIEL: Thank you.

All in favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: It's been approved.

Item 13, possible approval of contract 500-06-007 for $1,299,616 with Ecos Consulting to identify and prioritize potential energy efficiency improvements for consumer and office electronic equipment in California,

including commercial equipment, medical equipment, secondary power supplies, televisions and desktop computers.

MR. MEISTER: Good morning, Commissioners. I'm Bradley Meister. I'm here today to request approval of Contract 500-06-007 for $1,299,616 with Ecos consulting to investigate commercial, medical, secondary, and consumer power supply use.

Last year the California Energy Commission released an RFP to announce a PIER-funded solicitation to do research, development and demonstration projects focused on reducing energy use in the consumer and office electronics area. The Energy Commission received two qualifying proposals. One proposal submitted by Ecos Consulting passed our technical review.

This contract is intended to investigate the energy use in a number of new areas to include commercial medical sectors.

The proposed PIER-funded contract with Ecos will potentially provide up to 2900 gigawatt hours of future electric savings by identifying, prioritizing and developing the energy efficiency improvements in electronic equipment in California, including commercial equipment, medical equipment, secondary power supplies, televisions and desktop computers.

This project will be able to receive input from industry as well as other international organizations, will pave the way for future Title 20 appliance standards.

The staff recommends that the Commission approve this contract with Ecos Consulting.

CHAIRPERSON PFANNENSTIEL: Thank you.

I just have one question. It has to do with the prioritization. When Ecos looks at efficiency improvements that are technically possible, I assume that they then go through -- there's some hypothesis which is presented in terms of where the greatest savings would come. But I assume there's some analysis against that hypothesis in terms of the greatest savings that could be achieved in California. And so then that subgrouping is presented to the staff for further analysis. Is that how it's done?

MR. MEISTER: Exactly. Like in the medical and commercial sectors, which we don't know as much about, we go out and we do a census and we look at the duty cycle; in other words, how much electricity do these devices use and how long are they on? And so then after getting that basic information, we prioritize the list and go after those that are going to have the greatest impact.

CHAIRPERSON PFANNENSTIEL: Thank you.

Are there questions on this project?

COMMISSIONER ROSENFELD: I just want to say I think on behalf of Commissioner Pfannenstiel and me, we've had -- Ecos has a very good track record around here. It certainly helps us with external power supplies in a magnificent way.

So I'm pretty comfortable with this and I move the item.

CHAIRPERSON PFANNENSTIEL: Is there a second?

VICE CHAIRPERSON BOYD: I'll second the item, and just say that anything that moves -- Commissioner Rosenfeld talked a lot about vipers my first year here. And that I see --

COMMISSIONER ROSENFELD: Vampires, please.

VICE CHAIRPERSON BOYD: Yes, vampires. Vipers, vampires.

And this will advance that cause.

Thank you.

CHAIRPERSON PFANNENSTIEL: All in favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: It's approved.

Thank you.

Item 14, possible approval of contract 500-06-008 for $1,315,985 with Navigant Consulting, Inc., to conduct research assessments, develop technology road maps and related planning activities for PIER's Energy Systems

Integration Research Program.

MS. KELLY: Good morning. My name is Linda Kelly. I'm providing details on this proposal for Mark Rawson. I am the Program Manager for the Distribution Program in PIER and in the Energy Systems Integration Unit. I'd like to just provide some context and a few details about this proposed contract.

The IPER, the EAP, the California Solar Initiative, the RPS and other state policies identify a host of issues related to integrating renewables, demand response, distributed generation into California's transmission and distribution systems in an efficient, reliable, safe and cost-effective manner.

For FY 2006 ESI has an approved budget of $10 million to further the research program and responding to seven broad maps research strategic areas that are articulated in PIER's 2007-2011 Electricity Research Investment Plan.

The primary strategies that we'll be responding to enable optimal integration of renewables, distributed generation, demand response and storage to the power system; improved capacity utilization and performance of transmission and the distribution system; improved cost functionality of components to integrate demand response, distributed generation and electric storage into the

system; approve security reliability of the electricity system, including distribution and transmission, a focus there; and support improvement of regulations for demand response, distributed generation, storage and renewables; facilitate transmission siting process and develop knowledge based for future decision making, informal delivery integration and infrastructure policy improvements relative to electricity.

ESI is a very broad maps area. And so the different areas within an ESI address a whole range of these issues.

In May the R&D Committee approved allocations for ESI for $4 million. There's 225 million for distribution, 1.75 million for demand response, 1 million for distributed energy research integration, and 1 million for energy security.

Additionally, ESI has a 2006 budget allocation of 1.5 million for strategic natural gas research.

Through this $1.3 million dollar, 2 1/2 year Navigant contract we will assist ESI research teams, both the new evolving ones, which are the natural gas -- the strategic natural gas and the security program, it will assist these areas to establish and manage program advisory committees, conduct updating and develop new research assessments, develop and update road maps in an

integrated fashion. We will also -- the tasks also include providing technical support for portfolio management, R&D forums, project and research initiative scopings, program evaluation, solicitation support and program integration.

This contract is using 2005 electricity dollars and 2006 natural gas dollars, and was approved by the R&D Committee on May 17th of 2006.

I'm available if you have any other questions.

CHAIRPERSON PFANNENSTIEL: Thank you, Ms. Kelly.

Just I want to be sure I understand what Navigant is actually doing with -- you gave a whole description of the kinds of things. But is it basically an administrative function that they're doing or a research function?

MS. KELLY: Well, I think it's -- it's both. Within this contract that there is a -- several parts of this contract address developing road maps, helping the programs do their planning. So we're going to, you know, start out by doing research assessments. I feel research assessments are part of the research projects. I mean it's necessary to research what's out there so that PIER and ESI can target what's the most important research to do.

So in some ways I think, you know, this large

effort of doing research assessments, integrating these research and developing integrated road maps are the first step in good research.

They will be doing administrative work for us also, developing and helping us with tax program advisory committees. That's very administrative in nature.

But I think also what they bring to ESI and one of the reasons that we have -- you know, we're doing this contract is that they have broad experience with DOE and have networks that go well beyond California. And they bring that expertise and knowledge of that research to this activity.

So it's a mixture of both. There is administrative here, but they also provide research support in developing our programs.

CHAIRPERSON PFANNENSTIEL: Thanks.

Questions?

Commissioner Byron.

COMMISSIONER BYRON: Thank you, Madam Chairman.

I'm familiar with the role Navigant plays with regard to PIER, particularly on the distribution system PAC, Program Advisory Committee. I had the fortune of actually being on that advisory committee last year. Thank you, Ms. Kelly. And I think that really helped me understand more of what Navigant's role is. And, in fact,

thank you as well, to you and Mark, for coming up and spending some time with me yesterday afternoon to ask a bunch of questions.

My key thing here is -- besides what Navigant does, is making sure that we get as much customer involvement in these PACs as possible. And I was very impressed with the efforts that are being made to involve customers more. And it's a very difficult challenge to get them there.

So I just wanted to comment. Thank you. And I hope that you'll continue to do that in an overt way.

Thank you, Ms. Kelly.

MS. KELLY: We're already thinking about it.

COMMISSIONER BYRON: Yeah, I know. Thank you.

COMMISSIONER ROSENFELD: So I move Item 14.

COMMISSIONER BYRON: And I will second it.

CHAIRPERSON PFANNENSTIEL: In favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: Thank you, Ms. Kelly.

Item 15. Now, I understand there's been a change in the write-up of that item since it was distributed.

Possible approval of an amendment to Contract 200-05-001 for $96,000 with Inter-Con Security Systems, Inc., extending the term by six months to January 31st, 2007, for unarmed security guard services as required by

the California Highway Patrol's Emergency Master Services Agreement.

Thank you.

MS. VAN EGDON: Good morning, Commissioners. My name is Karen Van Egdon, and I'm the Contract Manager for the security guard services.

I'm requesting approval of the amendment to this contract for a security guard. The State Personnel Board is still holding the original master service agreement from the CHP, so we're kind of doing six month amendments until we can -- you know, till they let it go over there.

I forgot where I was here. I'm sorry.

Since the original MSA is still at the SPB, we have to execute this emergency amendment. On Thursday of last week I received a call from our CHP contact telling me that the hourly rate and the benefit rate -- which benefit rate is -- DPA sets that rate, we have no control over that -- was raised in the new amendment, thus making me add an additional $4,000 to the original request. I had no control over that. But I didn't find out until Thursday, or I would have done something sooner.

I did go to the Budget Management Committee on both the 92,000 and the $96,000 amounts and received their approval. So I'm requesting approval of the amendment.

CHAIRPERSON PFANNENSTIEL: Thank you.

Is there discussion or is there a motion?

VICE CHAIRPERSON BOYD: A question.

CHAIRPERSON PFANNENSTIEL: A question?

VICE CHAIRPERSON BOYD: You say the SPB is still holding the Master Service Agreement. How long has been going on? And I presume it's just looking at the typical responsibility of the SPB whether this could be done by state employees vis-a-vis a contractor.

MS. VAN EGDON: Exactly. And it's been there since -- it's either November or December of 2005.

VICE CHAIRPERSON BOYD: Okay.

MS. VAN EGDON: That's why we had to do the emergency one in the end of December for January through now. So it's still sitting there.

VICE CHAIRPERSON BOYD: Okay. Thank you.

I'll move the item.

COMMISSIONER ROSENFELD: Second.

CHAIRPERSON PFANNENSTIEL: In favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: Approved.

MS. VAN EGDON: Thank you.

CHAIRPERSON PFANNENSTIEL: Item 16, possible approval of Purchase Order No. 06-433.00-002 for $200,000 with Network Design Associates for specialized system analysis service, project-specific technical training in

Macintosh support.

MS. MATTHEWS: Good morning. I'm Sharon Jane Matthews, a customer support manager in the Information Technology Services Branch.

I'm here today to ask your approval of a purchase order for $200,000 with Network Design Associates to provide us with a specialized desktop support.

The Commission has a number of specialized desktop computers. Some are used for energy modeling. Some are used for geographic information systems. We have special configurations for reasonable accommodation requests to meet the Americans with Disabilities Act requirements. And we have a number of Macintoshes in the building.

Network Design Associates' support will include technology needs assessments for the specialized desktops, evaluation assistance specifications and recommended configurations and support where necessary. And I'm here today to ask you to approve it.

CHAIRPERSON PFANNENSTIEL: Thank you.

Are there questions?

COMMISSIONER ROSENFELD: I move the item.

VICE CHAIRPERSON BOYD: Second.

CHAIRPERSON PFANNENSTIEL: In favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: Approved.

Thank you.

Item 17. And I should note that we have four people who would like to speak on Item 17.

Possible approval of a compliance option for evaporatively cooled condensing units to be used with the 2005 building energy efficiency standards.

Ram.

MR. VERMA: Good morning. My name is Ram Verma.

Staff is requesting approval of the compliance option for evaporatively cooled condensing units. Evaporatively cooled condensing units are similar to conventional split system air conditioning units, except that water is sprayed on the condenser coils. These units save energy during the peak periods. At present these units don't get appropriate credit according to Time Dependent Valuation of energy.

With approval of this compliance option, all evaporatively cooled condensing units that meet the required eligibility criteria will get compliance credit.

This was presented in the Business Meeting on February 15th. There were concerns about water use by Michael Mahan representing California Water League and Peter, an independent engineer. Staff worked with these two persons and with California Urban Water Conservation

Consultants.

We have added a new requirement that in order to qualify for compliance credit, water use of these devices shall not exceed 5.0 gallons per ton-hour at ARI test conditions.

Staff has done everything reasonably possible to ensure water conservation and to increase the reliability of energy savings. This is an innovative and new technology. This will save 20 to 59 percent of cooling energy, and this is not required by our standard. It's just an option.

I'm open to questions.

CHAIRPERSON PFANNENSTIEL: Thank you.

Are there questions here?

COMMISSIONER ROSENFELD: I understand we have four speakers -- I understand we have four phone-ins. So we should probably --

CHAIRPERSON PFANNENSTIEL: There are people here. All right.

Michael Mahan is here, with the California Water League.

MR. MAHAN: Good morning again. Thank you again, Commissioners, for the opportunity to address you.

Staff and the device proponents have provided us with a lot of information about the actual water usage.

And although we no longer have the degree of uncertainty we have, we still have the same degree of concern.

What we're most concerned about is particular climate zones in California, the most hot, dry, arid parts of California, where there will be a peak water use, I think stipulated between 70 and, in the really hot areas, over 100 gallons during the day to the users of evaporative cooler. We're talking about cooling these particular most arid parts of California by evaporating water. And it's -- in these areas it's the least efficient areas for evaporating water to cool.

This -- we think it will pose a significant burden on water systems, and it should be subject to further study. Staff has said that they will recommend a further study once implemented. But we think that's kind of ex post facto once these units have already been put in. If they're put in mass, it could be a significant peak water issue. And if the water requires pumping, it will be a significant issue for electricity also.

We also retain our skepticism with respect to silica scaling, especially in the same areas of California, such as Bakersfield and Fresno and Needles and Riverside, that have high silica content in their water.

The system that we've been talking about is designed to purge its sump once per eight hours. And if

it does so at that frequency or even at double that frequency, we'll have a silica precipitating out of the water and taking hold in the sump. It's my understanding that at the pH of potable water, silica will precipitate out at between 120 and 180 milligrams per liter. And if the ambient water collected is going to start out at 60, then every time you evaporate through it's going to increase. So over the course of four hours, 60 would become 240; and over the course of eight hours it would become 480. So there's no question just from the chemistry that we're going to have silica precipitation and silica scaling.

This poses yet another issue, because silica scaling is more difficult to deal with than other scaling, such as calcium scaling, that you might get -- it might be more common in other parts of the state or other parts of the country. But from the particularly volcanic soil we find in these most arid parts of California, we're going to have silica scaling. And my review of the literature indicates that it is not subject to removal by normal mechanical means, but has to be treated with hydrochloric or hydrochloric acid.

Beyond these two objections that remain, we still have a degree of skepticism about this system. The system was originally presented in the literature as using 1.5

gallons of water per ton. But after staff and the device proponent come forward, we've noted that in these dry, arid parts of California we're looking at multiples of that per ton, not even including a sump dump, which as I said is -- I'm skeptical will be sufficient given the silica content of the water in these particular areas.

So my client has asked that this not be approved and further study regarding specifically the silica and the impacts of the increased peak water use -- that it not be accepted until there's increased study of these areas.

CHAIRPERSON PFANNENSTIEL: Thank you, Mr. Mahan.

May I ask the staff to respond to those two issues.

MR. PENNINGTON: This is Bill Pennington. I'm the Manager of the Buildings and Appliances Office.

We have had extensive discussions, as Ram was saying, with the CUWCC, with the Water Resources Board kind of listening in as a third party, with this particular person and with the applicant, and have spent 40 or 50 hours of discussion time going over how this system works, how this system has done innovative things to reduce its water use, looking at how local water agencies have, I'd have to say, not regulated this in-use in the past. And basically we searched around to identify what local governments were requiring of these kinds of

evaporative cooling systems. There's only a couple of local governments that do have requirements, the most stringent of which is a 9 gallons per ton-hour criteria. In the course of reviewing this, we agreed to establish an eligibility criteria that was one half of that requirement. So this would be more stringent than any other water agency requirement by 50 percent, and it would be a statewide requirement.

So basically we're -- the Energy Commission is providing quite a service here for water advocates to address this on a statewide basis.

The comments that Mr. Mahan has made here, one is saying that this system has not been tested, has not been field tested. That's not an accurate statement. There have been studies sponsored by PG&E and SMUD over the past several years. There's been fairly extensive testing done on the system. We find those -- the results of those studies persuasive and consistent with calculations that we've done to calculate water use.

This system is -- you know, has no market share now, if you will, in California. But it has a potential to be a huge peak-demand-saving resource. We've estimated about 60 percent cooling energy savings in the desert if this system were used there relative to a conventional air-conditioner. It's a system that, you know, the

situation demands its consideration and possible application. And we think it's ready for that kind of an introduction.

Related to the silica buildup, I might let the applicant speak a little bit about that, about those specific aspects of silica buildup. This system is certainly inundated in how it tries to avoid the buildup of those kinds of materials on the system and how it purges itself and does so in a water efficient way. I really probably should leave it to other people to speak about that.

The five gallons per ton-hour requirement, like I said, it is -- the closest requirement to that is nine in one locality. This is a very aggressive requirement. It could be argued why not be more aggressive. This particular manufacturer of this particular device could do better than that. So you might argue, why not just go as tight on what this manufacturer can do? A disadvantage of that is it would remove all competition for this system from the market if you had that type of a criteria. And that seems imprudent.

We have had discussions with the applicant and the local water agencies about the possibility of, once this compliance option was approved, for the water agencies to take some responsibility to look into what is

the performance of these systems and are there any issues that the water agencies are seeing relative to either water use or scaling that causes the system to be less reliable, along the lines of Mike Mahan's issues. And I think both the water agencies and the applicant are quite willing to cooperate in looking at how do these things perform once the approval would be made, and coming back to the Commission.

CHAIRPERSON PFANNENSTIEL: Thank you, Mr. Pennington.

We do have Rocky Bacchus from Freus, the applicant.

COMMISSIONER ROSENFELD: Just before you start, Mike Mahan said something which I just didn't understand.

Can I ask him a claritive question?

I'm a little bit puzzled by your first remark, Mike. You said that in hot, dry areas evaporative cooling didn't work well. And I thought the hotter and drier it was, the better it worked. So can you tell me -- educate me a little bit.

MR. MAHAN: Well, there's no question that it's efficient with respect to electricity. But it's less and less efficient with respect to water. And so in these areas where water is most scarce -- and, you know, presumably the electricity is not relatively scarce there

compared to other parts of California -- where the water is most scarce, they're going to be using the most water, especially on the hottest days.

COMMISSIONER ROSENFELD: But very efficiently. It extracts 540 calories per gram. That's a hundred percent efficient, right?

MR. MAHAN: Well, it's efficient with respect to electricity, Commissioner. But it uses a lot of water. And we're concerned about the water use.

COMMISSIONER ROSENFELD: Oh, okay. I understand what you're saying.

CHAIRPERSON PFANNENSTIEL: Thank you.

COMMISSIONER ROSENFELD:

MR. BACCHUS: Madam Chair, Commissioners, ladies and gentlemen. My name's Rocky Bacchus. I'm with Freus Air Conditioning. I've been in the evaporative air conditioning business for 30 years now. I've been on the technical committee for evaporative cooling for as many years as I can remember. And I wanted to comment somewhat on this proposal.

In reviewing this application, there has been no challenge to any of the technical computations. The application is for proper credit for evaporative condensers. That's what it's about.

Our company has been continuously selling

evaporative cooled equipment in California for approximately 30 years. Ownership has changed, but have basically been in the same office.

If fully implemented, some of the numbers that have come up to say what will the water impact be. But it should also be remembered that if fully implemented, which means all air conditioners in California, which in 2004 was 692,139 units, there would be 1,384 megawatts of peak power reduction per year. That's per year. It accumulates as the years go by. At the same time, if it was fully implemented, the water impact on the state's water would be less than 1/100 of 1 percent. So that's .001 -- less than that percentage.

We've gone through several generations of building evaporative condensers and have improved substantially. There have been studies in California and other states for over ten years now. These studies have been done and furnished to all of the parties openly. They're available, and I've personally sent copies to Mr. Mahan. But there have been air line certified tests, and we furnished copies of that ETL certifications.

In 1998 PG&E did a field study with measured water performed by Davis Energy Group.

In 2003 Nevada Power concluded two years of studies performed by Paragon Consulting Group. The water

was measured at the individual units. Individual metering to check the water consumption.

The water consumption went from just over five gallons per ton-hour in the '98 studies down to the most recent study done by the Department of Energy's Building America Program and performed by Davis Energy Group in the Sacramento area showed 3.5 gallons per ton-hour. And that included all the flush systems.

There's been a two-year study of corrosion and scaling done by SMUD, Sacramento Municipal Utility District. And they showed that the manufacturer's data on removal of scale was accurate and that the ends do shed scale. And they admitted them into their own programs for rebate applications.

It is important to note that 30 or 40 years ago nearly all residential manufacturers of air conditioners had evaporative cooled condensers. But those were relegated to only commercial applications where there was overwhelming energy savings. And they've gone to low cost and built air cooled units at much lower efficiencies. Now, that has gradually increased. But even so, these field studies have consistently showed as much as 65 percent energy savings on field studies. And this verifies all of the lab application information that is thoroughly documented.

In the past -- in addressing Mr. Mahan's point about silica scale. Silica's basically sand. There is sand everywhere. And his calculations are just plain wrong. He assumes that the concentration would go from 90 parts per million to 480 parts per million -- or per liter. I forgot his exact term. But basically a concentration of 5 to 1.

The flushing system that is used that flushes once every eight hours flushes the entire sump. And so during that course of time the concentration would get to a maximum of about 3.16 to 1. And the average would be about 1.6 to 1. So his math is just off by a factor of like 3 times.

Over the last 30 years, we have never had a case where scale -- silica scale has caused a warranty claim. We have never had a coil failure that was pointed out for silica scale buildup. This issue is just not backed up by any factual data. It is a supposition that is unfounded.

In building our units we purchase an insurance policy with a major insurance company to guaranty performance for ten years. We pay the parts and labor if a coil goes out or if scale were to create a problem. And therefore we have findings and responsible to say that if something such as he has suggested were to happen, even though it's never happened that we know of in the past,

and there's been continuous evap condensers in commercial units used for only 50 years and certified and we haven't found any cases where silica scale has caused a warranty or failure in that case either, that we would have to replace the coil. And so it could be field placed. The components are replaceable. We're looking at a 30-year life. And we suggest the coil be replaced at ten-year intervals.

This is a competitive market. It doesn't happen in a vacuum. And it is substantially more expensive to build a unit that is extremely water conservative. The number he quoted about 1.5 gallons per ton is accurate. And that includes the flush, is what we believe our equipment will achieve. We do not believe any other manufacturer that's a competitor can currently achieve that. But there was nothing misleading or improper about using our data for our equipment in making a submittal to CEC as to what would be done. That number has been modified to five gallons per ton-hour as a reasonable competitive level that is an approximately 44 percent reduction for the most stringent standard that is enforced in code anywhere in California.

The points about no testing are simply invalid. The points about silica buildup do not have any basis in fact or in historical data.

And despite having two years of work at the California Energy Commission on this proposal, despite having two public workshops, despite having Mr. Mahan at the second public workshop, at which time he stated that he had no questions, he requested none of the data we brought -- I personally sent it to him -- but in all of this time he has provided no data whatsoever to back up the claims. And therefore we request and state that the proposal as it is now agreed should be passed, that we should be allowed to compete. And that this is not a simple matter to compete in California and that we have to perform and convince builders and homeowners of our performance long term. And they're the ones that will determine what the performance is in switching from one technology to the another.

But we need to have our performance properly calculated. And that's what this is about. It's just saying we want it properly calculated, not anything extra or a special benefit, just calculate it correctly. Because if we can reach 1384 megawatts per year of peak savings, it's very valuable to California.

Thank you.

CHAIRPERSON PFANNENSTIEL: Thank you, Mr. Bacchus.

We also have Thomas Pape with the California

Urban Water Conservation Council.

MR. PAPE: Thank you for allowing me to speak today.

I represent the California Urban Water Conservation Council. I'm their technical advisor. We're made up of more than 300 members, mostly water agencies throughout the state, about 70 environmental groups, and then there's the Group 3 list which we call the consultants. Our purpose is to try and advance the science and the implementation of water efficiency.

On this issue we could not categorically oppose a concept of using water to garner improved energy efficiency, for water has demonstrable cooling properties through the latent heat of evaporation. However, it is important that water is not wasted whenever water is used, and evaporative cooling is no exception.

We were very concerned and have concerns about this. One of the things that sort of rang the bell was, whenever we here benefit costs comparing the price of water to the price of energy, we get kind of shook about that. As you mentioned, the water is gold in this state. Well, it's not priced that way, unfortunately.

The price of water is not based on its value. It's based on the cost to filter and treat and deliver. So that has some concerns.

We do support the proposal, but we do this with caution. There's several reasons we were cautious about this. The limit of five gallons per ton-hour is about 30 percent efficiency in water use, as in the potential latent heat of evaporation of that water and how much is used per ton, understanding you can't reach a hundred percent. You have drift, you have to have flushing, et cetera.

But probably our greatest concern is that in the hot areas, for instance, Zone 13, Fresno, et cetera, this is over 100 gallons a day per home that's used in this thing, on the same peak days that the water agencies are trying to reach -- trying to meet the peak demand of water, because everyone's watering their lawn and those sort of things. So this could be an issue later on depending upon how prevalent these system take place. This is about a 30 to 50 percent increase in average daily water use, and that gives us a lot of concern.

We agree with the proposal, but with caution. We want to make sure that the five gallons per ton-hour is the level of water used at the -- if the system is anyway adjustable on how often it flushes the water, we want to make sure that that five gallon per ton-hour is at the maximum flush level if it's adjustable.

We also want to see the condensation water that's

collected from the evaporation coils to return back to the condenser unit to be used for this. That's the other great thing. You've got basically distilled water, no TDS. That can be used in the system and it solves a lot of the -- if there is a silica problem, I'm not sure if there is, but it would certainly help that out a great deal.

And we want to make sure that the overflow line is visible to the homeowner. Just like toilets, these refill valves do sometimes start leaking. And if it's a silent leak and an invisible leak, unless that overflow line -- someone can see water running out of it, sometimes it gets put into a sewer line or something and the system can waste water and leak water for months and months before someone gets a water bill and realizes it.

So, that is sort of our position. We support -- like I said, with caution we support the proposal. We'd rather have -- basically there's really no water use regulation on these systems. So this isn't really what we'd go for if it was our decision. But we'd rather have five gallons per ton-hour than basically infinite gallons per ton-hour, which is kind of what exists today. So we think it's a darn good start. We will be watching it very closely. And we hope to be able to do some studies on this after we see some installed.

CHAIRPERSON PFANNENSTIEL: Thank you, Mr. Pape.

Ken Nitler from Enercomp, Incorporated.

MR. NITLER: Good afternoon, Commissioners. I'm Ken Nitler with Enercomp. I've been involved with the building standards for many years and the author of one of the computer programs that's used for that. I did some work for Freus in preparing this application.

I don't want to be redundant with all the comments you've heard, so I just want to say the following:

I've had the privilege of being involved with four or five of these compliance options dating back to 1985. And I got to tell you, for a never-before-recognized technology coming before the Commission and trying to be integrated into our building standards process, I've never encountered one that's as robust or as refined or as well documented or as ready for prime time use as this water cooled condenser.

You know, there's -- for many years there's been an ARI standard on how to measure efficiency. That's not something new. There is unfortunately no national standard on how much water one of these sort of devices is allowed to use. But the Commission is proposing -- the proponent in working with the staff came up with the five gallons per hour, which I predict will become a standard

across the country if you guys adopt it. And we would see other water agencies in adjacent states doing something like that. And some day it would be the basis for a national standard. So that would be very powerful and useful in the marketplace.

In working with the proponent on this, I'm amazed as an engineer. Listening to the design improvements that they've done over the years in response to many of these varied questions, ingenious design tweaks, if you will, to reduce the chance that scaling is an issue, to provide proper sump flushing, things like that. This is a highly refined device, at least the one the proponent is offering, that I'd be excited to see it offered.

And you know how in the -- well, the last week here, right, we've all been experiencing a hundred degree temperatures. How'd you like to have an air conditioner at home that uses two or three KW or two or three KWH instead of four or five or six KWH? That's the kind of power we're talking about here with a water-cooled condenser.

So I would encourage you to move forward on this.

Thank you.

CHAIRPERSON PFANNENSTIEL: Thank you very much. Thank you for being here.

Are there other questions from the Commissioners?

COMMISSIONER ROSENFELD: I have a couple of simple questions.

First of all, CUWCC. This idea of reclaiming the condensate water seems like a good idea. But it must be pretty climate zone dependent. I mean I would think that in really hot, dry climates there just isn't a lot of condensate water and it wouldn't be cost effective.

Can you say a few words about where it's cost effective?

MR. PAPE: I can't speak exactly where it's cost effective. But I want you to keep a couple of things in mind. You're returning the line with basically a plastic tubing as long as you've got a gravity flow. So you're -- and if it's incorporated when it's installed, you know, it's not that difficult to install that line. You're running Freon lines anyway to the evap coils inside the plenum.

So how much water? It's not so much -- although a humid climate will create more humidity inside the home, a lot of the humidity in the home that it's pulling out is being internally generated. It's from the cooking, the baths, the showers, that sort of thing.

COMMISSIONER ROSENFELD: That's a good point. I guess I would encourage staff and Freus to look into that.

Thank you. That's all right. There are showers

and there are people and there's cooking and stuff, yeah.

MR. PAPE: My personal experience has been anywhere in the middle of summer from having a system where I had a five-gallon bucket collecting the water, anywhere from 5 to 15 gallons a day might be a good average amount of water.

COMMISSIONER ROSENFELD: Thanks.

MR. VERMA: This requirement is in the proposal. We have the requirement. In order to qualify for the requirement, this is requirement that they have throughout the condenser back to the tank.

COMMISSIONER ROSENFELD: Good. Well, thank you for educating me.

And the other question is, I guess -- this Commissioner at least would be interested in knowing whether real data are going to come out from the water use in the different climate zones for the first hundred units or if Freus is looking the first 500. I don't know.

Are either the water districts or the CEC staff going to collect some of that valuable data?

MR. VERMA: I heard that the water --

MR. PAPE: Well, the council certainly will very much like to collect that data and analyze. We really have to get the data from our members, from the water retailer. But we need to know where they're located. Our

intent is -- we've already requested to try and get a hold of a couple of different methods of where these were installed. I feel very confident I can convince our member agencies where they're installed to get us the consumptive data, and we can create a random sampling and a control group and study group.

Yeah, a hundred gallons a day is very much worth studying. And I don't have the money in the pocket to do the research, but I feel confident the water agencies are willing to give the money for us to research this.

COMMISSIONER ROSENFELD: That's wonderful. Thank you.

CHAIRPERSON PFANNENSTIEL: Further discussion?

COMMISSIONER ROSENFELD: I'm ready to move the item.

VICE CHAIRPERSON BOYD: Second.

CHAIRPERSON PFANNENSTIEL: All in favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: It's been approved.

Thank you all for your participation.

Approval of the minutes of the July 15th Business Meeting.

Do I hear a motion?

COMMISSIONER ROSENFELD: I so move.

COMMISSIONER BYRON: I'll Second.

CHAIRPERSON PFANNENSTIEL: In favor?

(Ayes.)

CHAIRPERSON PFANNENSTIEL: Commission and Committee Presentations.

Are there any?

VICE CHAIRPERSON BOYD: Madam Chair?

CHAIRPERSON PFANNENSTIEL: Commissioner Boyd.

VICE CHAIRPERSON BOYD: I just might mention, although it got lots of notoriety last week, the Governor did have an event that -- where he released the Bio-Energy Action Plan for California, a document being prepared by the Bio-energy Interagency Working Group that this Commission chairs, which was in turn in response to the Governor's Executive Order of April and a report that this agency helped facilitate, again through that working group, on the whole subject of bio-energy and bio-power, bio-fuels.

So it's safe to say that we're well underway in this particular arena, the bio-fuels component of which is a major component of the alternative fuels plan that is being prepared again by working groups that consist primarily of this agency and the Air Resources Board, and will be definitely utilized for those purposes as well as just utilized by all who have been pushing for the subject bio-energy utilization in this state for quite some time.

And we're seeing a lot of activity with regard to many, many facets of what constitutes bio-energy.

So it's a fairly significant accomplishment, I think, and a very strong cooperative accomplishment by many, many state agencies, which isn't always the easiest thing to do. But this has been a very positive event. And now the interagency working group will be engaging in, you know, progress against plan meetings regularly to see how the various agencies are implementing their commitments that are included in this action plan. So that's a very positive thing.

One other quick item. And I'm practically taking advantage of a public forum to say this. But in the context of, you know, alternative fuels for transportation and the huge emphasis many agencies are putting on that, particularly our own, the subject of E-85 and flexible fuel vehicles is constantly at the head of many of the discussions of the multi-fuel plan we might develop. But there are little wrinkles on the pond -- or ripples on the pond that aren't so positive each year.

Last year both DaimlerChrysler and Ford did not certify so-called flexible fuel cars for sale in California in spite of all the advertising we see about this new wave. And I was assured by representatives of both those companies that this was kind of a temporary

thing and they're going to work it out and what have you. And to our shock, let's just say, we read in the media a week or so ago that Daimler and Ford both announced they're not going to certify yet another model-year-round of vehicles for sale in California.

And so there's a little bit of -- I'm not quite sure what to say. But somebody's being rather -- quite a hypocrite about what they advertise and what they actually do.

So we in the various agencies involved in this will be certainly addressing. And this Friday there's a meeting hosted by the Cal EPA Agency to talk about where we're going on our E-85 component. And this will certainly be part of that. But it looks like the think green, go yellow people are the only ones even making vehicles. So this should prove to be a rather interesting discussion.

That's all I have.

CHAIRPERSON PFANNENSTIEL: Thank you, Commissioner Boyd. And I think that we should recognize your leadership in bio-energy. And certainly from this Commission's standpoint, I think from there -- for the whole state, I think that there's an awful lot that's happening in bio-energy that would not be happening were it not for your leadership to this point and I think on to

the future. So thank you.

VICE CHAIRPERSON BOYD: Thank you.

CHAIRPERSON PFANNENSTIEL: Chief Counsel's Report.

Mr. Chamberlain.

CHIEF COUNSEL CHAMBERLAIN: I have no report today, Madam Chair.

CHAIRPERSON PFANNENSTIEL: What a shame.

(Laughter.)

CHAIRPERSON PFANNENSTIEL: Executive Director's report.

ASSISTANT EXECUTIVE DIRECTOR MATTHEWS: Nor I.

VICE CHAIRPERSON BOYD: The lights are on.

CHAIRPERSON PFANNENSTIEL: Ledge report.

Oh, we have a Ledge Director here to report.

GOVERNMENTAL AFFAIRS DIRECTOR SMITH: Good afternoon, Chairman, Commissions. My name is Mike Smith. I'm the Director of Governmental Affairs at the Energy Commission. Actually the fairly new Director of Governmental Affairs at the Energy Commission. And --

VICE CHAIRPERSON BOYD: My loss is the Commission's need.

(Laughter.)

GOVERNMENTAL AFFAIRS DIRECTOR SMITH: Since this is my first report to the Commission, I will try and keep

this fairly brief. And I'd also welcome any suggestions that you may have regarding the content of any future -- excuse me -- the content of any future reports. So if there's any particular points or areas of interest with bills that you want to expand on, I would certainly welcome that input.

As you know, the Legislature's in recess for the month of July. They return in early August for about a month, in which case during which chaos reigns.

We are going to be very, very busy during the month of August keeping up with events at the Capitol as bills become final and they're enacted and sent over to the Governor's office.

We're focusing on about -- currently about 25 or so key pieces of legislation that we are working fervently with the division staff to update the analyses, to make sure everything is in place, so that when bills are passed and sent to the Governor and the Governor's office comes to us with requests for newer bill reports, we are ready to provide the necessary paperwork and recommendations in a very short order.

Unlike analyses, which some would think are very short in time-turnaround requests, EBRs are relatively split seconds that we get the request that we have to turn around on a response, typically in a day to three days.

So we have to be prepared.

As I said, August is going to be very busy. The Senate -- the first floor session of the Senate is August 7th, and also is the first floor session of the Assembly. There's a number of key committees that are also going to be meeting that have been scheduled. There's several key committees that have not been scheduled. But let me just sort of quickly run through a couple of those.

The Senate Environmental Quality Committee meets on August 7th. On their agenda is AB 1925, which is a bill by Assemblyman Blakeslee. This would require the Energy Commission in consultation with the Division of Oil and Gas and Geothermal Resources to accelerate a -- prepare a report rather that would accelerate greenhouse sequestration technologies. That would be due on January 2008. So we're following that bill fairly closely.

The Senate Judiciary Committee meets on August 8th. And on that agenda is AB 2927, which I'm sure Mr. Chamberlain is quite familiar with. This is the public records -- deals with public records and public records requests. It imposes some rather stringent and almost unrealistic requirements on agencies to respond and to have information -- public information available. So we're following that bill.

Assembly Appropriations meets on August 9th.

There's several bills on their agenda currently scheduled. SB 757, a bill by Senator Kehoe, which would implement the -- or enact the Oil Conservation and Efficiency in Alternative Fuels Act. Interesting piece of legislation. It has several components to it. But one that's most troubling to us is a provision that requires Cal EPA to make an assessment and recommendations to the Governor on alternative fuel policies in California. Troublesome in the fact that it seems to overlap completely with our responsibilities in that area and the Integrated Energy Policy Report. So another bill we're following closely.

Another Kehoe bill, SB 1675, the Renewable Diesel Standards Act. This bill would implement a 2-percent and then a 5-percent renewable diesel content for all diesel fuel sold in California. Originally they had time frames of 2008 and 2010, respectively, for those requirements. Those specific years have been removed from the bill, and in place there are time frames after which ARB is to complete multi-media evaluations as well as assessments that would determine if the requirements create that impact -- or, excuse me -- that increase in emissions to California. An interesting -- important bill that follows up on energy report requirement -- or recommendation from 2005. So we're quite keenly interested in this bill.

SB 1511 by Senator Ducheny, the renewable --

requires ARB in developing fuel regulations, and in fact in their current update -- current cycle of updating the predictive model, to incorporate provisions that would give the greatest flexibility to allow alternative or renewable fuel into the gasoline supply.

The Senate Energy Committees and the Assembly Utility and Commerce Committees have not yet been scheduled. But as soon as they are, we'll forward that information and any key bills that are of interest to us to you folks.

Other legislation that is of special interest to the Commission and we are following closely includes AB 32, which is the Greenhouse Gas Solutions Act, as it is titled. It requires a number of things of ARB -- probably a great many things of ARB. But the most prominent requires ARB to set greenhouse gas emissions caps for a number of key industries and sectors in California, including the petroleum sector, the electricity sector, and so on.

AB 1970, the Vampire Slayer Act, we are following that with great interest. It was recently -- in June -- at the end of June this bill, along with a great many bills -- which is why we are so busy these days, a great many bills were amended at the last committee meetings. But this bill was completely gutted and amended. But the

amendments that were included in the bill still provides some trouble to us in terms of the requirements for the threshold -- five megawatt threshold for the standby and active power requirements, as well as the fact that it requires the Commission to adopt these regulations. And we would rather have the flexibility to consider adopting the regulations.

Yes, Commissioner.

COMMISSIONER ROSENFELD: I hate to be rude. I have to find out whether I have to be at the Governor's office at one o'clock. So I'm not being ruder than I have to be.

(Laughter.)

GOVERNMENTAL AFFAIRS DIRECTOR SMITH: I'm almost done here anyway.

SB 1, which is the -- it codifies or implements the solar -- California Solar Initiative. Actually that's a misstatement. It does -- they've been very clear that this bill does not codify the solar initiative. It does set some parameters around the implementation of the solar initiative, in particularly cost parameters. It puts a cost cap of $3.2 billion on the entire program. Interestingly, nearly 800 million of that is from the muni's. And so the cost cap for the IOUs is around 2.5 billion.

CHAIRPERSON PFANNENSTIEL: Mike?

GOVERNMENTAL AFFAIRS DIRECTOR SMITH: Yes.

CHAIRPERSON PFANNENSTIEL: In the legislation of SB 1 is there a requirement on the muni's? I understand it's a cap. Is there a --

GOVERNMENTAL AFFAIRS DIRECTOR SMITH: There is a requirement on the muni's, but there's also a -- I'll call it escape provision, an offramp that allows them to stop funding if they can meet certain -- if they could demonstrate that they're on target to meeting certain requirements.

SB 1059, which is the administration's transmission corridor planning bill. That bill has actually moved very nicely through the process. It's out of the assembly and -- excuse me. I'm sorry. It's pending in the Assembly Appropriations. Beg your pardon. But all issues on that bill have basically been resolved. There were a number of concerns raised by local government and organizations. But we have dealt with them rather effectively over the last two months. So that bill should move fairly smoothly.

SB 1250. This is probably of most concern to the Energy Commission, is the re-authorization for the PIER Program and the Renewable Energy Program. Was to be heard at the Assembly Utilities and Commerce Committee at the

end of June. It was held -- it was pulled off the agenda, which was initially disconcerting to us. But it was pulled off the agenda and held over till August in order to allow the Committee's staff folks to work through the litany of issues that have been raised as a result of the last series of amendments made to the bill while it was still in the Senate.

It's actually -- I view it actually as a positive move. It will require a rule waiver in order for the bill to be heard in August when the Assembly Utilities and Commerce Committee reconvenes. But it does allow us -- and in fact we are in discussions now with the Senate staff and the Assembly staff on the amendments that were taken. A number of them are very, very disconcerting to us. Probably the most important one is the removal of the continuous appropriations for the Renewable Energy Program. That's absolutely key to that program. If we don't have renewable -- excuse me -- if we don't have continuous appropriation, that puts that program at a serious disadvantage. It jeopardizes the CSI and jeopardizes the RPS.

SB 1368, Perata's bill, which would require the Energy Commission to set a greenhouse gas performance standard for baseload generation in California, we are also following that and completing an analysis on that

bill currently.

There are a number of other bills that we're following. But I just wanted to give a highlight on what I thought were perhaps the key bills that you would be concerned about.

The last thing I want to mention is, this Friday there is a select committee hearing -- Select Committee on Air and Water Quality hearing in Santa Monica. And I will be attending that, in fact making a presentation at that hearing on the future of alternative fuels. It's probably -- I don't know. Commissioner Boyd, do you think it's maybe the third in a series of these hearings on alternative fuels and the ten oh seven and --

VICE CHAIRPERSON BOYD: I think it's the third.

GOVERNMENTAL AFFAIRS DIRECTOR SMITH: Yeah. The joint committee chairs are Assemblywoman Pavley and Senator Kuehl.

So I will be down there to represent the Commission and make a presentation on our efforts on alternative fuels.

So with that I will close and answer any questions that you may have.

CHAIRPERSON PFANNENSTIEL: Are there questions?

None.

Thank you, Mr. Smith.

GOVERNMENTAL AFFAIRS DIRECTOR SMITH: Thank you.

VICE CHAIRPERSON BOYD: Thank you, Mr. Smith.

CHAIRPERSON PFANNENSTIEL: Very good report. I think that you're going to spoil us. We're probably going to want it all the time now.

GOVERNMENTAL AFFAIRS DIRECTOR SMITH: Okay.

CHAIRPERSON PFANNENSTIEL: So keep that in mind.

Public Advisor report.

MR. BARTSCH: Madam Chair, members. I'm Nicholas Bartsch in the Public Advisor's Office representing Margret Kim. And we do not have anything to report at this time.

CHAIRPERSON PFANNENSTIEL: Thank you.

Public Comment.

Any public comment?

Nobody on the phone?

EXECUTIVE SECRETARY KALLEMEYN: No one on line.

CHAIRPERSON PFANNENSTIEL: We'll be adjourned.

(Thereupon the California Energy Commission business meeting adjourned at 12:50 p.m.)

CERTIFICATE OF REPORTER

I, JAMES F. PETERS, a Certified Shorthand Reporter of the State of California, and Registered Professional Reporter, do hereby certify:

That I am a disinterested person herein; that the foregoing California Energy Resources Conservation and Development Commission meeting was reported in shorthand by me, James F. Peters, a Certified Shorthand Reporter of the State of California, and 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 the outcome of said meeting.

IN WITNESS WHEREOF, I have hereunto set my hand this 31st day of July, 2006.

JAMES F. PETERS, CSR, RPR
Certified Shorthand Reporter
License No. 10063