

BUSINESS MEETING
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

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

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

WEDNESDAY, FEBRUARY 15, 2006

10:04 A.M.

Reported by:
Peter Petty
Contract No. 150-04-001

COMMISSIONERS PRESENT

Joseph Desmond, Chairperson

Jackalyne Pfannenstiel, Vice Chairperson

Arthur Rosenfeld

James D. Boyd

John L. Geesman

STAFF and ADVISORS PRESENT

B.B. Blevins, Executive Director

William Chamberlain, Chief Counsel

Betty McCann, Secretariat

Elaine Sison-Lebrilla

Kerry Willis

Ram Verma

William Pennington

Mary Ellen Bronson

Joseph Wang

Adel Suleiman

Tom MacDonald

Atlas Hill

PUBLIC ADVISER

Margret J. Kim

ALSO PRESENT

Peter McClellan

Michael Mahan
California Water League

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P R O C E E D I N G S

10:04 a.m.

CHAIRPERSON DESMOND: I'd like to call this meeting to order. Good morning, everyone. Please rise and join me in reciting the Pledge of Allegiance.

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

CHAIRPERSON DESMOND: I'd like to thank everyone for coming here today. I note that we have two speakers on agenda item number 3. And I don't know if we have anyone else on the phone. Okay.

First item on the agenda is the consent calendar.

COMMISSIONER BOYD: Move approval.

COMMISSIONER GEESMAN: Second.

CHAIRPERSON DESMOND: All those in favor?

(Ayes.)

CHAIRPERSON DESMOND: Opposed? So moved.

Second item is the 2005 geothermal program solicitation. Possible approval of five proposed projects totaling \$3.4 million from the

1 geothermal resources development account for
2 fiscal year 2005/2006 which resulted from the 2005
3 geothermal program solicitation. Ms. Sison-
4 Lebrilla.

5 MS. SISON-LEBRILLA: Yes, good morning.
6 My name is Elaine Sison-Lebrilla, Manager of the
7 Energy Generation Research Office.

8 Staff is requesting approval of the
9 proposed projects resulting from the 2005
10 geothermal program solicitation totaling \$3.4
11 million from the geothermal resources development
12 account, also known as GRDA.

13 The request is for approval for four
14 awards -- for awards for four projects and a
15 conditional award to the fifth, which is to
16 Mammoth Pacific Limited Partnership. And Kerry
17 Willis from our legal office will explain that
18 later on.

19 The proposed awards are based on ranking
20 of the scores of the project proposals and have
21 the approval of the Research and Development
22 Committee. Projects are proposed for funding in
23 the order of ranking beginning with rank one.
24 Funding of the proposed projects is contingent
25 upon the Energy Commission receiving the projected

1 GRDA revenues and the authority to spend those
2 revenues for fiscal year 2005/06.

3 In accordance with geothermal program
4 regulations the Energy Commission must allocate at
5 least 25 percent of the GRDA available funding to
6 projects in each of the three project categories:
7 resource development, planning and mitigation.

8 The Energy Commission may allocate
9 remaining funds to any of the three project
10 categories. Staff is proposing one planning
11 project, one mitigation project and three
12 development projects.

13 The planning project is to the town of
14 Mammoth Lakes for structuring geothermal heating
15 district for Mammoth Lakes for \$191,176.

16 The mitigation project is for Image Air,
17 Incorporated; application of InSAR to the
18 monitoring and mitigation of surface subsidence
19 from increased geothermal development in the
20 Imperial Valley, California, for \$292,726.

21 The three development projects are to
22 Bottle Rock Power Corporation; increasing steam
23 production from an existing well using near-
24 horizontal drilling technology; \$880,237.

25 To Fort Bidwell Indian Community for

1 geothermal exploration of drilling, assessment and
2 demonstration in Indian country; for \$1,139,814.

3 And to Mammoth Pacific LP for the
4 Rhyolite Plateau Geothermal Exploration Project
5 for \$896,047.

6 The geothermal program solicitation
7 proposed awards supports California's goal to meet
8 the accelerated 20 percent eligible renewable goal
9 by 2010 and a longer term goal of 33 percent by
10 2020 per the Integrated Energy Policy Report.

11 In July 2005 the geothermal program
12 released a program opportunity notice to announce
13 new solicitation for geothermal projects. The
14 notice announced that up to 3.9 million was
15 available from the geothermal resources
16 development account, GRDA, to fund projects that
17 relate to geothermal research, development and
18 demonstration, geothermal planning or
19 environmental mitigation.

20 On August 30, 2005, the Energy
21 Commission received 15 qualifying preapplications.
22 On October 12, 2005, written comments on the
23 proposed projects were sent to each preapplicant
24 for consideration in preparing a final
25 application. These letters provided comments on

1 the competitiveness of the proposals and
2 suggestions on possible improvements.

3 On November 14, 2005, the Energy
4 Commission received 13 of the preapplications as
5 qualifying final applications, requesting 10.2
6 million, and providing 11.4 million in matching
7 contributions. Each final application was
8 screened for completeness and reviewed by Energy
9 Commission Staff and external technical
10 consultants.

11 Then a Technical Advisory Committee,
12 also known as TAC, reviewed, evaluated and scored
13 the 13 qualifying final applications using
14 criteria prescribed in program regulations. The
15 TAC recommended the projects proposed for funding
16 in the order of ranking beginning with rank one in
17 each of the categories of planning mitigation and
18 development. This recommendation was approved by
19 the Research and Development Committee.

20 The funding amount recommended by staff
21 is up to 3.4 million for GRDA projects based on
22 the current GRDA funding condition. Funding
23 cannot exceed the specified amount for each
24 project.

25 I will now read the project description

1 and suggested conditions for each project.

2 For the planning project for the town of
3 Mammoth Lakes, the town of Mammoth Lakes has long
4 been recognized as an attractive candidate for the
5 development of geothermal district heating.

6 The elements which contribute to this
7 assessment include a proven geothermal resource,
8 substantial local interest, and the opportunity to
9 significantly displace the use of gas by
10 geothermal energy.

11 Despite these positive attributes no
12 project has ever proceeded beyond the discussion
13 phase. This project proposes to develop the first
14 comprehensive planning study covering the
15 organizational and financial structure for a
16 geothermal district heating system.

17 Project activities would include
18 assessment of various organizational and financial
19 structures, legal implications of those
20 structures, cost effectiveness and the marketing
21 need to gain acceptance and participation by new
22 and existing property owners. No recommended
23 conditions were placed by the TAC on this project.

24 The next project is with Imageair, which
25 is a mitigation project. Land-based methods for

1 detecting and mapping surface deformation that may
2 accompany geothermal power production is
3 laborious. However, such surveys are important
4 because subsidence and inflammation can be
5 important impacts in regions where large-scale
6 power production is underway.

7 Interferometric synthetic aperture
8 radar, InSAR, has a potential to allow rapid
9 surface deformation surveys of large areas of high
10 resolution. This proposal will evaluate the
11 ability to use former ER as -1 and ER as -2
12 current radarsat and envisat and future ALOS
13 satellite data, as well as airborne systems to map
14 surface elevation changes in the vicinity of power
15 production sites in the Imperial Valley.

16 It is anticipated that the current
17 installed capacity of 500 megawatts in the
18 Imperial Valley will increase over the next decade
19 by an additional 2000 to 3000 megawatts. This
20 increase in geothermal energy production must
21 remain compatible with the present agricultural
22 industry uses of the Valley floor, and the
23 delicate balance involved in continuing the salt-
24 leaching technology.

25 InSAR may provide a cost effective

1 technique for monitoring surface movement in this
2 region and provide the technical data necessary
3 for the design of any needed mitigation
4 strategies.

5 Recommended conditions for this project
6 is the applicant working with the geothermal
7 developers need to describe and validate value of
8 the data that will be used as match prior to the
9 reimbursement of Energy Commission funds. And
10 also that applicant needs to confirm that she,
11 which is their PI in Imageair, is able to fulfill
12 the obligations of current contracts, as well as
13 those for this project, prior to the approval of
14 the funding agreement.

15 Now we're starting with the development
16 projects. The first one is Bottle Rock Power
17 Corporation. The Bottle Rock geothermal field,
18 located at the Geysers known geothermal resource
19 area, shut down in 1991 after six years of service
20 due to declining steam production. It is now
21 proposed to reopen this facility and restore power
22 generation by using new drilling techniques to
23 increase production of geothermal fluids.

24 The approach being considered is to
25 adopt horizontal drilling technology that has

1 successfully been employed by the oil industry to
2 increase production.

3 The project is expected to increase the
4 amount of electricity being generated at the
5 Geysers geothermal field by 4 megawatts over the
6 next 15 years. The direct economic benefit will
7 be approximately 15,768,000, as well as enhanced
8 employment opportunities for the local community.

9 This project would also significantly
10 contribute to the achievement of the California's
11 renewable portfolio standards goals. If
12 successful, this project would also provide
13 important demonstration value for expanding
14 similar drilling approaches to other geothermal
15 power production sites throughout the state,
16 compounding the impact of this technology on
17 meeting RPS goals.

18 Recommended conditions for this project
19 is if drilling is not successful the applicant
20 must provide matched share to abandon their well
21 appropriately. And also there's prevailing wage
22 conditions that Kerry Willis will talk about
23 later.

24 The next development project is with the
25 Fort Bidwell Indian Community. The U.S.

1 Department of Energy geothermal program is funding
2 an exploratory well, targeting the upflow zone of
3 the Fort Bidwell Indian Reservation geothermal
4 system.

5 The purpose of that project is to
6 discover and characterize a likely moderate- to
7 high-temperature geothermal resource capable of
8 electrical power generation and potential cascaded
9 direct uses.

10 However, recently there has been an
11 unexpected steep rise in the cost of steel, drill
12 rig rates, well services and fuel, all of which
13 have effects on exploration and the drilling
14 project underfunded. This proposal seeks GRDA
15 funds to complete the well and to expand, deepen
16 and test it. The cost-sharing with DOE would
17 share the financial risk, increase the likelihood
18 of completion of the well with a successful
19 outcome, increase the value of data obtainable
20 from the well, and increase the costs of a
21 development project, should one follow this
22 drilling project.

23 The recommended conditions for this
24 project is all permits must be in place before
25 this project begins, and prior to the

1 reimbursement of any Energy Commission funds. And
2 if drilling is not successful the applicant must
3 provide matched share to abandon the wells. There
4 are also prevailing wage conditions that Kerry
5 will discuss later.

6 The third and final conditional award is
7 to Mammoth Pacific Limited Partnership. Mammoth
8 Pacific Limited Partnership currently holds
9 federal geothermal leases for several tracts in
10 the Rhyolite Plateau region of the Long Valley
11 caldera, which is not far from Mammoth Lakes.

12 This region is a largely unexploited
13 known geothermal resource area. This proposal
14 seeks funding for further exploration and resource
15 assessment for the Rhyolite Plateau.

16 The exploration and assessment would
17 include geotechnical study and the permitting and
18 drilling of one geothermal well. The results from
19 this project would significantly contribute to the
20 long-term goal of obtaining the required
21 information to complete the design and permitting
22 of a 50-megawatt, estimated, geothermal power
23 plant. Completion of that project would
24 significantly contribute to achieving California's
25 RPS goals. And this project has a prevailing wage

1 condition that Kerry will now talk about.

2 MS. WILLIS: Good morning. I'm Kerry
3 Willis, Senior Staff Counsel. First, I'd like to
4 talk about the prevailing wage issue. Three of
5 the proposals have indicated that they are not a
6 public work, and therefore not subject to
7 prevailing wage.

8 However, the reviewers of these
9 proposals have noted that these projects involve
10 drilling and/or construction activities, usually
11 considered to be public works.

12 In order to resolve this issue, before
13 executing the grant agreement, the applicant will
14 either concur that the project is a public work
15 and revise their budget accordingly; there will be
16 no additional funds from the Commission for this,
17 however.

18 Or, if they prefer, they can get a
19 determination, a coverage determination from the
20 Department of Industrial Relations. If DIR finds
21 that the project is a public work, then the
22 applicant will once again need to submit a revised
23 application to include prevailing wage. If DIR
24 determines the project is not a public work, then
25 the proposal does not need to be revised.

1 So that, I think that will be going out
2 in a letter to them following this meeting. And
3 they will have up to six months if they decide to
4 go through the Department of Industrial Relations.
5 We did discuss this with an attorney there, and it
6 appears that their opinion, at least initially, is
7 that these projects are a public works, and would
8 be subject to prevailing wage.

9 The second area I'd like to address
10 today is that, as many of you know, we are the
11 lead agency for CEQA compliance with these
12 proposals. We're asking today for approval of
13 four of the proposed projects, the first four on
14 the list. And a conditional approval for Mammoth
15 Pacific.

16 Our staff did a CEQA analysis of each of
17 the projects, and the first two proposals are
18 basically paper projects of the involved planning,
19 analysis and data collection. Therefore, they did
20 not fall under the definition of project under
21 CEQA, so that will be -- we will be filing a
22 notice of exemption for those first two projects.

23 The third -- 3(a) Bottle Rock Power
24 Corporation, the horizontal drilling of the
25 existing well, that applicant has obtained all of

1 their permits through the County. They have an
2 existing use permit, and through the Air District.
3 So we found that to be in CEQA compliance.

4 The 3(b), the Fort Bidwell, is an
5 existing DOE, Department of Energy project. And
6 it was assessed through the NEPA process. They
7 received a categorical exclusion determination.
8 This exclusion is parallel to a CEQA categorical
9 exemption class 1. The land has already been
10 prepared and pads have been constructed. So we
11 found that project also to be in CEQA compliance.

12 3(c) is Mammoth Pacific. Currently this
13 project does not meet CEQA compliance. The
14 applicant is currently in the process of
15 completing its environmental assessment to be
16 submitted to the Bureau of Land Management. The
17 other projects that -- they have several other
18 projects adjacent to this particular site, and
19 each of those projects have received a negative
20 declaration in the past. And we anticipate that
21 this project will not be any different.

22 The process may take four to six months,
23 however, and once they're in compliance, then we
24 would come back before you again to ask for a
25 final approval. But at this point in time we feel

1 that a conditional approval would be appropriate.

2 CHAIRPERSON DESMOND: Thank you.

3 Discussion, comments or questions?

4 VICE CHAIRPERSON PFANNENSTIEL: I have a
5 question.

6 CHAIRPERSON DESMOND: Commissioner
7 Pfannenstiel.

8 VICE CHAIRPERSON PFANNENSTIEL: Elaine,
9 on the write-up you mentioned that there was 4.9
10 million available --

11 MS. SISON-LEBRILLA: Three point nine.

12 VICE CHAIRPERSON PFANNENSTIEL: I'm
13 sorry, 3.9. Say it's now estimated at 3.4 million
14 is available. What happened to the half-a-million
15 dollars?

16 MS. SISON-LEBRILLA: Well, when we first
17 started solicitation in July 2005 -- this is the
18 2005/2006 fiscal year -- we got an estimate from
19 Budgets that we would have 3.9 million.

20 When we came to the Policy Committee we
21 asked Budgets, well, what is the estimate now, and
22 they said 3.4. So we used the 3.4 million number.

23 I don't know if half-a-million went
24 away. It's just that their estimates were
25 modified and so we chose the lower number.

1 VICE CHAIRPERSON PFANNENSTIEL: That
2 would be interesting to follow up, though, --

3 MS. SISON-LEBRILLA: Sure.

4 VICE CHAIRPERSON PFANNENSTIEL: -- to
5 find out why the --

6 COMMISSIONER ROSENFELD: Maybe you could
7 tell us in a sentence or so where the 3.9 or 3.4
8 comes from anyway.

9 MS. SISON-LEBRILLA: Geothermal
10 resources development account gets its money from
11 geothermal royalties on federal land leases.
12 These royalties go to the government, the federal
13 government, and half come to California. Of that
14 half, 30 percent come to this program to fund
15 geothermal projects.

16 So, for fiscal year 05/06 it would be
17 the money that, the royalties that are collected
18 during 05/06 that we're trying to encumber. And
19 that won't be over until June of 06, so we don't
20 know exactly how much there is in the GRDA
21 account. So when we release the solicitation we
22 get the best estimate from our accounting office;
23 and we refine it when we go to our Policy
24 Committee. And we use the best-guess estimate at
25 that time.

1 CHAIRPERSON DESMOND: Okay, thank you.

2 COMMISSIONER ROSENFELD: This came
3 before the R&D Committee and I'm pleased to move
4 it.

5 COMMISSIONER GEESMAN: Second.

6 CHAIRPERSON DESMOND: All those in
7 favor?

8 (Ayes.)

9 CHAIRPERSON DESMOND: Opposed? So
10 moved.

11 Agenda item number 3, Building Standards
12 Compliance Option for Evaporatively Cooled
13 Condensing Unit. Possible approval of a
14 compliance option for evaporatively cooled
15 condensing units for use with the 2005 building
16 energy efficiency standards. Approval of this
17 compliance option will provide appropriate
18 compliance credit for installing evaporatively
19 cooled condensing units in residential buildings.
20 Evaporatively cooled condensing units use less
21 energy compared to conventional air-cooled air
22 conditioning units. Mr. Verma.

23 MR. VERMA: Good morning. My name is
24 Ram Verma. Staff is seeking approval of a
25 compliance option for evaporatively cooled

1 condensing units. Evaporatively cooled condensing
2 units are similar to conventional -- system units
3 except that water is sprayed on the condenser
4 coils. These units are more efficient and save
5 energy during peak periods.

6 Currently these units don't get credit
7 under time-dependent valuation of energy. With
8 approval of this compliance option all
9 evaporatively cooled condensing unit that meet the
10 eligibility requirements will get appropriate
11 credits.

12 Staff has evaluated this option -- this
13 proposal, including energy saving, environmental
14 impact, and water use. Staff has determined that
15 this proposal is technically justified and will
16 result in reliable and sustainable energy savings.

17 This proposal has been approved by the
18 Energy Efficiency Committee. Any questions?

19 CHAIRPERSON DESMOND: I have no
20 questions. I know that we do have two speakers
21 who wish to address the Commission here on this
22 issue. Mr. McClellan.

23 MR. McCLELLAN: Hello.

24 CHAIRPERSON DESMOND: Good morning. For
25 the record, please state your name and the

1 organization.

2 MR. McCLELLAN: My name is Peter
3 McClellan; I'm a mechanical engineer here in
4 Sacramento. I am not affiliated with any
5 organization.

6 CHAIRPERSON DESMOND: Thank you.

7 MR. McCLELLAN: My main concern,
8 actually with this proposal is in concern with
9 water consumption of the proposed units.

10 The units use, I believe, more water and
11 therefore more energy, and use a more -- use more
12 of our natural resources than we would be led to
13 believe.

14 I do have supporting documentation for
15 what I am going to speak about, if you do care to
16 look through it.

17 Specifically, some of the manufacturers
18 that we've looked at, specifically a Freus unit,
19 claim to use 7.38 gallons per hour for a five-ton
20 unit, which gives you a usage of approximately
21 1.47 gallons per hour per ton. Theoretical water
22 consumption for this unit, the capacity being
23 58,500 Btus per hour, comes out to be
24 approximately 1.49 gph per ton, which is higher
25 than the consumption they've claimed.

1 That theoretical basis does not take
2 into account the losses to the atmosphere, does
3 not take into account, you know, any sort of
4 imperfections in the heat transfer between the
5 evaporative condensing section, the evaporative
6 cooling section, along with the condenser section.
7 And it assumes basically a perfect situation,
8 which just simply does not happen.

9 It also assumes a lack of bleed; talks
10 about also does not take into account any sort of
11 blow-down, loss of water that way.

12 In a --

13 COMMISSIONER ROSENFELD: Mr. McClellan.

14 MR. McCLELLAN: Yes.

15 COMMISSIONER ROSENFELD: I just want to
16 understand. You're saying that the Freus
17 calculations are just engineering calculations,
18 they aren't measurements, is that what you're
19 telling us?

20 MR. McCLELLAN: I am saying that they
21 are not measurements, that is correct.

22 COMMISSIONER ROSENFELD: Fine.

23 MR. McCLELLAN: Okay. There was a
24 report conducted by Algo Chemical regarding silica
25 buildup, specifically talking about the issues of

1 scaling and having to keep a limit of 120 parts
2 per million to avoid scaling on units.

3 The reason I bring this up is because
4 you basically have to go into a continuous bleed
5 to avoid scaling in many parts of the state
6 because of the high silica content.

7 There are water sources here in
8 California, specifically there was a study done in
9 Davis. The water content there, I believe the
10 silica content is about 60 parts per million.

11 The silica scales cannot be removed by
12 traditional methods. They have to use
13 hydrochloric acid. This is something that has to
14 be done mechanically; has to be sprayed on; has to
15 be scrubbed. It's damaging to the media, it's
16 damaging to the unit, itself. I feel that this is
17 not something to be undertaken by building owners;
18 not something that will be upkept; and will reduce
19 the efficiency of these units over time.

20 In regards to water consumption, PG&E
21 did a study on these units in 1998. Specifically
22 a 2.5 ton unit in Davis that did monitor the water
23 flow of usage by this unit. It's, as far as I
24 know, the only independent test that is published
25 on a similar system to these.

1 The water consumption over the course of
2 this test was rated at 5.28 gallons per ton hour,
3 which is less than the Freus system claims, but
4 less than 1.5. The reason that this was so high
5 was because they had to keep that continuous bleed
6 to avoid silica buildup.

7 In a hypothetical, say that they did a
8 intermittent purge on this, they said basically
9 that the water consumption would be cut by half.
10 It's still, you know, at 2.64 gallons per hour per
11 ton, which is much higher than that 1.5.

12 The annual water maximum consumption
13 that I use in this analysis was a maximum -- I'm
14 sorry, just a moment, lost my place there -- the
15 actual value tested in the Davis 2.5 ton system
16 was just under 10,000 gallons. I believe Freus is
17 claiming that the maximum 7500 gallons, the actual
18 tested being 10,000.

19 I don't believe that a system such as a
20 five-ton unit for a typical home in Sacramento
21 would use the 1600 gallons that has been
22 represented for an average home, which Freus has
23 claimed. I believe that the total is more towards
24 a, almost a 10,000 gallon value -- I'm sorry,
25 rather more like 50,000 gallon value in some parts

1 of the state.

2 COMMISSIONER GEESMAN: Mr. Chairman, --

3 MR. McCLELLAN: Yes.

4 CHAIRPERSON DESMOND: Commissioner
5 Geesman.

6 COMMISSIONER GEESMAN: Could you walk
7 through that arithmetic for me?

8 MR. McCLELLAN: Yeah, I will in just a
9 moment. Based on the testing done by PG&E they
10 came up with 5.28 gallons per ton hour. Based on
11 a cooling load -- that was on a 660 hour cooling
12 load with a 2.5 ton unit.

13 If you go into a high consumption rate,
14 somewhere in the southern Valley, something like
15 that where you have dry conditions, high silica
16 content that can go up to something between 1500,
17 1800.

18 COMMISSIONER GEESMAN: Hours?

19 MR. McCLELLAN: Hours, yes. And --

20 COMMISSIONER GEESMAN: Again, assuming
21 the 2.5 ton --

22 MR. McCLELLAN: No, I'm assuming a 5 ton
23 for a typical house.

24 COMMISSIONER GEESMAN: Okay.

25 MR. McCLELLAN: For a typical home.

1 COMMISSIONER ROSENFELD: I think he went
2 up a factor of four, he doubled the tonnage and
3 doubled the hours.

4 MR. McCLELLAN: Yeah, double the
5 tonnage, double the hours used, or actually a
6 little bit more than doubled the hours used.
7 Comes up with an extrapolated data value of 44,000
8 for 1500 ton hours and 1800 for -- I'm sorry,
9 52,000 for 1800.

10 Even if you cut that in half, based on
11 the intermittent purging, that still comes up with
12 26,500 or so, which is much larger than that 7500
13 claimed.

14 COMMISSIONER GEESMAN: Thank you.

15 MR. McCLELLAN: I think that we should
16 have some sort of testing on the units. There
17 needs to be some sort of independent testing for
18 each one of the units before these things are
19 approved. We don't know how much water the system
20 uses, but we do know that the water the system
21 uses is much greater than what manufacturers
22 claim.

23 We do know it's physically possible to
24 test it, but we do know it's physically impossible
25 that it uses the amount of water that it claims.

1 Because of the water conditions in
2 California it's going to have to use a whole lot
3 more than theoretical values. And before any of
4 this is accepted by the Commission it should be
5 independently verified by a third party.

6 That's all I have.

7 CHAIRPERSON DESMOND: Thank you.

8 COMMISSIONER ROSENFELD: I have a
9 question for you, Mr. McClellan, and then for Ron
10 Verma. I don't know the economics very well. If
11 you take your estimate for the water usage, so
12 25,000 gallons or something, assuming the partial
13 bleed, and let's not discuss Sacramento where
14 water is pretty much free, but you take costs of
15 water in Bakersfield or something.

16 MR. McCLELLAN: Right.

17 COMMISSIONER ROSENFELD: How do the
18 economics work out? We still have a more
19 efficient air conditioner, so there's a tradeoff
20 here. And I can't tell --

21 MR. McCLELLAN: Talking about the
22 economics --

23 COMMISSIONER ROSENFELD: Yeah.

24 MR. McCLELLAN: -- to the consumer?

25 COMMISSIONER ROSENFELD: Yeah.

1 MR. McCLELLAN: To the consumer. I am
2 not familiar with water rates throughout the
3 state. I am simply looking at water usage and the
4 fact that we are continuously in drought in this
5 state.

6 COMMISSIONER ROSENFELD: But we're also
7 continuously paying bills for electricity in this
8 state.

9 MR. McCLELLAN: I understand that. I
10 do.

11 COMMISSIONER ROSENFELD: Maybe Mr. Verma
12 has some comments.

13 MR. VERMA: Yes, I do. I don't believe
14 it's possible to consume 5.28 gallons per ton.
15 It's not simply possible by physics laws. And
16 because even if you take one ton is like 11,000,
17 12,000 -- per hour. And (inaudible) 980 --

18 COMMISSIONER ROSENFELD: No, his problem
19 is all this darn bleeding, it's not the
20 evaporative cooling.

21 MR. VERMA: Yeah, bleeding is not --
22 actually bleeding is, in this model, a fraction of
23 the total water consumption. And this unit flush
24 the water tank once for every eight hour of
25 compressor run.

1 COMMISSIONER ROSENFELD: I'm sorry, Ram,
2 say that again?

3 MR. VERMA: The water tank is flushed
4 once for every eight hour of compressor run time.
5 And that's very small compared to evaporation.
6 The main consumption is from evaporation which is
7 we have (inaudible) in different regions. And in
8 the worst region, in the Imperial Valley, it's
9 6000 gallons per year. In Sacramento it's around
10 1200 gallons per year.

11 MR. McCLELLAN: This is per ton?

12 MR. VERMA: No, is total for the unit; I
13 said for 3 ton unit.

14 MR. McCLELLAN: For a 3 ton unit.

15 COMMISSIONER ROSENFELD: Well, Ram, do
16 you have the economic answer that I was asking?
17 That is, even if you were to use -- I wouldn't
18 have a problem if you were to use Mr. McClellan's
19 rates and it still turned out to be economic then
20 I would be comfortable. Otherwise we've got to
21 figure out whose rates are right, water rates.

22 MR. VERMA: Yeah. I can at least show
23 that these rates are extremely high. I can show
24 with engineering calculations that these rates
25 that we have used are appropriate.

1 VICE CHAIRPERSON PFANNENSTIEL: Mr.
2 Chairman.

3 CHAIRPERSON DESMOND: Commissioner
4 Pfannenstiel.

5 VICE CHAIRPERSON PFANNENSTIEL: I know
6 that we have another person who wants to address
7 the subject, and I suggest that we move on to
8 that. I believe that these technical discussions
9 probably need to happen outside of the --

10 COMMISSIONER ROSENFELD: Right.

11 VICE CHAIRPERSON PFANNENSTIEL: -- you
12 know, Commission meeting. I think that we
13 probably need to do some more technical analysis
14 here, but we should perhaps hear from the other
15 speaker.

16 CHAIRPERSON DESMOND: Thank you.

17 COMMISSIONER ROSENFELD: I'm sorry to
18 the next speaker, I didn't mean to interrupt in
19 the middle of the discussion. I forgot there's a
20 second speaker.

21 MR. McCLELLAN: Would you like a copy of
22 this?

23 COMMISSIONER ROSENFELD: Give it to him.

24 CHAIRPERSON DESMOND: Please. Thank
25 you, Mr. McClellan.

1 MR. McCLELLAN: Yes.

2 CHAIRPERSON DESMOND: Second speaker is
3 Mr. Mahan for the California Water League.

4 MR. MAHAN: Good morning, Commissioners.
5 My name is Michael Mahan. I'm here on behalf of
6 the California Water League. We represent a
7 number of interests including farming uses and
8 small hydro projects.

9 And from my review, which has only been
10 a few days of the documents here and making a few
11 phone calls, it's my understanding that staff is
12 accepting the manufacturer's specifications rather
13 than any outside testing of this device.

14 And it's also my understanding, just
15 based on what the discussion went on right here,
16 is the staff is talking about the evaporative
17 cooling water supply, but Mr. McClellan was
18 talking about the purge, getting rid of water to
19 avoid silica buildup on the unit.

20 The manufacturer details one per eight
21 hours, but we know from the silica content of
22 water in various parts of the state that it can be
23 such that a continuous purge would be required, or
24 at least purging about four times as often as the
25 manufacturer is detailing for us.

1 So the water use in that instance is
2 going to be many times of what has been indicated
3 by the manufacturer. And if we go back and look
4 at just the evaporative cooling effect of using
5 water, this is unlike a swamp cooler where you
6 basically use all the air coming out. Just
7 looking from the diagrams, this device purges
8 cooled air into the outside atmosphere, outside of
9 somebody's house.

10 And so the water use -- I mean that
11 cooled air has to be cooled somehow, and it's
12 cooled by the evaporative water. And if we can
13 look from their diagrams it looks like their
14 device is about 55 percent efficient. So if we
15 double the amount of water use for the purposes of
16 cooling, because there's cooling air going outside
17 the house and cooling inside the house, we'd have
18 to double the amount of water being used. Because
19 that water is being used to cool the outside air
20 as well as the inside air.

21 And the staff has mentioned that they
22 believe that there'd be an energy savings as well
23 as a positive environmental impact and positive
24 for water use. We just know that they cannot
25 purge this once per eight hours, one cycle per

1 eight hours because the silica buildup is going to
2 be too much. When you evaporate the water out you
3 have all the salts, all the remainder stuff, all
4 the impurities in the water, whatever they're
5 going to be.

6 And some of the standards for silica are
7 relatively high in this state. And so if we allow
8 the silica buildup to continue, number one, the
9 energy efficiency will go down rapidly on the
10 device if they have to purge it quite frequently.
11 And number two, silica and other saline discharges
12 provide environmental hazard for our water
13 supplies. It has to be treated.

14 And one thing that's not being
15 considered at all is the time value of water.
16 Water is a reservoir for energy, if you think
17 about it, water. It's our most scarce resource in
18 California. And we're having an incredibly high
19 use of water in this device. The water has to be
20 transported there; generally it's going to be
21 potable water because it's not being pulled off a
22 river. It's going through, you know, city
23 supplies, so there's a lot of energy use involved
24 there.

25 And moreover, water, our probably most

1 time-dependent value resource in California. I
2 mean when it's hot and people are using air
3 conditioning, that's when water is most scarce,
4 because it's evaporating into the atmosphere.

5 One of the other miscalculations --

6 COMMISSIONER ROSENFELD: Excuse me, one
7 small point. If we do the economics correctly,
8 all of the cost of delivering water to my house
9 will be taken care of in the price of water. So,
10 you're sort of double-counting in your objections.

11 I mean, it's true, water takes
12 electricity to pump it and it took the
13 distribution system to get it to me, and so on.
14 But, I pay for that.

15 So if the staff does the calculations
16 and shows that it's still economic that would take
17 care of your perfectly legitimate concern.

18 MR. MAHAN: Well, the calculations, I
19 mean for water, are not time dependent. It
20 requires much more energy to provide you with
21 water in the same time it's providing you -- when
22 it's requiring much more energy to cool your
23 system just running electricity through it.

24 COMMISSIONER ROSENFELD: I would say
25 that's a problem that the water agency should

1 really address, but not us.

2 MR. MAHAN: Okay, I understand, Mr.
3 Commissioner. But the factor is that there's a
4 lot of energy required to move this water. And
5 this system is understating the energy, both on
6 their evaporative cooling effect and also on their
7 purging effect.

8 So whatever calculation is there needs
9 to be redone. And it's my understanding that
10 there's been no outside testing of this device.
11 They seem to state that they've been certified by
12 ETL, but ETL has not certified this device.

13 All of their water use is based on
14 speculative calculation, which doesn't take into
15 effect the two main factors that they don't purge
16 it enough, and that they aren't efficient enough.
17 That means they're sending cold water out into --
18 or cold air out into the atmosphere.

19 So the energy savings really isn't true
20 because there's too much water being thrown
21 through here. The environmental impact is they're
22 going to be purging silicates, you know, into the
23 water supply; whether it has to be scrubbed, or
24 whether you count that energy consumptions or not,
25 it's not a positive environmental impact. And I

1 don't think it's been accounted for.

2 Number three, the water use is just
3 vastly understated. It's probably understated by,
4 you know, a factor of ten at most.

5 I, being an attorney, probably know less
6 about these calculations than anybody in this
7 room, however my review of just basic science
8 there isn't a conservation of energy going into
9 this system, it's, you know, only 55 percent
10 efficient; it's bleeding cold air into the
11 atmosphere; and those calculations are not
12 provided for by the staff report.

13 Moreover, it's my understanding that the
14 applicant has based some of its calculations on
15 the cost of energy and water on kind of a
16 misleading standard. They look to the cost of
17 producing hydroelectric power, however most of the
18 water that is in hydroelectric projects and
19 reservoirs, et cetera, has multi-uses, whether
20 it's recreational, whether it goes off to farmers,
21 whether it's just for flood control.

22 To look at the global conditions, or to
23 look at the overall conditions of the state and
24 assume that all water gets used only for the
25 creation of hydroelectric power vastly understates

1 the cost, because there are more benefits that are
2 received for the same cost of keeping that water
3 around.

4 In fact, -- if I can thumb through
5 here --

6 COMMISSIONER ROSENFELD: Mr. Mahan, I
7 think the fact that there are concerns means we
8 will have to hold this discussion over. And --

9 MR. PENNINGTON: Could I comment just
10 for a second?

11 COMMISSIONER ROSENFELD: Yes, Bill.

12 MR. PENNINGTON: I'm Bill Pennington,
13 the Manager of the Buildings and Appliances
14 Office. I apologize that this is taking up so
15 much of the Commission's time here. Neither of
16 these speakers made their comments to staff or
17 brought this information to us over the last three
18 or four months when we've been trying to evaluate
19 this project. Nor came to the workshop that we
20 held.

21 We have been actively working with
22 California local water use agencies to review the
23 water use of this equipment, and have come to an
24 understanding with that Association on the
25 appropriateness of the water use for this device.

1 This is a potential breakthrough
2 technology from the energy efficiency vantage
3 point for saving energy on peak and throughout the
4 year. It also uses significantly less water than
5 most evaporative technologies.

6 And the manufacturer's taken a number of
7 measures to reduce water use in the system. And
8 we also have developed additional mitigations for
9 water use as a condition for this approval.

10 Having said that, I think we need to
11 address these comments. And we'd be glad to do
12 that and bring the item back.

13 VICE CHAIRPERSON PFANNENSTIEL: Mr.
14 Chairman, I'd like to move that we hold this item
15 until both the engineering and the economic
16 analyses have been further vetted with the staff,
17 given these comments. I know the staff has held
18 public workshops on this. And I don't know, as
19 Mr. Pennington said, why this information hasn't
20 been derived previously.

21 But we have it in front of us; I think
22 that we will all need to take another look at it
23 and have it brought back to us.

24 COMMISSIONER GEESMAN: I'll second
25 Commissioner Pfannenstiel's motion, and add the

1 observation, your backup material does indicate
2 that during the public workshop the California
3 Urban Water Conservation Council had raised
4 concerns. And you proposed some mitigation
5 measures to address those concerns.

6 Before you bring it back I'd like some
7 written indication as to whether the California
8 Urban Water Conservation Council now believes this
9 is a good idea or not. During our IEPR process
10 last year we took quite a bit of testimony from
11 the Urban Water Conservation Council and others
12 about the desirability of promoting an integrated
13 view of water and energy efficiency.

14 And I think it would be important for us
15 before we take any action to have a better
16 understanding of how well integrated this
17 particular proposal is.

18 MR. PENNINGTON: Great.

19 CHAIRPERSON DESMOND: Okay. Then, --
20 Commissioner Rosenfeld.

21 COMMISSIONER ROSENFELD: I'd like to
22 make one -- I echo a little bit Commissioner
23 Geesman's point. Obviously we need an integrated
24 approach and the two points that I found
25 disappointing in trying to learn something from

1 Mr. McClellan and from you, is that there wasn't a
2 single dollar figure mentioned comparing the
3 electrical savings with the water costs. I mean
4 water is very valuable, but it's not holy, it is
5 worth something in dollars.

6 And secondly, there's this discussion of
7 the silica problem. And there was no indication
8 whether the numbers you're using are for the worst
9 1 percent of the state or for the whole state. We
10 are divided into climate zones, and we could take
11 that into consideration. But I got no information
12 about that, either.

13 So, I think we have to look at this as a
14 function of where in the state we're discussing
15 it. So, that's just some small points that have
16 to be worked out.

17 COMMISSIONER BOYD: Mr. Chairman.

18 COMMISSIONER ROSENFELD: But let's go
19 ahead with the vote.

20 CHAIRPERSON DESMOND: Commissioner Boyd.

21 COMMISSIONER BOYD: Well, I want to
22 agree with everything I've heard here today. I
23 find it rather ironic we're having this debate
24 after, in our first item, approving a water energy
25 policy symposium to take place next month.

1 Perhaps some of these integrated issues will be
2 discussed at that time, as well.

3 So, I'm in support of the idea of
4 holding this until the questions are resolved.

5 CHAIRPERSON DESMOND: Well, there have
6 been a number of questions. I want to thank both
7 the speakers today for raising these issues. I'm
8 sure staff will go back and address all the
9 concerns that have been made, both in terms of the
10 purging, the reliance of the manufacturer on his
11 own internal data. I'd also ask them to consider
12 whether or not there have been any field studies
13 done in other states that they've looked at for
14 the comparison between actual and manufacturer-
15 rated water consumption.

16 And so we'll look forward to hearing
17 back again before we take this issue up. So, it's
18 held over for further discussion. Thank you.

19 MR. McCLELLAN: Thank you.

20 MR. MAHAN: Thank you.

21 MR. VERMA: Thank you.

22 CHAIRPERSON DESMOND: Agenda item number
23 4. City of Capitola. Possible approval of a loan
24 for \$40,000 to the City of Capitola to install
25 energy efficient light-emitting-diode traffic

1 lights. This project is estimated to save about
2 \$8,800 annually, with a simple payback of 4.4
3 years. Ms. Bronson. I'd note we have ten
4 speakers here to address this issue. Just
5 kidding, we don't.

6 (Laughter.)

7 CHAIRPERSON DESMOND: We don't.

8 MS. BRONSON: These are always a point
9 of humor.

10 My name's Mary Ellen Bronson with the
11 Public Programs Office in the Efficiency,
12 Renewables and Demand Analysis Division.

13 Staff is here to request your approval
14 of a \$40,000 loan to the City of Capitola. The
15 interest rate for this loan will be 4.5 percent.
16 The loan will be used to replace red, green, amber
17 and pedestrian incandescent traffic signals with
18 energy efficient light-emitting-diode modules,
19 LEDs.

20 The project will reduce the City's
21 annual energy use by over 65,000 kilowatt hours,
22 translating to a load reduction of 7.5 kilowatts.

23 Installation of the LED modules will
24 save the City approximately \$8800 annually in
25 reduced energy costs.

1 The loan request meets all of the
2 requirements of the Energy Conservation Assistance
3 Act account, ECAA, and/or the bond fund program.
4 The loan has a simple payback of 4.4 years, thus
5 meeting the requirements of the loan program. And
6 staff therefore recommends approval of the loan
7 for the City of Capitola.

8 Any questions?

9 CHAIRPERSON DESMOND: Commissioner
10 Pfannenstiel -- oh, Rosenfeld. Go ahead.

11 COMMISSIONER ROSENFELD: I have one tiny
12 friendly question. The payback time you list as
13 4.4 years. That's based only on the electrical
14 savings, right?

15 MS. BRONSON: Yes.

16 COMMISSIONER ROSENFELD: Because, in
17 fact, as we know, the lamps last, I don't know,
18 five or ten years, and it saves a lot of trucks
19 and climbs up the ladder, and so on, which
20 probably reduces the payback time significantly
21 below that.

22 But I think your figure is just electric
23 savings.

24 MS. BRONSON: Yes, it is.

25 COMMISSIONER ROSENFELD: Yeah. Thanks.

1 VICE CHAIRPERSON PFANNENSTIEL: Mr.
2 Chairman, this item has come before the Energy
3 Efficiency Committee. It was approved there, and
4 so I move it.

5 COMMISSIONER ROSENFELD: Second.

6 CHAIRPERSON DESMOND: All those in
7 favor?

8 (Ayes.)

9 CHAIRPERSON DESMOND: Opposed? So
10 moved. Thank you, Ms. Bronson.

11 Agenda item number 5, City of
12 Victorville. Possible approval of a loan for
13 \$54,566 to the City of Victorville to install
14 packaged Ice Bear thermal energy storage systems
15 at two city facilities. The project is estimated
16 to save about \$5667 annually, with a simple
17 payback of 9.6 years. Mr. Wang.

18 MR. WANG: Good morning, Commissioners.
19 My name is Joseph Wang, and I'm the Project
20 Manager for this loan.

21 This is the second loan from the
22 Commission for the City of Victorville. The first
23 loan was approved in November of 2005 to install a
24 similar systems. And they want to install two
25 more, these thermal energy storage systems at two

1 more facilities. And this time they will install
2 three additional units.

3 And each unit is rated at 50 ton hour,
4 and will allow the City to shift a 7.5 ton air
5 conditioner operation for six hours during onpeak
6 period. Or a 5 ton air conditioning unit for nine
7 hours of operation.

8 And this project will save the City over
9 \$5600 a year. And this is only based on energy
10 savings alone. And this project has a single
11 payback of 9.6 years.

12 And staff has reviewed this project and
13 recommends approval of this loan.

14 CHAIRPERSON DESMOND: Thank you.
15 Commissioner Pfannenstiel.

16 VICE CHAIRPERSON PFANNENSTIEL: Just a
17 question. So this is the second one of this same
18 technology that they're installing?

19 MR. WANG: That's correct. They want to
20 combined both project installation at the same
21 time.

22 VICE CHAIRPERSON PFANNENSTIEL: And the
23 technology works well?

24 MR. WANG: Yes.

25 VICE CHAIRPERSON PFANNENSTIEL: It meets

1 the specifications? It does what they had
2 expected it to do?

3 MR. WANG: That's correct.

4 VICE CHAIRPERSON PFANNENSTIEL: I know
5 that we're considering this technology elsewhere
6 in the building standards, and I was wondering
7 whether this is any kind of pilot for that.

8 MR. WANG: We have about 15 Ice Bear
9 systems installed in California, and the longest
10 unit has been running for about two years.
11 There's no failure rate at this point.

12 And they are also planning to come to
13 our Commission's compliance option process; and
14 they are reviewing the data right now.

15 VICE CHAIRPERSON PFANNENSTIEL: But this
16 is the same -- I assume it's a slightly larger
17 scale technology than we would be considering for
18 home use, is that --

19 MR. WANG: This is correct. These units
20 are rated at 50 ton hour per unit. And those will
21 be between 20 and 30 ton hours.

22 VICE CHAIRPERSON PFANNENSTIEL: And then
23 the other question is you mentioned, you note in
24 the writeup that the City buildings will switch to
25 a time-of-use rate. So currently, even though

1 they currently have these storage systems onsite,
2 they're not on a time-of-use rate?

3 MR. WANG: The existing rate schedule
4 that these buildings are on are the regular GS2
5 demand rate schedule, and there's no time element.
6 To take advantage of the time-of-use rate
7 schedule, to save -- you know, energy savings, the
8 City will be switching to GS2 time-of-use option
9 B.

10 VICE CHAIRPERSON PFANNENSTIEL: Well,
11 was the economics done based on the non-time-of-
12 use rate or the time-of-use rate?

13 MR. WANG: The economics is calculated
14 based on time-of-use rates.

15 VICE CHAIRPERSON PFANNENSTIEL: Okay.
16 That's fine. With those answers, then, I'll move
17 the item.

18 COMMISSIONER ROSENFELD: Second.

19 CHAIRPERSON DESMOND: Let me just add I
20 think that this technology provides some of the
21 largest opportunities we have right now to address
22 the peak demand situation. I mean the benefits
23 extend both to being able to downsize the
24 distributed solar systems on residential.

25 But, to me, most exciting is it's field-

1 retrofittable. Meaning we can --

2 MR. WANG: That's correct.

3 CHAIRPERSON DESMOND: -- address the
4 existing market, not just new construction, with
5 this. So very interested in seeing how this does
6 with that.

7 All those in favor?

8 (Ayes.)

9 CHAIRPERSON DESMOND: Opposed? So
10 moved. Thank you, Mr. Wang.

11 MR. WANG: Thank you.

12 CHAIRPERSON DESMOND: Agenda item number
13 6, County of Alameda. Possible approval of a
14 \$703,917 loan augmentation to the County of
15 Alameda's existing loan of \$2,154,848 awarded in
16 September of 2004.

17 And this argumentation allows the County
18 to install an additional 250 kW module, resulting
19 in a total system capacity of 1 megawatt fuel cell
20 cogeneration.

21 The additional module is estimated to
22 save the County 1,752 kilowatt hours or \$71,828
23 annually in reduced energy costs, with a simple
24 payback of 9.8 years. Mr. Suleiman.

25 MR. SULEIMAN: Good morning. My name is

1 Adel Suleiman; I'm with the Public Programs
2 Office.

3 In September of 2004 the County of
4 Alameda requested and received a loan from the
5 Energy Commission of \$2.15 million to finance the
6 installation of three modules at 250 kW of fuel
7 cell cogen at the Santa Rita Jail in Dublin.

8 This item before you today is for an
9 additional loan of \$703,917 to install an
10 additional module of 250 kW, as well, on the same
11 facility.

12 This additional module is estimated to
13 save the County 1.7 million kWh; and 200 kW demand
14 savings or approximately \$71,828 in annual cost
15 savings.

16 This loan has a simple payback of 9.8
17 years. When the project is complete it will
18 provide, this project will provide approximately
19 50 percent of all electricity needs at the jail,
20 and it will be the largest fuel cell project in
21 the country.

22 The Energy Commission Staff has
23 evaluated and determined that this loan request is
24 technically feasible and meets the requirements
25 for a loan under the Energy Conservation

1 Assistance Act and the bond fund program. And
2 staff is seeking your approval on this item.
3 Thank you.

4 CHAIRPERSON DESMOND: Thank you.

5 COMMISSIONER ROSENFELD: I have a
6 question.

7 CHAIRPERSON DESMOND: Commissioner
8 Rosenfeld.

9 COMMISSIONER ROSENFELD: I apologize, I
10 didn't do my homework last night. Is this cost
11 shared with --

12 MR. SULEIMAN: Yes. The rebates on this
13 project for the total project, PG&E self-
14 generation incentive program is providing \$2.5
15 million of rebate to this project. The Department
16 of Defense is also providing \$1 million. So
17 there's a cost share from the DOD and from PG&E.

18 COMMISSIONER ROSENFELD: Thanks.

19 CHAIRPERSON DESMOND: Commissioner
20 Pfannenstiel.

21 VICE CHAIRPERSON PFANNENSTIEL: If there
22 are no further questions I would move the item.

23 COMMISSIONER ROSENFELD: Second.

24 CHAIRPERSON DESMOND: All those in
25 favor?

1 (Ayes.)

2 CHAIRPERSON DESMOND: Opposed? So
3 moved.

4 MR. SULEIMAN: Thank you.

5 CHAIRPERSON DESMOND: Thank you. Agenda
6 item number 7, Western Governors Association and
7 possible approval of contract R650-05-006 for a
8 reimbursement between the Energy Commission and
9 the Western Governors Association.

10 Under this agreement WGA will provide
11 \$100,000 to fund a study of biofuels technology
12 development in California. Mr. MacDonald.

13 MR. MacDONALD: Good morning,
14 Commissioners. I'm Tom MacDonald with the Fuels
15 and Transportation Division.

16 As stated, we're requesting approval of
17 this contract with the Western Governors
18 Association which will result in securing an award
19 of \$100,000 from WGA to fund a study of biofuel
20 technology development in California.

21 This project originated last summer with
22 a solicitation from the Western Governors
23 Association's regional biomass energy program. It
24 was passed to us as a request from the Governor's
25 Office to respond to the solicitation.

1 It required a coordinated effort between
2 energy, forestry and ag agencies as part of their
3 request. So we worked together with the
4 Department of Forestry, Department of Food and Ag
5 to develop a three-part package of separate, but
6 related, project proposals. All three of them
7 were accepted by WGA and funding was awarded.

8 What we originally pursued as a grant,
9 however, turned out to be a contract to meet WGA's
10 requirements. And that's why we're here for the
11 approval of grant. Wouldn't have required
12 approval but the contract does.

13 There's a lot of material in the agenda
14 backup package. The service agreement from WGA is
15 there with our proposal and its attachments are in
16 there if anybody requires the details.

17 CHAIRPERSON DESMOND: Okay. Mr.
18 MacDonald, I just had a quick question. I note
19 that the term of the contract is 18 months. And
20 I'm sure you're aware the Governor has put us on a
21 fast track for addressing the biomass opportunity,
22 including biofuels. And we'll have a report
23 that's due out this March.

24 Obviously this is very complementary to
25 that effort. We also have a Pavley Bill signed

1 into law that requires us to deliver a report to
2 the Legislature next May 2007. And I want to make
3 sure that if there's any way we can move up the
4 pace, or at least the schedule, that the
5 information from this contract helps to inform
6 that report when we deliver it to the Legislature.

7 MR. MacDONALD: Sure. We certainly hope
8 to complete this well before the 18 months.
9 Unfortunately the contract process is delayed to
10 start from what we originally expected, so
11 hopefully we'll be able to get started very soon
12 and at least have some interim results perhaps to
13 feed the bioenergy action plan.

14 CHAIRPERSON DESMOND: Right, thank you.
15 Other?

16 COMMISSIONER BOYD: As Mr. MacDonald
17 said, this is the result of a collaborative effort
18 between multiple agencies of the same agencies a
19 working part of the biofuels working group. And
20 it is unfortunate that this has taken much longer
21 than we anticipated. As Mr. MacDonald indicated,
22 we've asked for as many exit ramps as we can have
23 out of this study to meet the requirements of the
24 legislation and the Governor's request.

25 But this was reviewed quite some time

1 ago by the Transportation and Fuels Committee and
2 I'd like to recommend its approval.

3 VICE CHAIRPERSON PFANNENSTIEL: Second.

4 CHAIRPERSON DESMOND: Commissioner
5 Geesman.

6 COMMISSIONER GEESMAN: I think this is
7 an important effort, and I'm pleased that state
8 government, in general, is trying to step up our
9 efforts in this area.

10 I think we should use these activities,
11 including the plan that will come in front of us
12 in March, to try and get a better sense of the Air
13 Resources Board's perspective on greater use of
14 ethanol in our transportation fuel system. We
15 joined with them a couple of years ago to develop
16 a petroleum displacement strategy pursuant to AB-
17 2076. And we touched on the issue in some detail
18 last summer in the Integrated Energy Policy Report
19 process.

20 But I have the continuing sense that
21 much of the ARB's perspective is shaped by the
22 oxygenate war conducted in the courts over the
23 last several years. Those wars are over now, and
24 I'd like to have a better sense of the empirical
25 basis of what I perceive to be continuing

1 reservations by the ARB.

2 I think we can do an outstanding job in
3 documenting the resource potential and the very
4 substantial business development potential, and
5 still be hamstrung by air quality concerns. And
6 I'd like to make certain that those are
7 empirically based air quality concerns. And I
8 think our forum is a good one to do that.

9 CHAIRPERSON DESMOND: Mr. MacDonald, in
10 looking through the contract, as I looked at the
11 tasks, it focused on, you know, the evaluation of
12 previous projects, candidate technologies,
13 estimates of potential. I think that's really
14 straightforward. And then identifying future
15 funding mechanisms. Can you see a way in which
16 Commissioner Geesman's concern can be worked into
17 part of that scope as you go forward?

18 MR. MACDONALD: Well, I certainly agree
19 that's one of the key constraint issues we hear
20 raised constantly by all the perspective
21 developers of these technologies, is there going
22 to be a market for our product in California. And
23 how can state government better assure us if we
24 build these projects we will, indeed, be able to
25 sell these fuels here. And that's certainly one

1 of the outstanding issues.

2 It certainly wasn't our intent to deal
3 with that in a detailed way in this study. This
4 is really a technology-focused study. What's the
5 status, in effect, of the various development of a
6 several dozen actual technology platforms being
7 investigated.

8 Other than identifying the generic
9 constraints to these technologies, one of which,
10 again, is the marketability of the products. It
11 wasn't our intent to specifically deal with the
12 air quality constraint issues here, although I
13 certainly agree we need to find some way to better
14 address and resolve those issues.

15 COMMISSIONER GEESMAN: And I don't in
16 any way mean to hold up this contract on it. I
17 know the budget act last year required that we
18 collaborate with the Air Resources Board in
19 developing a transportation-oriented R&D program.
20 I think that's another good forum in which to
21 address these concerns.

22 But I think that it's important that we
23 try to get to the bottom of these air quality
24 concerns that have emanated from the ARB; and that
25 we try and do that as quickly as we can.

1 COMMISSIONER BOYD: Mr. Chairman, I
2 might add that as we speak many members of our
3 staff are in an upstairs conference with the ARB
4 and representatives of the environmental
5 community, having discussions exactly aimed at
6 trying to reach a resolution on some of these
7 issues.

8 And I'm pleased to note that the
9 environmental community, NRDC in particular, has
10 become quite a champion of pursuing some of these
11 questions, and ethanol in particular.

12 So, hopefully, we can move that issue
13 along.

14 CHAIRPERSON DESMOND: Thank you. We
15 have a motion --

16 VICE CHAIRPERSON PFANNENSTIEL: And a
17 second.

18 CHAIRPERSON DESMOND: -- and a second.

19 All those in favor?

20 (Ayes.)

21 CHAIRPERSON DESMOND: Opposed? So
22 moved. Thank you, Mr. MacDonald.

23 Agenda item number 8. Professor Richard
24 J. Lazarus. Possible approval of a contract 140-
25 05-001 for \$25,000 with Professor Richard J.

1 Lazarus to provide specialized legal services
2 relating to litigation in the United States
3 Supreme Court in which the Commission is a party.
4 Mr. Chamberlain.

5 CHIEF COUNSEL CHAMBERLAIN: Thank you,
6 Mr. Chairman. As the Commission is aware, the
7 Commission prevailed on appeal in the case of Air
8 Conditioning and Refrigeration Institute v. Energy
9 Commission last year. And a petition for certiori
10 was filed.

11 We filed an opposition to that and the
12 court issued an order asking the Solicitor General
13 of the United States to weigh in and give his
14 opinion as to what the view of the United States
15 is on this.

16 This gave us a little bit of time. It
17 makes it probably more likely that the case might
18 be taken, although we certainly still hope that it
19 will not be. It gave us some time to negotiate
20 with an expert on Supreme Court practice. This is
21 a very specialized practice.

22 And I have met Professor Lazarus; I've
23 heard him speak. He's very knowledgeable of this
24 subject matter, and I think we're very fortunate
25 to have this opportunity to work with him.

1 CHAIRPERSON DESMOND: Thank you; -- for
2 a motion.

3 COMMISSIONER GEESMAN: So moved.

4 VICE CHAIRPERSON PFANNENSTIEL: Second.

5 CHAIRPERSON DESMOND: All those in
6 favor?

7 (Ayes.)

8 CHAIRPERSON DESMOND: Opposed? So
9 moved.

10 Agenda item number 9, California
11 Department of Technology. Possible approval of
12 contract 200-00-003, amendment 2, for \$300,000
13 with the California Department of Technology
14 Services for a three-year time extension at
15 \$100,000 per year for three years and a name
16 change.

17 The contract provides support for
18 various Energy Commission programs and
19 communication services including data storage and
20 various mediums, special printing, land technical
21 support and data processing for accounting and
22 personnel offices; dedicated equipment costs and
23 communication lines for internet access. Mr.
24 Hill.

25 MR. HILL: Good morning; my name is

1 Atlas Hill. And I'm here seeking approval for
2 this amendment for a name change and extension of
3 services for what was formerly known as the Teale
4 Data Center.

5 And basically, as stated, we've been
6 making every effort to try and keep some of these
7 costs down. At one point they were around \$1
8 million. Now we're actually spending somewhat
9 under that \$100,000.

10 So, if there are any questions I can
11 entertain those now.

12 VICE CHAIRPERSON PFANNENSTIEL: I'll
13 move the item.

14 COMMISSIONER GEESMAN: Second.

15 CHAIRPERSON DESMOND: All those in
16 favor?

17 (Ayes.)

18 CHAIRPERSON DESMOND: Opposed? So
19 moved. Thank you.

20 MR. HILL: Thank you.

21 CHAIRPERSON DESMOND: Agenda item number
22 10 is approval of the minutes for February 1,
23 2006.

24 COMMISSIONER ROSENFELD: I move the
25 minutes.

1 COMMISSIONER BOYD: Second.

2 CHAIRPERSON DESMOND: All those in
3 favor?

4 (Ayes.)

5 CHAIRPERSON DESMOND: Opposed? So
6 moved. Agenda item 11, Commission Committee
7 Presentations and Discussions. I know
8 Commissioner Pfannenstiel would like to at least
9 raise one issue.

10 VICE CHAIRPERSON PFANNENSTIEL: Thank
11 you, Mr. Chairman. It's actually more in the way
12 of a Committee report concerning the efficiency
13 standards, appliance efficiency standards that
14 this Commission adopted in December of 2004.

15 We adopted standards for a number of
16 appliances, some of which have yet to go into
17 effect. And there are some standards for external
18 power supplies that are scheduled to go into
19 effect July 1st of this year, as well as digital
20 television adapters, which are scheduled to go
21 into effect January 1st of 2007.

22 There was a Committee workshop held last
23 week on these items. And based on the information
24 from that workshop we filed yesterday with the
25 Office of Administrative Law a rulemaking language

1 proposing four specific changes to the adopted
2 standards.

3 The four changes were first, to delay
4 the effective dates for the external power supply
5 standards for six months. Actually there were two
6 separate sets of standards going into effect, but
7 the earliest, as I said, would have been July 1st
8 of 2007. So we extended that until January 1st --
9 I'm sorry, they would have been July 1, 2006; we
10 extended it six months to January 1, 2007.

11 This delay makes our effective dates
12 consistent with other states, those in other
13 states that have similar standards. It should
14 provide the industry sufficient time to comply.
15 And it really does not penalize those companies
16 that have made good faith efforts to comply with
17 the original dates.

18 Second, we proposed to exempt power
19 supplies that are used for certain medical
20 applications. And these power supplies are those
21 that are subject to approval by the Food and Drug
22 Administration, so it's a separate category.

23 Third, we are proposing to eliminate a
24 requirement that some of the external power
25 supplies be tested at 230 volts. This is a

1 voltage level used internationally but not in
2 California. So we would propose doing labeling
3 difference for those that are tested just at the
4 115 volts.

5 And fourth, the final change that we're
6 proposing is to delay the implementation date of
7 the standards for the digital television adapters
8 for a year to January 1, 2008. These digital
9 television adapters, DTAs, are going to be
10 required for those analog television sets that
11 receive over-the-air broadcast beginning in 2009
12 when the federal government has required that all
13 broadcasters will broadcast in digital
14 transmission, not analog.

15 The Committee needs to continue to
16 explore some technical options for DTA standards.

17 The next step is that on March 27th the
18 Committee will hold a hearing for further input on
19 these proposed changes. And sometime thereafter
20 we will bring the proposed modified standard to
21 the Commission.

22 CHAIRPERSON DESMOND: Thank you,
23 Commissioner Pfannenstiel. Any further?
24 Commissioner Rosenfeld.

25 COMMISSIONER ROSENFELD: A small

1 addition to that. As is pretty obvious, it's a
2 small fraction of the industry which is unhappy.
3 But, of course, 5 percent of the manufacturers can
4 make 50 percent of the noise. And so, as
5 Commissioner Pfannenstiel decided, we reluctantly
6 are going to delay.

7 That, of course, leaves 95 percent of
8 the manufacturers who are ready to comply and who
9 are, of course, upset that we have let them down,
10 I don't know what we can do about that.

11 But I thought I would say that with the CEC
12 having good relations with the utilities and the
13 energy efficiency programs, I am talking to the
14 energy efficiency program managers at the three
15 IOUs.

16 And I think there's a good chance that
17 we can get them to give early compliance
18 incentives to the manufacturers who are ready to
19 comply on the present date, and thus make it up to
20 them a little bit. At least it's a show of
21 solidarity, which is encouraging.

22 CHAIRPERSON DESMOND: Thank you.
23 Nothing further? Agenda item 12, Chief Counsel's
24 report.

25 CHIEF COUNSEL CHAMBERLAIN: Thank you,

1 Mr. Chairman. As we have been here at the meeting
2 I have received on email a rumor that a decision
3 was issued by the Superior Court of Sacramento
4 yesterday.

5 Because there's so many complex issues I
6 hesitate to report to you what the decision was,
7 because I don't really know. But the rumor
8 suggests that the Commission prevailed in that
9 case.

10 CHAIRPERSON DESMOND: Okay.

11 CHIEF COUNSEL CHAMBERLAIN: I will
12 certainly provide you a full analysis of it when I
13 receive it.

14 CHAIRPERSON DESMOND: Thank you.

15 COMMISSIONER GEESMAN: I think the
16 record should reflect there were no expressions of
17 surprise by anyone in the room.

18 (Laughter.)

19 CHAIRPERSON DESMOND: Thank you. Agenda
20 item 13, Executive Director's report.

21 EXECUTIVE DIRECTOR BLEVINS: I have no
22 report, Mr. Chairman.

23 CHAIRPERSON DESMOND: Okay. We don't
24 have anyone here for the Legislative Director.

25 Ms. Kim, Public Adviser's report.

1 MS. KIM: I have nothing to report.

2 CHAIRPERSON DESMOND: Nothing, okay.

3 Any additional public comment? Is there anyone
4 who wishes to speak addressing any issue here
5 today? No.

6 With that, we'll conclude this meeting.

7 I want to thank everyone for coming.

8 (Whereupon, at 11:17 a.m., the business
9 meeting was adjourned.)

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CERTIFICATE OF REPORTER

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

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

IN WITNESS WHEREOF, I have hereunto set my hand this 18th day of February, 2006.

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