

COMMISSIONERS PRESENT

James D. Boyd

Arthur H. Rosenfeld

Jeffrey D. Byron

Julia A. Levin

Karen Douglas

STAFF PRESENT

William Chamberlain

Melissa Jones

PUBLIC ADVISOR

Elena Miller

ALSO PRESENT

Martha Krebs

Tim Tutt

Valerie Hall

Thomas Slaight

Mauro Martins

Rose Taylor

Rocky Compton

Deborah J. Whitman

Dane Wigington

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P R O C E E D I N G S

MAY 6, 2009

10:03 a.m.

CHAIRPERSON DOUGLAS: Good morning, everyone.

Before we get started, let's have the pledge of allegiance.

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

COMMISSIONER DOUGLAS: We have a special
presentation today and I would like to ask Commissioner
Rosenfeld to present.

COMMISSIONER ROSENFELD: Actually, Martha Krebs
-- for many years now, I think the peak was under seven of
the eight years under President Clinton's Administration,
she was Assistant Secretary and Director of the Office of
Science where she was responsible for a \$3.5 billion
budget, and I did say "billion" with a "B", which over
seven years it was quite a few billion dollars. She did a
good job of it. Despite all the successes, I want to
praise Martha. For just a few months in 1981, when I got
to know her very well, when Reagan had swept into office
and was bent on zeroing out the DOE Office, which is now
called EERE, a good name, it was at the time called
Conservation and Solar, which was sort of anathema. They
were particularly an anathema to the Reagan Administration
because they were keen on appliance and building standards
which California had time to introduce to the rest of the

1 country. There was a political problem and that is
2 Reagan's first budget came out with zero dollars for
3 Conservation and Solar, and all the people who could defend
4 that program before Congress were DOE employees, or
5 National Lab employees, and could not do anything except be
6 quiet. And by fluke, I knew something about the issue, I
7 was running the Center for Building Sciences, but I was a
8 University of California Professor and not on the DOE
9 payroll, and so I could say what I pleased. And Martha
10 arranged for my first testimony, where I had a lot of good
11 props, Low E windows, and compact doors and lamps, and
12 building power supplies, and [inaudible] radon air quality,
13 and I came around and waved all those good things, and the
14 hearing went well, and I was very happy with that. And it
15 seems like a few years later I got another invitation, also
16 arranged by Martha to talk to the full Science Committee,
17 and that went well, and pretty soon, as far as I could
18 remember, Martha and my new friends were having me
19 testify every Monday, Wednesday and Friday. In fact, I
20 remember leaving my little kit of wave a round's in
21 Martha's office on regular trips back to Berkeley to teach
22 class. It was all fun. When the dust settled at the end
23 of the year, the budget instead of being zero was three-
24 quarters of what it was the previous year, and we had sort
25 of shown you could stand up to the Reagan Administration.

1 That worked so well, in fact, that at Lawrence Berkeley
2 Lab, instead of cowering down, we decided to hire Martha as
3 Associate Director for Development in Science and all sort
4 of good things. Bless you, Martha. Well, Clinton came and
5 went, and Martha went off to a Nanotech Center at UCLA, and
6 I came here and started learning about the PIER Program and
7 chairing the R&D Committee, and discovered pretty soon that
8 PIER was a world-class outfit and needed a world-class
9 leader, and that was Martha. And we called her up and
10 convinced her to take the job here. Unfortunately, she is
11 on a four-year loan and that term is up. We are going to
12 miss that. So, meanwhile, take a month off after we read
13 you this resolution, and enjoy the month, and come back and
14 see us and help us solve our problems. Is Phil here, too?
15 No. Well, we will miss you both. I have a resolution
16 here.

17 COMMISSIONER DOUGLAS: Art, we may have other
18 comments before you --

19 COMMISSIONER ROSENFELD: Oh, I am sorry.

20 COMMISSIONER DOUGLAS: Better go on that side.

21 COMMISSIONER BYRON: Oh, heavens yes. I will be
22 brief. Dr. Krebs, I can barely see you back there.

23 Anyhow, I really regret that we have not had an opportunity
24 to work as much together as I would have liked. I have
25 always enjoyed the insights and expertise that you bring to

1 this Commission, but more so the stature and the
2 credibility that you have brought to the PIER Program,
3 extremely valuable to us. And despite the best efforts of
4 myself and some of my fellow Commissioners, to hire away
5 your top management teams to be our advisor, you somehow
6 managed to fill those, and train them, and have an
7 excellent team. But we are going to miss you. We are
8 going to miss having that expertise, that insight,
9 particularly now as we begin to work more closely with our
10 federal government and particularly the Department of
11 Energy. So, Dr. Krebs, I just would very much like to
12 thank you and extend my best wishes to you in your next
13 endeavor, whatever that might be. Thank you.

14 COMMISSIONER BOYD: Well, let me add to the
15 comments if I might, as a long-time bureaucrat, I think I
16 can address myself to another kind of long-time bureaucrat,
17 Martha, Dr. Krebs. I really over the years have come to
18 appreciate Martha more than she probably realizes, and to
19 appreciate the knowledge she has, that she brought to this
20 job, and the assistance she has provided to the Commission
21 as a whole and to the R&D Committee, of course, in
22 particular, which I am fairly new at. The other thing I
23 learned over time is, no matter where I went and having
24 just been in Washington last week doing some kind of
25 patronage work there, I guess, Martha had actually arranged

1 at least one of my meetings and, everywhere I went, people
2 know Martha, remember Martha, praise Martha for what she
3 did at DOE. And so I just wanted to add to what both the
4 previous Commissioners had said in terms of her -- your
5 importance to us as an organization, the respect that we,
6 that I have for you, your understanding of what it is like
7 to maneuver one's way through the bureaucracy, and still
8 remain standing and continuing the process. So I hope you
9 do not mind, but you are liable to continue to hear from me
10 in the future. And I guess, just lastly, I want to wish
11 you well in whatever it is you do and we are going to miss
12 you, quite frankly, and I am a tad saddened that we will
13 lose your skills. I am feeling suddenly guilty that I did
14 not feel guilty when I sat down here when Commissioner
15 Byron reminded me that, oh, gosh, yeah, I also ripped off
16 one of your key staff people as an advisor, so I am
17 surprised you are able to continue. But you are getting a
18 lot of advice from former subordinates who sit now on the
19 Commissioner Row -- and you handled it marvelously, and you
20 have been a real mentor to these people, and you have
21 willingly seen them change jobs in a way that I think you
22 saw probably served them well in their future, so I
23 appreciate that. So best of luck, Martha.

24 COMMISSIOSSION LEVIN: Martha, we overlapped, so
25 I really just want to say thank you and good luck, and I

1 hope you really enjoy whatever comes next.

2 COMMISSIONER DOUGLAS: And, Martha, Dr. Krebs, I
3 will be last and brief. As the new presiding member of the
4 R&D Committee, I have really only recently had a chance to
5 work closely with you and the other very talented staff on
6 the PIER Program, and I have enjoyed it much more than I
7 even thought I would and, in particular, enjoyed the long
8 and repeated discussions we have had about the role and
9 importance of publicly financed research in helping advance
10 an energy policy agenda consistently over time as the PIER
11 Program has helped us do in California. I think we have
12 not said nearly enough about the many ways in which the
13 PIER Program and the research that we finance through the
14 PIER Program has advanced California's energy and
15 environmental goals, and I am very committed to help us get
16 much better at that because I think we have compiled a
17 tremendous record of successes and there has been a
18 tremendous amount of thought put into how we move forward
19 with that program. I am pleased now to be much more a part
20 of it. I also cannot resist mentioning that we are having
21 the Advisory Committee Meeting for the PIER Program this
22 afternoon at 1:00 in this room, so if anyone is watching or
23 sitting in the room and vaguely interested, we would love
24 to see you there. And Dr. Krebs will be there with us and
25 available to speak to items as they come up at the Advisory

1 Committee Meeting. So thank you very much. And, Art, the
2 resolution.

3 COMMISSIONER ROSENFELD: The resolution:

4 "WHEREAS, Dr. Martha Krebs over 30 years has been
5 dedicated to advancing science and energy in a stellar
6 career that started with the House Committee on Science,
7 and includes Associate Director for Planning and
8 Development at Lawrence Berkeley Lab, Assistant Secretary
9 and worked at the Office of Science at the Department of
10 Energy, Associate Vice Chancellor for Research at U.C.L.A.,
11 and Director of the California NanoSystems Institute, and

12 WHEREAS, as Deputy Director of the Energy
13 Commission's R&D Division since June '05, Martha has
14 passionately and skillfully helped make the \$84 million a
15 year Public Interest Research Program world-class, and
16 ensured funding for over 400 projects that have advanced
17 California's innovative energy technology and increasingly
18 imported environmental benefits providing greater system
19 reliability and lowering consumer costs, and

20 WHEREAS, Martha Krebs capably managed the success
21 and unique Energy Division Small Grants Proposal Program by
22 awarding over \$12 million in grants, providing
23 opportunities for entrepreneurs to demonstrate new and
24 creative energy efficient, emissions reducing, and
25 environmentally sound technologies, and

1 WHEREAS, with her walk-the-talk leadership and
2 national and international reputation, Martha brought major
3 players to the table to form new partnerships, including
4 the West Coast Regional Carbon Sequestration Partnership,
5 called West Carb, resulting in California's receiving over
6 \$80 million from the Department of Energy and the PIER
7 Transmission R&D Program that brings together California's
8 major utilities to address the research needs required to
9 meet the state's 33 percent renewable energy goal, and

10 WHEREAS, Martha Krebs has been unwavering in her
11 support of Energy Commission staff, who feel they have
12 grown and gained confidence under her guidance and
13 mentorship, and reaching that on the Energy Commission, and

14 WHEREAS, Martha considers herself to be one of
15 the original Trekkies and took the Star Trek Mensa Ark by
16 exploring the Brave New World, seeking out new research &
17 development projects, and really going where no woman has
18 gone before,

19 THEREFORE, BE IT RESOLVED, that the CEC
20 acknowledges Martha Krebs who served the organization and
21 the citizens of California with integrity, intelligence,
22 enthusiasm, in her unique and celebrated style, and thank
23 her for the leadership and exemplary contributions to
24 California's Energy R&D Programs and policies, signed, all
25 your friendly admirers and Commissioners." I guess you can

1 come up here and get this. [Applause] The usual.

2 MS. KREBS: Grip and grin.

3 COMMISSIONER ROSENFELD: Okay, my friend. We
4 will miss you.

5 MS. KREBS: As appropriate, you took all the time
6 you needed, so I will try to keep this short. As indicated
7 in my career, I have had the great good fortune to work
8 with and for many elected and appointed officials. And in
9 the time that I have been here, not just the current
10 company, but those who have preceded some of you, I have
11 been extraordinarily impressed with the quality of the
12 Commissioners. It is a blessing to California, it is a
13 blessing to this organization. I think, equally blessed
14 are you by the leadership and the quality of the staff here
15 at the Energy Commission in very tough times, and I also
16 feel very fortunate to have worked with some wonderful
17 people in the PIER Program, to have had a stable and
18 progressing -- not unchanging -- but moving in a direction
19 that you know where the state will be in terms of policy in
20 energy and environment and, as a consequence, PIER and the
21 Commission have been able to make some really important
22 investments that have already paid off and that I think
23 will pay off. So thank you very much, it has been a great
24 honor. [Applause]

25 COMMISSIONER DOUGLAS: Next, Valerie Hall, would

1 you please enter the resolution honoring Tim Tutt, who
2 unfortunately was snatched away from us by SMUD, so I wish
3 you the best at SMUD, Tim, and we will try not to hold any
4 grudges.

5 MS. HALL: Okay, well, I have the honor of
6 reading a resolution for Tim. I have worked with Tim for
7 the last several years and have greatly appreciated the
8 time and have really appreciated the passion that Tim
9 brings to many of our policy goals here at the Commission
10 for Efficiency and Renewables. So with that, let me read
11 the resolution:

12 "WHEREAS, Tim Tutt for over 30 years has worked
13 diligently to advance Energy Efficiency and Renewable
14 Energy strategies throughout the state, and

15 WHEREAS, Tim Tutt took his freshly earned
16 Bachelors of Science in Social Science from California
17 Institute of Technology and began his career at the Jet
18 Propulsion Laboratory in Pasadena, forecasting
19 petrochemical product trends and modeling the development
20 and economics of solar technologies, then worked for
21 Southern California Edison running End Use and Efficiency
22 Data Models to produce estimates of conservation potential,
23 and

24 WHEREAS, Tim Tutt came to the Energy Commission
25 in 1990 to run the Industrial Sector Forecasting Models for

1 the Demand Analysis Office, and coordinated the analysis
2 of the Energy Impacts of Air Quality Management Plans, then
3 became Technical Director of Renewable Energy Office, and
4 one of the Energy Commission's experts in renewable energy,
5 as well as a driving force in developing programs and
6 guidelines for market-based incentives to advance the
7 state's goals, and

8 WHEREAS, as a Special Advisor to Chairman
9 Jackalyn Pfannestiel, Tim worked on policy more directly,
10 providing valuable assistance to the Efficiency Policy
11 Committee and the Load Management Subcommittee, and was
12 also deeply involved in creating the successful new Solar
13 Homes Partnership Program, promoting California's
14 homebuilders to construct new energy efficient solar homes,
15 and

16 WHEREAS, Tim Tutt recently joined the Efficiency
17 and Renewable Energy Division as Manager of the Appliances
18 and Process Energy Office, leading the staff efforts in new
19 efficiency standards for appliances, load management
20 standards, and industrial process energy, and

21 WHEREAS, since Tim's full name is Timothy Nathan
22 Tutt, or TNT, he has been a dynamite member of the Energy
23 Commission Staff and passionately practices what he
24 preaches by retrofitting his own home to be highly energy
25 efficient and installed photovoltaic panels for electric

1 power,

2 THEREFORE, BE IT RESOLVED, that the Energy
3 Commission recognizes values and is grateful to Timothy N.
4 Tutt for his significant contribution to the people of
5 California, our energy future and environment, and wishes
6 him well in his future endeavors to advance renewable
7 energy policy and technologies for the rate payers of
8 Sacramento County. Tim? [Applause]

9 MR. TUTT: Thank you.

10 COMMISSIONER DOUGLAS: Now, Tim, before you get
11 to say anything, but appropriately, while you are standing
12 here in front of us, I think there are a number of us,
13 perhaps all of us who would like to make a few remarks, as
14 well, beginning with Commissioner Rosenfeld.

15 COMMISSIONER ROSENFELD: I will be briefer this
16 time, but I did want to reminisce a little about things I
17 have done with Tim where he has gone way out of his way to
18 be wonderful. Val, you did not say his macro-economics
19 degree was from Cal Tech, a very prestigious institution.
20 Standards Demand Response, California Solar Initiative,
21 Standards, the undisputed hero of standards around here, of
22 course, is Bill Pennington, but... There are two advisors I
23 work with closely, one who has gone way out of their way to
24 push standards, have taken the lead in negotiating with
25 manufacturers, trade association, retailers, efficiency

1 advocates, and generally kept California at the forefront
2 of appliance standards and building standards. And
3 frankly, Tim, I do not know how the heck we are going to
4 get along without you, but I guess you have got to go.
5 Demand Response. I guess you all know that California is
6 the first state to start installing integral [inaudible] to
7 all customers. This all dates to a joint proceeding with
8 the PUC and it came right after the '01 electricity crisis,
9 we worked closely with the PUC all that time. My
10 subcommittee has met nearly every Thursday morning and Tim
11 has been there for, golly, eight years, and we have
12 supervised pilots for the remaining critical pricing
13 through design and program of communicating thermostats.
14 We are going to miss you and tomorrow morning, do not
15 forget to come to the last meeting. California Solar
16 Initiative -- I guess you also all know that there were
17 debates, particularly on the new housing issue of how you
18 combine solar on the roof and energy efficiency. The Title
19 24 standards are designed to value what I just -- it is
20 green value, which is residential about .15 an hour, and
21 solar is a great thing, but it is a little more expensive
22 than .15 an hour, but obviously you want a slightly souped
23 up efficiency to go into the house before you put the solar
24 on the roof. And Tim was part of a think tank of Jackie
25 Pfannenstiel and me and my office, in which we came up with

1 this pretty novel idea that you were certainly eligible
2 for a solar rebate on a new home, but you have got to meet
3 our own standards by 15 and preferably 35 percent before
4 you did that. I think that is a first in the nation and,
5 again, I think it is a great idea. Again, that came from
6 participating in that. So after Jackie left, Tim took on
7 the responsibility for appliance standards and he is going
8 to continue to negotiate with them, and we are going to
9 miss you, again, Tim and -- well, we are just going to miss
10 you.

11 COMMISSIONER BOYD: We will just go down the row
12 here, Tim. I will be brief, which is unusual for me, but
13 -- I have enjoyed working with you and around you here at
14 the Commission, but I feel like I have known the Tutt
15 household longer than somebody up here. I remember almost
16 hiring a young woman at the Air Resources Board who
17 ultimately became Mrs. Tim Tutt, so I have known about the
18 Tutt family far longer than many people here. And I cannot
19 top what Art said. You should be proud of the contribution
20 you have made to the program here and the public service
21 that you have provided. I am proud of anybody who hangs in
22 there as long as many in this room, and you in particular
23 have hung in there within the government. There have been
24 fun times and there have been some bloody cruel times, and
25 this is not one of the fun times, I think. But you are not

1 exactly leaving government, you are going to our local
2 utility which is a form of government. And since I am a
3 patron of that and a recipient of the services of that
4 utility, I do hope you do good for us. I am enjoying my
5 fairly modest electricity rates and efficiency, and the
6 good name, and pretty soon you better start a CEC Alumni
7 group over there at SMUD because we will have to come visit
8 you all pretty soon. Anyway, best of luck to you, Tim.

9 COMMISSIONER DOUGLAS: And, Tim, I have enjoyed
10 working with you very much, especially having the benefit
11 of your expertise in renewable energy and energy efficiency
12 on Commissioner Row when I was the new Chair of the
13 Renewables Committee, and turned to you often for guidance
14 on some of the issues that we ran into there. So I also
15 wish you the best at SMUD and look forward to seeing more
16 of you in the future, as well.

17 COMMISSIONER BYRON: Mr. Tutt, I am not happy
18 about this. We have lost half of one of Sacramento's power
19 couples here, and you are going to become a SMUD-ite --

20 MR. TUTT: It is not mud-ite, it is SMUD-ite.

21 COMMISSIOENER BYRON: -- yeah -- joining one of
22 this country's probably premiere municipal utilities. Are
23 you going to call Mr. Nastasi (phonetic) and Mr. Shevon
24 (phonetic) and let them know we are going to have to raise
25 the bar over there, make it more difficult for them to get

1 access to our staff. Tim, it has been a pleasure working
2 with you. I wish you the best of luck over there, and I
3 know you will be coming back to see us often in your new
4 capacity; I look forward to it, and I wish you the best of
5 luck.

6 COMMISSIONER LEVIN: Well, I share my fellow
7 Commissioners' unhappiness at you leaving. Take that as a
8 compliment. Tim, I think you and I worked here more before
9 I came to the Commission than since I was appointed. I
10 think you are leaving a huge hole behind, I mean, you,
11 Valerie, Bill, Patricia Roosevelt, and others have really
12 led the world in the appliance standards and the other
13 energy efficiency work that we have done, and I do not
14 think any of us can over-state how big an impact that has
15 in the world's climate, in the world's air quality, in our
16 economy, and for all the reasons that we all know energy
17 efficiency is so important, and you were decades ahead of
18 the rest of the country, and the rest of the world just
19 seems to be realizing now how critical it is for energy
20 security in our future. So I do not think any of us can
21 really thank you enough for your expertise, and your
22 thoughtfulness, and your foresight in pushing these issues.
23 And I have always enjoyed working with you and valued your
24 perspective. And I am very very sorry to see you go, but I
25 hope that you can continue your leadership at SMUD with the

1 other publicly owned utilities, and really help them move
2 forward as aggressively as you helped the state for the
3 CEC. So thank you, and good luck, and stay in touch.

4 MR. TUTT: Thank you. Thank you, all. I just
5 want to say that, when I was approached in 1990 by Mike
6 Jaske, asking if I wanted to come up and work at the Energy
7 Commission, I had no idea that I would be here for 19
8 years, I did not know how long I would be here, of course,
9 or that I would have so much fun while I was here. And I
10 have been thinking about that and realize that part of the
11 reason I have had so much fun is just the mission of this
12 agency, the expertise, and the people here. It is a great
13 agency and great people to work with. I am going to miss
14 you all and I hope to be in touch with you and see you in
15 my new capacity. It is with a good dollop of regret that I
16 am leaving, but I am, and I am going to miss being here,
17 and I appreciate all the kind words. Thank you very much.

18 [Applause]

19 COMMISSIONER DOUGLAS: Well, thank you, again,
20 Tim Tutt and Martha Krebs. Moving on to the Agenda now.
21 Item 1, the Consent Calendar.

22 COMMISSIONER ROSENFELD: I move the Consent
23 Calendar.

24 COMMISSIONER BYRON: Second.

25 COMMISSIONER DOUGLAS: All in favor?

1 (Ayes.)

2 This item passes.

3 Item 2. California Reporting LLC. Possible
4 approval of Contract 180-08-001 for \$74,700 with California
5 Reporting LLC to provide hearing reporter services for the
6 Energy Commission Business Meetings and other hearings and
7 workshops. Ms. Garfield-Jones.

8 MS. GARFIELD-JONES: Thank you, Commissioners.
9 Good morning. I am Susanne Garfield-Jones. I am with the
10 Media and Communications Office, which manages this
11 contract. Commissioners, as you are aware, the Energy
12 Commission is required to provide transcripts of its public
13 meetings such as business meetings, docketed proceedings,
14 and workshops. This contract will provide the reporting
15 services for these events and it replaces a previous
16 agreement that was terminated April 24th by the Department
17 of General Services. The Contractor was chosen under the
18 California Multiple Awards Schedule, or CMAS, that allows
19 the state agencies to select contractors from a list of
20 pre-approved by general services, it covers the reporting
21 services through March 2010, which is the expiration date
22 on the CMAS list. So we are asking for your approval of
23 this contract.

24 COMMISSIONER DOUGLAS: Questions.

25 COMMISSIONER BYRON: Ms. Garfield, is this an

1 annual renewable that we do?

2 MS. GARFIELD-JONES: No, sir. It is actually
3 not. It is a three-year contract, but it was terminated
4 early, so we have one year left.

5 COMMISSIONER BYRON: Okay, thank you.

6 COMMISSIONER ROSENFELD: I move the item.

7 COMMISSIONER BYRON: Second.

8 COMMISSIONER DOUGLAS: All in favor?

9 (Ayes.)

10 This item passes. Thank you.

11 Item 3. California Institute for Energy and the
12 Environment. Possible approval of \$750,000 for five grant
13 awards under Contract 500-01-043 with the University of
14 California-California Institute for Energy and the
15 Environment. Mr. Gravely, if you could, please describe
16 Items a through e because I would like to discuss them and
17 consider voting them as a group.

18 MR. GRAVELY: Okay, thank you. So the projects
19 here are under the Enabling Technologies Development
20 Program we discussed before, and these are building blocks.
21 What we do, in general, is they look at new technologies
22 and integrate those. The majority of the work that is done
23 is done through the University and, in some cases, they go
24 out with these research opportunity notices and award these
25 grants in these areas. Do you want me to give a brief

1 summary of each of the five items?

2 COMMISSIONER DOUGLAS: Yes, please.

3 MR. GRAVELY: Okay. So the first item is from
4 San Diego State University, An Integrated and Cognitive
5 Home Energy Management System for Demand Response. This is
6 a software program to use in the home to help integrate
7 energy and demand and the integration of this system into a
8 bigger system. Again, these are building blocks that we
9 use for a larger home area network in systems like this.
10 This particular system will provide software to use the
11 automation of home devices, or smart devices, and also to
12 allow those devices to be used for staggering of those
13 devices for demand response and for load shifting.
14 Questions?

15 COMMISSIONER DOUGLAS: Questions?

16 MR. GRAVELY: The next project is -- in this
17 area, we do both home area and interface with the grid.
18 This represents one of the grid interface, the distribution
19 of interface software tools that will be used to develop
20 what they call a "State Estimator" to allow us to use the
21 interface of the home area -- the Advance Meter
22 Infrastructure System and Advanced Sensors and to use those
23 to integrate with the distribution system itself over
24 protocols and adapt those into the Internet so it allows
25 the home to communicate with the grid system, and allows

1 the home to communicate with open architectures that are
2 being developed by other areas. So the goal here it to
3 take the information that we have at the home and to be
4 able to communicate it to the grid.

5 COMMISSIONER DOUGLAS: Okay.

6 MR. GRAVELY: Okay, the next project is with
7 SISCO, and this one here is the development of protocol.
8 This again is Web-based protocol, it is just information we
9 use for open architecture of these protocols that we
10 define. They are shared openly with other vendors so they
11 can develop products to work with this. Again, the primary
12 focus of these researches is to actually look at different
13 elements of the home area network and the residential and
14 small business and small commercial systems, and integrate
15 those systems into it. And this one here will be developed
16 to use a particular language, Java language, and if you are
17 familiar with the IT system, there are seven different
18 stacks of protocol development; this is using those
19 different stacks. These are standards being developed by
20 the Department of Energy for Smart Grid, and so we are
21 developing these components of those for different
22 interfaces. So the goal here is to develop standard
23 architectures and look at these projects and how to again
24 ultimately to be able to allow the home systems, the demand
25 response that we are looking for, and integration of that

1 demand response into a distribution level system.

2 The fourth project is Pacific Northwest National
3 Labs. In this case here, they are looking at controls of
4 the HVAC, and normally the systems in the home are very
5 dumb systems, the air conditioning systems, so they are
6 looking at using those systems and allowing those systems
7 that you put in home area networks, and you have them more
8 intelligent in the home. That system can report its
9 failure mode, it can report its problems. If it is in a
10 failure mode, it operates very inefficiently and draws much
11 more energy, and so this will allow the system to report
12 its errors. It is kind of like telling you there is a
13 problem to be fixed and it will help you to, one, note that
14 the problem is occurring, avoid the high energy use, and,
15 two, to avoid the failure in the future. So it allows you
16 to know the status of the system. So all of these are
17 being integrated and one of the values of what we are doing
18 is we are using common architectures amongst different
19 projects so we can actually communicate together, be sure
20 they are interoperable and be sure they are not
21 duplicative.

22 And the last project here looks a little bit more
23 into the area of what motivates people to participate in
24 demand response. Some of this is behavioral-type research;
25 some is the development of tools to help us understand

1 that. So the last project from the University at Berkeley
2 will be looking at the demand response activities, how we
3 encourage more demand response, and how we make the system
4 more useful, and how the software can be developed to allow
5 customers to better understand what they are using, and to
6 be able to better operate their home system efficiently
7 without a lot of complexity.

8 COMMISSIONER DOUGLAS: Thank you. And my
9 understanding is that these were the highest ranked
10 projects in the competitor solicitation run by the
11 University. Is that correct?

12 MR. GRAVELY: This project is -- you are probably
13 familiar with the Small Grant Program and this is a little
14 bit different than the Small Grant Program, this is a
15 result of three different research opportunity notices, and
16 so we actually went out with a very targeted area for
17 research, and then these are the results. We bring them
18 back periodically for approval like this to go forward, so
19 they were in three different solicitations, and 2, 2, and 1
20 were the results of how they were picked. But you do have
21 the opportunity to make choices if you choose on this, so
22 there is no question.

23 COMMISSIONER BYRON: Commissioner, if I may?

24 COMMISSIONER DOUGLAS: Please.

25 COMMISSIONER BYRON: You know, having had the

1 opportunity a couple weeks ago to go down to San Diego and
2 participate and witness first hand the Energy Innovation
3 Small Grants Selection process, which I was very interested
4 in seeing, and I have every reason to believe this is
5 conducted the same way, and I have a great deal of
6 confidence in the approach that PIER uses to select these
7 research projects. And I think that is probably why you
8 are not getting a lot of questions on these, because I know
9 I find, in reading the summaries, that I am very satisfied
10 that these are good selections. So I just wanted to add
11 that comment.

12 COMMISSIONER DOUGLAS: Thank you.

13 COMMISSIONER BOYD: I guess, on behalf of the
14 research committee who reviewed these, Commissioner Douglas
15 and myself, I will move their approval. That is approval
16 of Item 3, and its sub items a through e.

17 COMMISSIONER ROSENFELD: Second.

18 COMMISSIONER DOUGLAS: All in favor?

19 (Ayes.)

20 This item passes. Thank you.

21 MR. GRAVELY: Thank you.

22 COMMISSIONER DOUGLAS: Item 4. California
23 Employment Development Department. Possible approval of
24 Contract 600-08-008, an interagency agreement for
25 \$4,500,000 with California Employment Development

1 Department for workforce and industry development and
2 training, labor market data for the Alternative and
3 Renewable Fuels and Vehicle Technology Program. Mr. Smith.

4 MR. SMITH: Good morning, Commissioners. I am
5 Mike Smith. I am the Deputy Director for Fields and
6 Transportation here at the Energy Commission. And this is
7 our first contract out of the 8118 program, we are very
8 proud about that. And the program, of course, was
9 implemented with the passage of 8118, and then was
10 subsequently amended with the passage of 8109 last year.
11 What the statute allows the Energy Commission to do is to
12 fund a broad range of activities relating to alternative
13 and renewable fuels in California. One of the things the
14 authors of the Bill did, both AB 118 and, subsequently, 109
15 was to recognize that it is not enough to put alternative
16 fuel vehicles on the road and alternative fuels into the
17 marketplace, but you need a skilled and qualified workforce
18 to service and maintain and grow this new multi-fuel
19 transportation sector. And so, with that in mind, we are
20 pleased that our first agreement that we are bringing to
21 the Commission for approval is this \$4.5 million
22 interagency agreement, with a sister state agency, the
23 Employment Development Department. The Agreement has three
24 components to it. We will be working with EDD to expand
25 their very effective program of one-stop career centers,

1 and these one-stop career centers provide services to
2 employers, as well as employees, and they will be expanding
3 this program to include, now, alternative and renewable
4 fuel industry sectors. These one-stop career centers
5 provide employer workforce need assessments, job seeker
6 qualification assessments, employer job seeker match via
7 Internet-based automated systems. This also provides case
8 management services, referrals to education, training, and
9 support services to both the industry and the potential
10 employee. Secondly, the EDD will be expanding their labor
11 market information services to include alternative and
12 renewable fuels. And this new data will help identify
13 green transportation workforce needs and guide workforce
14 development efforts going forward. And then, thirdly, we
15 will be working with the EDD to expand their Industry
16 Cluster Program. These industry clusters are groups of
17 related and/or interdependent industries located within a
18 region or a state. And industry clusters can be used as a
19 framework for understanding the regional economy in guiding
20 economic and workforce development policies and
21 initiatives. And so with this, we will be working to
22 identifying new industry clusters specific to alternative
23 and renewable fuel production in California. And with
24 that, I ask for your approval and I will be happy to answer
25 any questions that you have. Thank you.

1 COMMISSIONER BOYD: If there are no questions, I
2 will move approval.

3 COMMISSIONER ROSENFELD: Second.

4 COMMISSIONER DOUGLAS: All in favor?

5 (Ayes.)

6 This item passes. Thank you very much.

7 MR. SMITH: Thank you very much.

8 COMMISSIONER BOYD: Congratulations, Mike. First
9 one out the door.

10 MR. SMITH: Thank you.

11 COMMISSIONER BOYD: Many more to go.

12 COMMISSIONER DOUGLAS: Item 5. AccuStaff.
13 Possible approval of Contract 150-08-004 for \$74,500 with
14 AccuStaff for temporary support services to assist the
15 Energy Commission's Federal Economic Recovery Program
16 during periods of peak workload. Mr. Hutchison?

17 MR. HUTCHISON: Good morning, Commissioners.
18 Mark Hutchison with the Executive Office. I will keep my
19 comments brief. The AccuStaff contract for \$74,500 will
20 provide administrative support over the next 18 months to
21 assist staff with peak workload demands implementing the
22 American Recovery and Reinvestment Act funds administered
23 by the Energy Commission. Your approval of this contract
24 is requested. I am available to answer any questions.

25 COMMISSIONER LEVIN: I just want to express one

1 concern, which I did express previously when we met with
2 staff and that is, on the fourth bullet, while I absolutely
3 understand staff is working beyond 24/7 and appreciate
4 that, and I fully recognize the need for additional
5 administrative and clerical support, I am concerned when we
6 start to execute contracts that get into what I would
7 consider more substantive areas, and I think that the
8 monitoring, particularly when we get into the specifics
9 such as monitoring the greenhouse gas productions, that
10 those become highly technical, and we should decide first
11 on program areas before we decide on or execute contracts
12 that become technical like that, and are, or should be
13 based on specific programs that the Commission decides to
14 fund. So I will abstain from a vote on this because I am
15 concerned about executing contracts that get into what I
16 would consider program or technical areas, before we have
17 decided what program or technical areas we are going to
18 fund. But I understand the need for the other areas of the
19 contract.

20 MR. HUTCHISON: And let me just respond that I
21 could not agree with you more. The type of staff that
22 AccuStaff will be providing for this is strictly
23 administrative and clerical paper processing. We provided
24 kind of that broad brush in the event that there were some
25 administrative assistants that could provide in some of

1 these areas, in some of the more technical areas. It is
2 strictly not having them go out and do this type of
3 monitoring, but certainly to be able to help staff process
4 paperwork and data input, that type of activity.

5 MS. JONES: And I would just add that we do
6 recognize that and we will have technical staff actually
7 monitoring the programs and the projects and evaluating
8 them. This contract, like Mark said, is only for
9 administrative assistance.

10 COMMISSIONER LEVIN: Then I would just suggest in
11 the future, then, not including bullet 4 because that
12 implies something, I think, broader, and something that
13 does require more technical expertise.

14 MR. HUTCHISON: Well noted.

15 COMMISSIONER DOUGLAS: All right, but the
16 understanding, obviously, this is administrative support
17 and it is very necessary for us, I think, as we move
18 forward further into or closer where we are actually
19 implementing our programs and doing the work to get grants,
20 loans, and so on out the door. I think that is very
21 valuable. I also agree that we should not have people on
22 board in administrative support doing technical review
23 analysis, and I expect that they will not be.

24 MR. HUTCHISON: Correct.

25 COMMISSIONER BOYD: Well, I for one read the

1 words "temporary support services" and then "system
2 monitoring" and I kind of took it the way it was described
3 to us by Mark, but I can see you can easily slip into other
4 areas, so I think with all the provisos that I have heard
5 that I think the staff really -- these are support-type
6 services and I hopefully would, and presume, that they
7 would not be getting into the technical area, and I think
8 many Commissioners have expressed that intent. So I am
9 sure the staff will follow that. So I would move approval
10 of the item.

11 COMMISSIONER DOUGLAS: Is there a second?

12 COMMISSIONER ROSENFELD: Second.

13 COMMISSIONER DOUGLAS: All in favor?

14 (Ayes.)

15 COMMISSIONER DOUGLAS: One abstention. The item
16 passes. Thank you.

17 Item 6. University Enterprises, Inc. Possible
18 approval of Amendment 8 to Contract 200-96-010 with
19 University Enterprises, Inc. for student assistant
20 salaries. Kyle -- I am sorry, how do you say your last
21 name?

22 MR. EMIGH: Kyle Emigh.

23 COMMISSIONER DOUGLAS: Kyle Emigh, please.

24 MR. EMIGH: Good morning, Chairman,
25 Commissioners. I am Kyle Emigh with the Commission Budget

1 Office and I am also the Contract Manager for the student
2 contract, and I am here this morning requesting approval to
3 amend this ongoing student contract. This contract has
4 been in place for a number of years and has been a valuable
5 resource for the Commission in helping meet peak workload
6 demands in a variety of program areas. It has also provided
7 practical work experience for students in their field of
8 study and has been an excellent recruitment tool for
9 potential new Commission employees. If approved, this
10 amendment is for authority only; we are not asking -- we
11 will not be encumbering any money, it will go through the
12 normal process through work plans and resource allocation.
13 At that point, dollars would be added with approval. And I
14 request for the approval of this amendment.

15 COMMISSIONER DOUGLAS: Are there questions or
16 comments?

17 COMMISSIONER BYRON: Mr. Emigh, you are not
18 familiar to me. Are you relatively new here at the
19 Commission? Or have I just not come across you?

20 MR. EMIGH: I have been here about 15 years.

21 COMMISSIONER BYRON: I feel terrible.

22 COMMISSIONER BOYD: As you should.

23 MR. EMIGH: That is okay. We met briefly.

24 MS. JONES: And I would just note that Kyle was
25 recently promoted to the Budget Office, and so that is

1 probably -- he has been working in the Budget Office, and
2 he is now more visible.

3 COMMISSIONER BYRON: All right, congratulations.
4 I am sorry we have not had a chance to talk.

5 COMMISSIONER BOYD: We on the Budget Management
6 Committee have seen too much of Kyle lately.

7 COMMISSIONER BYRON: I also note there is a name
8 change on this, too. Right? The University Enterprises is
9 now what they are going to be called?

10 MR. EMIGH: Correct. It was formerly The Hornet
11 Foundation, it is now -- it is still at Sacramento State
12 University, it is just the name change to University
13 Enterprises, Inc.

14 COMMISSIONER BYRON: Thank you. I have no
15 questions. I will be glad to move the item.

16 COMMISSIONER BOYD: Second.

17 COMMISSIONER DOUGLAS: All in favor?

18 (Ayes.)

19 This item passes. Thank you.

20 MR. EMIGH: Thank you.

21 COMMISSIONER DOUGLAS: Item 7. Westport Power,
22 Inc. Possible approval of Contract 500-08-043 for \$500,000
23 with Westport Power, Inc., to develop a liquefied natural
24 gas engine using advanced technology adapted to an existing
25 diesel engine. Mr. Koyama.

1 MR. KOYAMA: Good morning, Commissioners. I am
2 Ken Koyama. I am with the Research and Development
3 Division. We are requesting your approval of this \$500,000
4 agreement to Westport for the improvement of their existing
5 liquefied natural gas heavy duty engine, using high-
6 pressured direct injection technology. This technology has
7 the potential to improve the efficiencies of these natural
8 gas engines to that of diesel engines without compromising
9 emissions. In fact, we are hoping to achieve 80 percent
10 reduction of emissions with this agreement. We are joining
11 this project with South Coast Air Quality Management
12 District, the Ports of Long Beach and Los Angeles, and this
13 project is consistent with our Alternative Fuels Plan to
14 increase the use of alternative fuels by achieving a 26
15 percent penetration by 2022. We request approval of this
16 project.

17 COMMISSIONER BOYD: If there are no questions, I
18 will move approval.

19 COMMISSIONER ROSENFELD: Second.

20 COMMISSIONER DOUGLAS: All in favor?

21 (Ayes.)

22 This item is approved. Thank you. I guess you
23 are up here for the next three items, aren't you?

24 MR. KOYAMA: Wait until you see June 17th, I will
25 be here a while.

1 COMMISSIONER DOUGLAS: Item 8. National Energy
2 Technology Laboratory. Possible approval of Contract 500-
3 08-047 for \$2,000,000 with U.S. Department of Energy
4 National Energy Laboratory to develop and demonstrate an
5 improved automobile heating and air conditioning system.
6 Please.

7 MR. KOYAMA: This Agreement with the National
8 Energy Technology Laboratory is to develop and demonstrate
9 an automotive heating, ventilation and air conditioning
10 system that could reduce the fuel used to operate
11 conventional air conditioners by up to 33 percent. This
12 research advances the science in automotive HVAC by using
13 thermal electric solid state devices, and improves the
14 method of achieving occupant comfort while downsizing or
15 potentially eliminating the current vapor compression
16 systems. This \$2,000,000 will be matched by the Department
17 of Energy's \$5.4 million and industry's \$7.4 million. We
18 request approval of this agreement.

19 COMMISSIONER DOUGLAS: Questions?

20 COMMISSIONER BYRON: No.

21 COMMISSIONER BOYD: No questions. I will again
22 move approval.

23 COMMISSIONER ROSENFELD: Second.

24 COMMISSIONER DOUGLAS: All in favor?

25 (Ayes.)

1 This item passes.

2 Item 9. California Council on Science and
3 Technology. Possible approval of Contract 500-08-045 for
4 \$50,000 with California Council on Science and Technology
5 to assess the ability of existing energy technologies to
6 meet California's climate and energy goals for 2050. Mr.
7 Koyama.

8 MR. KOYAMA: This is another sole-source
9 agreement with the California Council on Science and
10 Technology. It is designed to produce a study that
11 assesses the potential of known technologies to meet the
12 goals, the climate change goals of 2050. It will identify
13 technology gaps and what research needs are required for us
14 to help fill those gaps. The study is going to help
15 California decision makers with information to help them
16 best implement the state's 2050 climate goals, and to help
17 them determine the best policy options that are available.
18 The project participants are a number of well known and
19 distinguished participants, including Commissioner Byron,
20 and we request approval of this agreement.

21 COMMISSIONER BYRON: I am not sure the level to
22 which I participate in this, Mr. Koyama. We were
23 approached last year by the California Council on Science
24 and Technology and I discussed their proposal with my
25 fellow Commissioners at that time. And I attended their

1 first Advisory Committee Meeting, actually it was a year
2 ago, last June, and we decided that we should participate
3 in this. I attended an additional Advisory Council Meeting
4 since then and I do not believe they have quite gotten the
5 level of funding that they were hoping to do, but this is
6 an important research project. The team that they have
7 assembled is quite impressive, a number of -- I would say
8 over 20 policymakers and academics from around the state, a
9 couple of Nobel Prize Laureates participating on it, and we
10 agreed about a year ago that the Energy Commission needed
11 to be a participant in this. It does inform us in the IEPR
12 process and it will probably have some input for us this
13 year, but certainly in future IEPR policy settings. And
14 they have had to scale back, to my knowledge, they have had
15 to scale back the scope of what they were planning to do
16 originally. But I still think it will be worthwhile
17 research and they may indeed find the additional funding
18 levels that they are looking for. We are not the only
19 participant, there are a number of others. So I would
20 recommend to my Commission approval of this item because I
21 think the topic is something that we need to be at the
22 table, and need to be part of the discussion.

23 COMMISSIONER LEVIN: Mr. Koyama, I think this
24 looks like a very important thing to fund and \$50,000 seems
25 like a very modest request in comparison to the importance

1 of it. I would just ask, are you coordinating with the
2 Air Board and other interested state agencies on this
3 contract and the funding request and, more importantly, or
4 most importantly, on the actual research project itself?

5 MR. KOYAMA: Yes, I believe the Air Resources
6 Board will be a participant in this study to some extent --

7 COMMISSIONER BYRON: Right.

8 MR. KOYAMA: -- as well as the Public Utilities
9 Commission and the National Academies in Washington, D.C.

10 COMMISSIONER LEVIN: Okay, great. Thank you.

11 COMMISSIONER BOYD: Move approval.

12 COMMISSIONER ROSENFELD: Second.

13 COMMISSIONER DOUGLAS: All in favor?

14 (Ayes.)

15 Thank you.

16 COMMISSIONER BYRON: And I would like to thank
17 Mr. Koyama and Ms. Fromm for shepherding this through. I
18 know sole-source contracts are not an easy matter for this
19 Commission, so I appreciate all the initial efforts that it
20 has taken.

21 MR. KOYAMA: I agree. Sandra did a terrific job
22 on this project.

23 COMMISSIONER DOUGLAS: Very good. Well, thank
24 you very much. Item 9 is approved. Moving on.

25 Item 10. UC Berkeley Global Metropolitan Center.

1 Possible approval of Work Authorization MR-TMP-662 for
2 \$250,000 to UC Berkeley Global Metropolitan Center to
3 research the combined fuel-savings potential of land use
4 and transportation measures in California's major
5 metropolitan regions.

6 MR. KOYAMA: This project is going to analyze the
7 major metropolitan regions of the state to estimate what
8 vehicle miles traveled and greenhouse gas emission
9 reductions we can get with aggressive land use strategies
10 such as Smart Growth transit-oriented development,
11 increased community density, and other types of policies.
12 It will differentiate policy options that will allow state
13 and local agencies to more effectively pursue land-use
14 strategies to further reduce VMT and greenhouse gases. We
15 also hope to get inputs that would be valuable to the
16 Energy Commission in their Transportation and Fuel Demand
17 modeling activities. We expect to get four papers -- four
18 research papers -- that will be available to us to inform
19 policy and regulations on land-use and improve our
20 analytical capabilities in this area. We request approval
21 of this project.

22 COMMISSIONER BOYD: Let me just say I was
23 extremely gratified to see this proposal and to see that we
24 are beginning to move to repair the very damaged weak third
25 leg of our transportation energy stool, you know, when this

1 is not technology, it is not fuels, this is actually
2 getting into the VMT reduction land-use and transportation
3 planning and the integration thereof, discussions of mass
4 transit, and even behavior change. So I am pleased to see
5 this, and this is something that I know Commissioner
6 Douglas and I hope to see the Transportation Committee
7 paying much more attention to in the future now that we
8 have got 118 rolling, although it seemed to be limping a
9 little bit thanks to our Legislature. But nonetheless,
10 anyway, I move approval.

11 COMMISSIONER DOUGLAS: Thank you. And I would
12 just like to add that I was also very pleased to see this
13 contract. I am very pleased to see the PIER Program
14 looking harder in this direction. I think the Energy
15 Commission has a natural role in helping strengthen the
16 analytical connection between land-use planning decisions
17 and energy use. This is an area that clearly requires more
18 work, and this is an area where research can make
19 tremendous progress in helping advance our state's policy
20 agenda through SB 375, AB 32, and other measures. So thank
21 you for bringing this item to us. And we have a motion.
22 Do we have a second?

23 COMMISSIONER ROSENFELD: Second.

24 COMMISSIONER DOUGLAS: All in favor?

25 (Ayes.)

1 This item passes. Thank you.

2 MR. KOYAMA: Thank you.

3 COMMISSIONER DOUGLAS: Item 11. Scripps
4 Institution of Oceanography. Possible approval of Contract
5 500-08-046 for \$199,077 with Scripps Institution of
6 Oceanography to develop an instrument to measure and
7 analyze the chemical composition of aerosols that form
8 water droplets in the atmosphere. Mr. Franco.

9 MR. FRANCO: Good morning, Commissioners. My
10 name is Guido Franco. I am associated with the Public
11 Interest interested in such a program here on the
12 Commission. I am here to ask you for approval of an
13 interagency agreement with the Scripps Institution of
14 Oceanography, in San Diego, to build, design, and test a
15 new instrument that will be able to measure some key
16 chemical components in aerosols which are small particles
17 in the air. The instrument will report and measure
18 concentrations every 20 minutes. Now, this work is very
19 important because the behavior of aerosols and their
20 interaction with clouds are a major source of uncertainty,
21 the biggest source of uncertainty in the regional climate
22 and also in global climate change science. The development
23 of these instruments and the future employment of these
24 instruments will allow us to, at the end, improve our
25 original fuel demand models and to more realistically

1 project how climate may change in the future. With that,
2 I am ready to answer any questions you may have.

3 COMMISSIONER DOUGLAS: There are also a number of
4 people who would like to speak on this item. We can ask
5 questions now, or wait until after public comment.

6 COMMISSIONER BOYD: I will hold for public
7 comment.

8 COMMISSIONER DOUGLAS: Very good. So I have got
9 a number of blue cards. If anyone in the audience who
10 wishes to speak to this item has not filled out a blue
11 card, please do so. The first card I have is from Thomas
12 Slaight.

13 MR. SLAIGHT: Slaight.

14 COMMISSIONER DOUGLAS: Slaight, representing
15 SOLT.

16 MR. SLAIGHT: I am just representing myself.

17 COMMISSIONER DOUGLAS: Oh, you are representing
18 yourself. Very well. Welcome, and thank you for coming.

19 MR. SLAIGHT: Thank you. I was so gratified and
20 glad to read that notice on the agenda about studying
21 aerosols. I think it is extremely important. I have been
22 researching on my own for seven years and some things go my
23 attention. I have got to have my notes, they were going to
24 be -- I want to deliberately be brief in this informal
25 because I just saw that and I put a few thoughts together

1 here because I think -- and I will get right to the point
2 -- I think major operations have been taking place in our
3 sky, all over the United States, in California, and it could
4 be studied as part of this. I do not preach, I do not tell
5 anybody that they should believe me, because I am saying --
6 I am just telling you what I think, and I have done
7 extensive video documentation, extensive still photography
8 documentation, and I am troubled when I look up and I see
9 things and I think, even from a distance, you can tell. I
10 do not know if you can see from there, but you can have
11 these pictures. There is a little tiny line from a jet
12 vapor trail, and I have been seeing these for most my life,
13 it is nothing new to me, but when I look up and I see
14 something that looks like that, and it grows, and it just
15 gets bigger and bigger and bigger, and this thing went from
16 horizon to horizon, that does not look like a vapor trail
17 to me. I do not know what it is. I do not claim to know
18 what it is. Pretty soon our sky is full of these in Lake
19 County. Our skies never had these. I had a darkroom off
20 and on since I was about 14 or 15-years-old. My pictures
21 in the past never had anything like this. I was told,
22 well, there are more jets. Well, there are not more, we
23 did not used to have this. And, again, you can have these
24 pictures, but I will do my best just to briefly show you.
25 We are seeing things like this. This is all coming out of

1 airplanes. What is it? I do not know, but it does not
2 look anything like the vapor trails from the past. Maybe I
3 should just get right to the point. I have a couple more
4 to show and then I will move on. All different kind of
5 trails. What is that? I do not know what it is. Things
6 that look like that. What is it? I do not know. I would
7 like to know. I think we should know. Strange things like
8 that. What is it? I do not know. I have never seen
9 anything like that before. And I made a video and I
10 brought it down quite -- I think about 50 copies with me,
11 it is only 20 minutes, it is just some of the things that I
12 have documented, that I do not know what they are and I
13 would like to find out some of the possibilities. And I do
14 not doubt that there are plenty of people that already know
15 what I am talking about, that you do not have any of this
16 information. In 1992, this copyright *Policy Implications*
17 *for Greenhouse Warming* from the National Academy of Science
18 has a whole chapter on Geo Engineering and talks about, for
19 example, the millions of tons of aluminum oxide in the
20 stratosphere to create a sunscreen to mitigate global
21 warming. That is one of the many possibilities. There are
22 possibilities -- military possibilities. And, again, I am
23 not assuming I am the only one in this room that has this
24 information, it is easy to find. Weather as a forest
25 multiplier, owning the weather in 2025, and they talk about

1 using -- and they put a disclaimer in there and you can
2 read it if you want to see exactly what it says. This has
3 to do -- these are just some ideas, just some
4 possibilities. For Smart materials and using Smart
5 materials to change the weather. Well, if you can change
6 the weather, you can control the world, you can take water
7 and move it from one place to another, cause drought, cause
8 floods, and so these are just some of the possibilities.
9 When people think these ideas are ridiculous, but they are
10 not ridiculous, they are easy to find and they are put out
11 by authorities. And probably a lot of you are familiar
12 with this idea that Obama, according to a news report, the
13 guy's name was (John) Holdren, I think, works with Obama,
14 and they were talking about getting a little more serious
15 about the possibilities for Geo Engineering. But it has
16 been on the books, anyways, it has always been on the
17 table, so to speak. And there are a lot of articles that
18 came out in 2007 that had to do with what they called the
19 Twilight Zone Clouds, and they had different names for them
20 -- I brought one article with me -- because they are
21 finding the climate models are missing -- there are some
22 things missing in there, and I am wondering what is coming
23 out of these airplanes. That is my guess, I do not know.
24 And NASA talks about Global Dimming. Global Dimming is
25 apparently real. There is a lot of haze, but I do not

1 particularly need sunglasses, like sunglasses are optional
2 because you can see the sun is not that bright because of
3 whatever is in the sky, and you can see what comes out of
4 these airplanes spreads out, and a lot of times you will
5 notice the sky is, well, probably not so much in
6 Sacramento. In Lake County, it is supposedly the cleanest
7 air in the country, and yet in America, I think we can see
8 all the stuff going on there, that they do not seem to want
9 to talk about, because I talked to them about it, and they
10 do not seem to be interested. And I think I know why,
11 because they do not want to talk about it, because they
12 have a reputation for clean air. I am getting a little off
13 track here, but a few last thoughts. We are told, "Well,
14 what's coming out of these airplanes is like what comes out
15 of your car on a cold morning." Well, what comes out of my
16 car on a cold morning does not look like a trail 50 miles
17 long, that lingers and spreads. Then we are told by others
18 it is more clean than it used to be. Well, there is not
19 more of this than there used to be. We did not used to
20 have this. And another important point from my research,
21 and I have documented extensively, I have never seen one
22 plane that I could identify as a commercial plane. The
23 ones that I have seen all appear to be unmarked, they fly
24 every which way, the normal flight path, over Lake -- north
25 and south, as nearly as I can tell, they do not have any

1 passenger windows and, again, you can take a look at this
2 video because I have videos for all of you, and draw your
3 own conclusions. But the point being, if they are going to
4 study aerosols, they need to know what to look for. And I
5 think there are a lot of new possibilities besides the ones
6 that they maybe originally had in mind. So thank you so
7 much. This is wonderful.

8 COMMISSIONER DOUGLAS: Well, thank you. Thank
9 you for coming here all the way from Lake County. The next
10 blue card I have is from Mauro Martins from the Northern
11 California Citizens for Clean Air.

12 MR. MARTINS: Good morning. If you have a pen, I
13 would like you to write down a couple things. American
14 Skywatch.com is a website that we put out up there. And on
15 that website, there is a U.S. Patent No. 5003186 filed
16 April 1990 from Hughes Aircraft and it is called the
17 Stratospheric Seeding for Reduction of Global Warming. And
18 similar to what Tom was talking about, this is straight off
19 the Government's website for that patent: "Number two,
20 said material comprises one or more of the oxides in
21 metals. Number three, said material compromises aluminum
22 oxide." Then they go on to say that the particle seeding
23 should be done at an altitude or on the order of 10
24 kilometers. So the particles may be seeded by dispersal
25 from seeding aircraft. Okay, right here is a lab test from

1 my local lab, a state certified lab, in fact, they do the
2 state's reports for water tests -- Basic Lab. And this is
3 taken by our after-school program, the children did this
4 without any adults involved, except for the sterilization
5 of the apparatus it would hold. One rainfall, one day, one
6 rainfall, and it was 264 parts of aluminum, which is
7 approximately one-half of what should accumulate over an
8 entire year. That was one rainfall. And we have 45 other
9 tests from Northern California Citizens for Clean Air that
10 we took to our Supervisors and they just came out with the
11 statement, "Oh, God, it is going to cost us a million
12 dollars to do these tests." That is what Ross Mole
13 (phonetic) of our Water Board told the Supervisors, and
14 convinced them not to test. Well, we test for \$21.00. So
15 when we bring our Supervisors 45 tests that are toxic --
16 and let me just show you another two tests -- the Pitt
17 River arm of Lake Shasta tested at 4,610,000 ppb of
18 aluminum. It was 4,600 times higher than the EPA maximum
19 containment level. Our Executive Director of our clinic,
20 no. 2 solvent clinic in the state, which is Hill Country
21 Clinic, Lynn Dora, tested her pond. It comes from a
22 spring. The spring was only a few feet away from the pond.
23 The spring tested negative -- zero aluminum. The pond is
24 50 years old. The pond tests 375,000 ug/l, which is 375
25 times the maximum containment load. So what you guys want

1 to do with this aerosol test equipment is excellent. We
2 have been waiting for this. We have been spending tens of
3 thousands of dollars doing the research, and screaming and
4 yelling, and not getting anywhere. So we would love for
5 you to find out why we are not getting enough rain up there
6 and why the power plants are not able to spin the turbines
7 the way they should be. I am Hydro Electric, myself, so I
8 know when the water is below normal. And we have always
9 suspected that our children are coughing because our airs
10 are full of this all day long, and they tell us, "Hey, it's
11 the atmospheric conditions." I called the airport in
12 Redding and said, you know, look outside, I have gotten the
13 guys to go outside and they go, "Oh, that's just north-
14 south traffic." But I used to remember the trails
15 disappearing. And we even have video on American Sky
16 Watch.com, you can go click on it, it is only a 900
17 kilobyte little video clips, of jets starting and stopping
18 the spraying. So if it is just the atmospheric conditions,
19 how does a jet clean out its thrusters like a paint man
20 cleans his nozzle at the end of the day? Not just once,
21 two or three times you see it. We have the footage --
22 right over the City of Redding. We have footage of them
23 flying in, starting the spraying, leaving the city limits,
24 stopping the spraying, coming back around and doing it
25 again. This goes on all day long. So we are not crazy,

1 but we are very patient and we really really hope that you
2 pass that. Thank you.

3 COMMISSIONER DOUGLAS: Thank you. The next blue
4 card I have is for Rose Casabear, Siskiyou County resident.
5 And I would like to ask -- we have, I think, three more
6 speakers on this topic. If you could please try to keep
7 comments to about three minutes. Thank you.

8 MS. TAYLOR: Hi. I appreciate you giving us the
9 time to speak on this. My name is Rose Taylor. My partner
10 is Dave Casebear, it is just I had my friend sign me in
11 because I was a little late. What Mauro said is very true.
12 He is in Shasta County. I am up in Siskiyou County. And I
13 moved there about five and a half years ago, thinking I
14 wanted to get out of Sacramento. I have been a Sacramento
15 for many years. I was tired of the smog. We had an
16 opportunity, we jumped at it, leaped at it. And I had
17 heard about the aluminum oxide, if you want to call it
18 chem. trails, or aerosol sprays, or weather modification,
19 or whatever they want to title this; I had heard about it
20 here, did not really want to -- I did not have time to -- I
21 was busy working and did not have time to consider it, but
22 once I got to Mount Shasta, I would wake up in the morning
23 in my sun room and would see a beautiful blue day, and I
24 would see these jets laying lines across the sky, and they
25 would not go away and I started thinking, "Wow, this is

1 what they were talking about on the late night radio."
2 But it is right in my face, so I started investigating,
3 connected with this group down in Shasta County. We
4 started taking dozens of tests. I have here in front of me
5 -- we have a retired state forest biologist and he has been
6 studying it, too, out of Mount Shasta, and he wanted me to
7 submit this to you. His name is Francis Mengels and he has
8 his opinion on what is going on. But what I wanted to do
9 is read pretty quickly on what we submitted -- hold on, it
10 is right here -- okay, we submitted an opinion piece which
11 was published in our local paper, and I think this might
12 help, too, because it goes into the lab tests. I mean, it
13 is facts, folks, and it is happening. It says: "Last
14 year, citizens from Siskiyou and Shasta Counties submitted
15 water test results to their city and county officials.
16 These tests came from snow-pack, rain, and water samples
17 taken in both counties. Basic Labs, a state certified lab
18 in Redding, performed the tests. The citizens urged the
19 local governments to conduct their own water tests, costing
20 no more than \$100 for each county. These tests produced
21 similar results that the citizens were getting. Then the
22 citizens expected the proper agencies to be contacted to
23 investigate the off-the-chart levels of aluminum showing up
24 in the county's surface waters. Of the three dozen tests
25 submitted, all showed near or over the maximum contaminant

1 level for aluminum in the drinking water for the State of
2 California. The following are some of the highest samples
3 documented. Snow-pack sample at Ski Bowl at Mt. Shasta
4 tested for aluminum at 61,000 ugl -- that is 61 times the
5 maximum contaminant level for the State of California.
6 After one and a half years of exposure to the atmosphere, a
7 Shasta County pond, a rubber lined pond, tested for
8 aluminum at 375,000 ugl, which is 375 times the maximum
9 contaminant level. This came as a surprise to the property
10 owner, who is here, by the way, because the pond tested
11 zero for aluminum when it was first built, and it is a
12 filtered location, forested hilltop, away from a highway or
13 industry. When the hydro geologist was shown the test, he
14 stated, "Unless you live near an Alcoa Aluminum plant,
15 there is no way these types of metals, barium has also been
16 detected, should be showing up in your pond rainwater
17 samples at any quantity." And then we talked about the
18 Pitt River Sample. "Aluminum and barium were considered a
19 highly toxic to humans, animals and plants, the
20 accumulation factor of these metals should not be
21 discounted or ignored. We do know about aluminum in
22 California waters. Rosalyn Peterson, co-founder of
23 Agriculture Defense Coalition, and former USDA Agriculture
24 Crop Loss Adjuster, researched California State Department
25 of Health Drinking Water Data between 1984 and 2008. She

1 has some compelling questions for our local and state
2 officials. Barium, magnesium, lead, manganese, aluminum,
3 iron sodium, and specific conductants, the ability of water
4 to conduct a charge, were being found under unusual
5 circumstances in our drinking water supplies. Unusual
6 spikes were occurring in almost all drinking water sources
7 in Mendocino County and in other counties throughout the
8 State of California. Prior to 1990, these spikes were not
9 evident in many drinking water test results. Most test
10 results tested at zero. Test results do show that, in non-
11 spike years, these contaminants were not found in most
12 water sources. Why? And why are almost every single
13 public drinking water source showing some of this spike
14 patterns? The California Air Resources Board Statewide
15 Summary for iron, aluminum, iron and zinc, manganese, and
16 barium also show positive air test results between 1989 and
17 2001. Our water test spikes appear to correlate strongly
18 with California Air Quality Test Results. Why? We believe
19 there is enough evidence...," I am almost done, "...to warrant
20 an immediate investigation. Our federal, state and county
21 water and air quality officials have a legal and a moral
22 responsibility to locate the sources of these contaminants
23 and protect the public welfare. Until more people start to
24 care, begin to speak up, and put the necessary pressure
25 upon local and state officials, our children, our loved

1 ones, our animals, our ecosystems will continue to be
2 exposed to dangerously high levels of aluminum and other
3 toxic contaminants. We encourage everyone to do their own
4 research and suggest the following links as a good place to
5 start. California Sky Watch and American Skywatch." And I
6 have -- I am pretty much done. I just wanted you to know
7 that I have included a lot of evidence, even Ashland is
8 talking about this -- these skies are not normal and they
9 need to be investigated, and we need to stop this. And we
10 all need to do it because we are all breathing in these
11 fine aluminum particulates. Thank you very much.

12 COMMISSIONER DOUGLAS: Thank you. We have three
13 cards left. I would like to ask the speakers, please --

14 COMMISSIONER ROSENFELD: Madam Chair?

15 COMMISSIONER DOUGLAS: Please.

16 COMMISSIONER ROSENFELD: I wonder, I myself am
17 pretty much at sea. I do not understand what aluminum has
18 to do with jet engines and where it is all coming from, so
19 I am wondering if you could ask either Franco a couple of
20 comments to help me understand what is going on.

21 COMMISSIONER DOUGLAS: I was absolutely planning
22 on doing that. Why don't we do that right now, then. Mr.
23 Franco, could you please address the issue of how the
24 research contract in question may or may not touch on the
25 concerns of that --

1 MR. FRANCO: Well, these projects is to
2 [inaudible] where this type of instrument would be
3 deployed. Now, this is a very small instrument and weighs,
4 at most, 1 kilograms, 2.2 pounds, and it is a very nice
5 instrument, but it will be able to measure just only key
6 chemical component like nitrates, sulfates, some organics
7 and so my understanding is it will not be measure aluminum,
8 however, there are other instruments that we hope to deploy
9 in the future that are larger instruments, that would be
10 able to measure, you know, depending on the composition, in
11 a much higher detail. I mean, if we are allowed to
12 continue the project, we hope to bring to you at a point in
13 the future and we will have measurements of the chemical
14 composition of the particles, and all the research probes
15 that are funded by the Energy Commission, using public
16 funds, and that will be available. Now, with respect to
17 the aluminum, I mean, there are some natural sources of
18 aluminum, some soils, for example, has aluminum, and in
19 some cases it is a tracer of dust in the air, so I cannot
20 speculate at this point about the high levels that are
21 reported by these concerned citizens.

22 COMMISSIONER DOUGLAS: But now, this is a -- as I
23 remember, one of a series of efforts that we have been
24 making to better understand the sources and chemical
25 composition of contaminants, especially aerosols, but

1 others as well in the atmosphere, so that we are better
2 able, as policy makers, to understand where various kinds
3 of pollution are coming from and how we might mitigate or
4 eliminate some of the sources. Is that correct?

5 MR. FRANCO: Yes.

6 COMMISSIONER DOUGLAS: Thank you. Other
7 questions from the -- ?

8 COMMISSIONER BOYD: Well, I was just going to
9 comment, I think this agency's emphasis is primarily on
10 those components, I will call them, for compounds that
11 contribute to, or are part of the mystery associated with,
12 climate change. I spent 20 years of my life in the air
13 quality business and a lot of this, I would expect to hear
14 debated in front of Air Quality officials with regard to
15 them taking airborne samples, and also hearing the concerns
16 of citizens with regard to what they are finding in their
17 waters, I would hope that both Regional Water Quality
18 Control Board and/or public health officials who have
19 responsibility for drinking water would also be agencies
20 who would respond to the concerns these folks have. I hope
21 we have not built up an expectation that the research work
22 that Mr. Franco is describing to us is going to shed much
23 light on the questions these folks are raising. I frankly
24 do not know, but based on what Guido just said, it does not
25 sound like, early on, we are going to be looking for, or

1 even have the capability of looking for -- in terms of
2 airborne particles, aluminum or aluminum oxide, as these
3 folks have referenced. But, anyway, that is the depth of
4 my ability to speak to the point at the moment.

5 COMMISSIONER ROSENFELD: Yeah, I would just like
6 to add to these folks who are pointing out what seems to be
7 a real problem, that what Jim Boyd said, that you folks
8 should be making noise, but I am afraid we are not equipped
9 to go into what seems to be aluminum, some connection with
10 aluminum in jet engines, and I hope you will not assume
11 that [inaudible], but it looks like there should be a
12 serious investigation. Guido, do you know anything about
13 that aluminum in jet engines?

14 MR. FRANCO: No. I will investigate that, but I
15 do not know.

16 COMMISSIONER ROSENFELD: And that shows how fully
17 equipped we are to help you solve your problems.

18 COMMISSIONER DOUGLAS: Commissioner Levin.

19 COMMISSIONER LEVIN: I was going to make a
20 similar comment. We do not want to appear unsympathetic or
21 to minimize the importance of the issues you are raising, I
22 have had the same concern over the last years and, to be
23 honest, this contract and the previous one, we have to be
24 careful that these are electricity research funds, and
25 particularly in this ARRA, of extremely difficult state

1 budgets, we have to be certain that we are spending money
2 in the way that the Legislature intended. And as important
3 as these issues are, or may be, I hope you will take them
4 to the Air Board and the State Regional Water Boards. I do
5 not know if they qualify as electricity research issues, or
6 even, more broadly, climate change; they may, but I have
7 not heard the link yet. But I do not think any of us want
8 to appear or be dismissive of them, that is not at all the
9 issue, but we have a particular legislative focus that we
10 need to stay within and it does not sound like the air
11 quality issues are necessarily part of that focus. But I
12 do encourage you to talk to other state agencies like the
13 Regional Air and Water Boards.

14 COMMISSIONER DOUGLAS: Well, I think there is no
15 question that the contract at hand, in helping us better
16 understand sources of pollution effects, ultimately, of
17 aerosols is a huge help in the state's climate mitigation
18 strategy and has implications for the energy sector and
19 energy policy. You know, I think Commissioner Levin raises
20 the question of how far down this path might we go in the
21 future, and when do you lose that link, and that is an
22 important question that is not necessarily before us today.
23 But we are having a lot of discussion and we have three
24 more blue cards, and we have the Public Advisor standing at
25 the microphone.

1 MS. MILLER: I was just going to say that there
2 is another member in the audience here that is anxious to
3 put the connections between these dots, so he has just made
4 himself known to me and he might be able to offer some
5 further clarity on this matter. I just wanted to give you
6 that information.

7 COMMISSIONER DOUGLAS: Thank you. We will call
8 him up when we get to the last blue card. Can I ask
9 speakers to please try to avoid duplicating comments that
10 have already been made to us. But please come forward.
11 Rocky Compton, Shasta County.

12 MR. COMPTON: I would like to relinquish my time
13 to Dane Wigington, or withhold my comments until the public
14 comments.

15 COMMISSIONER DOUGLAS: Okay, please. You would
16 like to relinquish to who, sorry?

17 MR. COMPTON: Dane Wigington.

18 COMMISSIONER DOUGLAS: Dane, please come forward.

19 MR. WIGINGTON: Hello, Commissioners. My name is
20 Dane Wigington. I am grateful for your time. I know these
21 items may seem unrelated; they are directly related. There
22 are articles presently, I have a background in solar power,
23 I worked for Bechtel Power Corporation. My home is on the
24 cover of the world's largest renewable energy magazine,
25 that is what started my study in this issue, when I began

1 to lose 30, 40, 50 percent of my solar uptake from
2 whatever the aircraft were emitting, that started my study
3 into this issue. I began to test the particulates coming
4 from the sky were aluminum particulates. Those
5 particulates have escalated in the last three years --
6 50,000 percent. We are not talking about slight increases
7 that could be ground-related. Precipitation from the sky
8 is not ground related. These particulates are not being
9 found because they are not being looked for. Air Quality
10 uses a testing procedure that stops at 45 microns; these
11 particulates are sub-micron size. I have paid thousands of
12 dollars of my own money testing this at a local lab. I am
13 also on hydro power. There are articles currently out from
14 NASA and NOAA directly relating particulates in heavy
15 quantities diminishing and dispersing rainfall. That is
16 the purpose of this meeting. And these particulates -- we
17 have seen in the last three years a lessening of
18 precipitation -- I am a climate researcher, have been for
19 10 years, and I have lectured on that subject to Chico
20 State and Shasta College. In the last three years, since
21 the metal counts went up, at times up to 50,000 percent.
22 The precipitation in my region has gone from 99 inches from
23 our baseline of 7 parts per billion of aluminum
24 particulates, as that escalated, our precipitation dropped
25 in '06-'06 to 45 inches, less than half, the following year

1 it continued to diminish, '07-'08 to 44 inches, '08-'09,
2 40 inches. As the metal went up, the rainfall went down --
3 directly related correlation. I also have done lightning
4 suppression work for Bechtel Power. Again, the lightning
5 event of last June, also relating to atmospheric
6 conductivity, a phenomenon that would be directly related
7 to the aluminum particulates. And with the rainfall, we
8 have seen and measured the approaching storm fronts where a
9 massive amount of aerial activity is seen with identical
10 atmospheric conditions, and rainfall that is predicted over
11 and over and over to happen on a certain day either does
12 not happen, comes late, or comes very light. This has been
13 a phenomenon only witnessed in the last three years. There
14 are meteorologists posting on this issue relating to
15 rainfall. The aluminum content in the streams with runoff,
16 Fish & Game in our area, because of the declining fish
17 populations and amphibious populations, they are beginning
18 to study their aluminum counts, as well. But these counts
19 have not been measured because they simply have not been
20 looked for. It is the equivalent to trying to filter the
21 air with a chain link fence, it is impossible to detect
22 these particulates when they are not being looked for. And
23 again, I have 2,000 acres on the east side of Lake Shasta.
24 air traffic is very audible in my area. As these storm
25 fronts approach, there is a complete obscuration of the

1 sky, there is not a natural strata of cirrus amongst it,
2 it is 100 percent from aircraft traffic that is about ten-
3 fold what the normal commercial traffic is on those days,
4 during those events, and the precipitation simply does not
5 fall -- again and again and again. Local Meteorologists
6 predict precipitation, this air traffic increases
7 exponentially, and the precipitation does not fall. And I
8 cite multiple patents that describe exactly what we see,
9 such as a patent assigned to Hughes Aircraft Stratospheric
10 [inaudible] Seeding for Reduction of Global Warming. It
11 describes the expressed goal of exactly what we see above
12 us, with the first ingredient being aluminum oxide. And I
13 can tell you with no ambiguity, I state again, as the metal
14 counts have gone up, aluminum, barium, strontium,
15 manganese, all metals named in these patents, as those
16 metal counts have gone up, the precipitation has gone down,
17 period. And the correlation, again, has been so direct and
18 tied so directly to the patents, and now is fortified with
19 articles from NASA, NOAA, and other agencies -- again,
20 *Scientific American, New Scientist, Popular Scientist,*
21 articles are plentiful to describe the impact of the
22 sulfate aerosols forming condensation nuclei that inhibits
23 the droplets from -- I am sure Mr. Franco could more
24 elaborate on that, but it would migrate precipitation from
25 one place to another where it may fall in a deluge -- the

1 last three years. We have seen record or near record
2 drought in California, and record flooding in the Midwest.
3 It is exactly the scenario one would expect from Geo
4 Engineering and the subject, to me, the elephant in the
5 room at this point, there is so much data on this subject,
6 but directly relating it to what the Commission is here
7 for, a lack of precipitation. It has been profoundly
8 obvious to us there that the connection seems undeniable,
9 as that metal count has gone up, as our skies have been
10 further obscured, the precipitation has dropped
11 dramatically and that is the connection with all this.
12 Yes, there are other ramifications from these programs, but
13 directly connecting it to the purpose of the Commission,
14 that correlation is undeniable, and we are talking about
15 levels of particulates that are astronomically high. And
16 if they are not being looked for, certainly they will not
17 be found, but my final statement would be that these
18 patents, of which there are several dozen describing
19 exactly what we see above us, and the ingredients are
20 exactly what is coming up on the ground. And this is only
21 one aspect of their renewable energy diminishment, there
22 are articles now available from NOAA and several other
23 agencies about the solar diminishment, as well, which I am
24 sure would concern the Commission because these are
25 scatterers of light rays, and they exponentially diminish

1 the ability for solar panels, especially parabolic panels,
2 to function --

3 COMMISSIONER DOUGLAS: Excuse me, let me make
4 sure that I understand what you are saying so that we can
5 get through this item and the rest of the public comment.
6 What I hear you saying is that there is geo engineering
7 work, potentially, underway right now that is not
8 officially known, or it has not been officially announced,
9 but that you have observed a greater number of airplanes
10 flying over Northern California, emitting significantly
11 more pollutants -- aerosols -- you believe, than in past
12 years, and that has correlated with changes in the weather
13 and with increased deposition of pollutants in the area?

14 MR. WIGINGTON: I can tell you this without
15 ambiguity. The patents describe what we see, the express
16 goal of what we see happening, and the aluminum counts have
17 exponentially shot through the roof, up to a 50,000 percent
18 increase in three years from a former baseline that was
19 already high because we saw some of this activity, but in
20 the last three years of this activity above us. And,
21 again, I can directly measure that with my UV meters and my
22 solar uptake, and this is my background. It has dropped my
23 solar uptake capabilities on given days 50 percent, there
24 is not a natural cirrus stratus or any other type of cloud
25 in the sky, and during those three years when that metal

1 count has shot through the roof, the precipitation has
2 dropped through the basement, period. And that fact, I can
3 state -- you could take the 50-year chain smoker that dies
4 with lung cancer and you cannot say that is what killed
5 him; but I can tell you with, again, absolute certainty,
6 the metal is there, it is coming from the sky, the tests --
7 we have four dozen plus tests -- it is not only happening
8 here, it is a much larger scale scenario, but as the metal
9 has gone up, the rain has gone down, period. And that --

10 COMMISSIONER DOUGLAS: Thank you. I appreciate
11 everybody coming here to express your concerns. I hope
12 that our research, if not now, in the future leads to
13 additional work that helps track this issue, and I also
14 want to join Commissioner Boyd in suggesting that you raise
15 these concerns with the local Regional Water Quality
16 Control Boards and the Air Board because I think it will be
17 a number of years before the research trajectory that we
18 are on leads to the kind of monitoring that might help you
19 with this issue.

20 MR. WIGINGTON: I would respectfully say that I
21 am sorely disappointed because there is a mountain of metal
22 falling on us that no one, virtually no one, is testing
23 for, for reasons I cannot express, and the damage being
24 done to the environment that Fish & Game, USDA and CDF
25 would all acknowledge in our area is quite horrific. Every

1 day matters, and I would respectfully express my
2 disappointment that such a mountain of contaminant would be
3 completely overlooked for a list of reasons too long to
4 state, and that such a time frame would be allowed to
5 elapse.

6 COMMISSIONER BOYD: Well, I think -- you speak.

7 COMMISSIONER ROSENFELD: Look, there is a real
8 problem here. You guys have a problem. You are talking to
9 the wrong Board. Who have you talked to who is in the
10 position to do something about this? Is it a California
11 agency? Is it the military? Who do you think is
12 [inaudible] out there?

13 MR. WIGINGTON: Again, I do not want to speculate
14 on things that I cannot prove. I can prove this. There is
15 a massive amount of metal in our air that was not there --

16 COMMISSIONER ROSENFELD: Well, you just said
17 that. I understand that.

18 MR. WIGINGTON: Okay. EPA does not care. We
19 have a letter back from the EPA and, again, I am here
20 because the purpose of this Commission's meeting was
21 diminished rainfall, and I am here to state that there are
22 articles today from NASA and NOAA that state clearly the
23 excessive particulates diminish and disperse rainfall.
24 Period. I mean, some of those studies have already been
25 done. But nobody seems willing to look for aluminum, which

1 is there in horrific quantities. And I want to stick to
2 the purpose of the subject of the Commission because that
3 is why you are here; you are not here to address water
4 issues or air issues, or anything else, you are here to
5 address hydrology issues. And that is a huge correlated
6 connection here, that articles already state from major
7 entities like NASA and NOAA, so --

8 COMMISSIONER LEVIN: Sir, I am sorry to
9 interrupt, but in fairness to the other speakers, I am
10 concerned with the amount of time.

11 MR. WIGINGTON: I was only trying to answer the
12 Commissioner's question.

13 COMMISSIONER LEVIN: What I would suggest to the
14 other Commissioners is, whether staff could consult with
15 our sister agencies, I think a number of us feel are maybe
16 better suited to take up this issue, and sooner, rather
17 than later. We do not have the expertise in this area. So
18 I do not think you need to keep repeating your concerns so
19 much as I think we need to have staff that have more
20 expertise, but not necessarily the right expertise, consult
21 with the Air Board and Water Board, and decide with them
22 what the right course of action is. But I am not sure we
23 can do more than that today.

24 MR. WIGINGTON: I understand. I was only here in
25 relation to hydrology and rain and --

1 COMMISSIONER LEVIN: Sir, we appreciate that.
2 We need to give other speakers a chance and I think that is
3 probably in most people's [inaudible] at this point.

4 COMMISSIONER DOUGLAS: I have two blue cards,
5 both of the next speakers have handouts connected with
6 them, which we will distribute behind the dais. I would
7 like to ask you to keep your comments brief. We have heard
8 a lot on this topic today. The next speaker is Deborah J.
9 Whitman, President of Environmental Voices.

10 MS. WHITMAN: Hello. I would like to thank the
11 Commissioners for allowing us to make a presentation. And
12 I would first like to start to say that I do encourage you
13 to approve this contract, and I also encourage you to
14 consider an RFP to try to develop some equipment that would
15 determine how much aluminum, barium, and strontium and
16 other chemicals that are in our air, and it does tie in
17 directly with what Dane talks about. So I just want to say
18 that I have contacted the Air Resources Board; since 2006,
19 I have probably spoken of this issue. I cannot get a call
20 back. I cannot get a meeting or anything. I have sent
21 letters with Air Resources Board, also Sacramento
22 Metropolitan Air Quality Board, Davis, my non-profits in
23 Davis, their action -- Climate Action Committee, I cannot
24 seem to get anybody to look at this. They have also
25 contacted their local people on this issue. I will not go

1 -- touch on some of the things that they already have, but
2 the reason I got involved with this is because I suffer
3 from multiple chemical sensitivities and I was going in to
4 emergency with symptoms consistent to these chemicals,
5 especially the sulfer hexafluoride, which is a greenhouse
6 gas, as well. I know that there are chemicals around these
7 aerosol sprayings, and I know these people came from
8 Northern California and talked about it, but it goes on
9 almost daily all over California, including Sacramento. I
10 am a published and award-winning photographer and
11 videographer, I have been videotaping these since 2004 when
12 these came here in Sacramento at Rancho Cordova, Davis,
13 Roseville, almost every day I would go from Davis to
14 Roseville and I videotaped massive aerosol spraying. We
15 need to get to the bottom of this. People are sick,
16 animals are sick, trees are dying. We just did a lab test
17 at U.C. Davis for aluminum and titanium and it came
18 positive in the trees there, and also in Tahoe. They are
19 forming in particular clouds over Mount Shasta and also
20 Tahoe from massive aerosol spraying. They have equipment
21 attached to jet planes that are putting these particulates
22 out in the air. So we really need to look at it. I hope
23 you fill out some kind of an RFP and tie it in with what
24 you are doing with energy because I think Dane has
25 indicated that there is a tie-in there. And I also

1 produced a documentary film called *Sky Lines* which can be
2 seen on YouTube that will talk about how it is affecting
3 our trees and our agriculture, as well. So I encourage you
4 to approve this contract and I encourage you to look at
5 developing some other type of a contract that will test for
6 these particulates and see how it relates to energy. Thank
7 you very much.

8 COMMISSIONER DOUGLAS: Thank you very much. I
9 just realized the last card I have is from Dane Wigington,
10 so I believe we have heard from him. We do have a number
11 of handouts that you provided, and we will pass them out.
12 I appreciate everybody coming this distance to come speak
13 at the Energy Commission and we heard your concerns. We
14 are not the body that would go out in the field and test
15 levels of aluminum at the local level; that really does
16 have to be Water Quality Control Board, their resource
17 board, or their other agencies. But as Commissioner Levin
18 suggested, we will ask staff to move forward with our
19 contacts at ARB and see what they are able to learn. I
20 heard strong public support for this contract, even if it
21 is not necessarily everything the public thought it might
22 be, at least not right away. Is there other comments or
23 questions from Commissioners?

24 COMMISSIONER BOYD: Well, I do not want to pursue
25 this much longer, and maybe I have not read any of the

1 materials, but I have been keeping track of the dominant
2 discussion on aluminum oxide, I have heard barium,
3 strontium, sulfur hexafluoride, titanium, hopefully this
4 literature contains references to all the materials that
5 have been found. The part I am struggling with is, I
6 guess, the allegation that there is purposeful spraying of
7 this in the atmosphere instead of it being, perhaps, a
8 consequence of the travels of the commercial and the
9 military aircraft through our atmosphere. And we could
10 never come up with an answer to that question of
11 purposeful, that there is a conspiracy of some kind to
12 purposefully spray this into the atmosphere. I would be
13 just personally curious about whether it is a consequence
14 of the normal operation of jet aircraft. But you have
15 certainly peaked the curiosity of a lot of us, and I know
16 we will not let it just lie there. What you have heard is
17 that this contract is so much more limited in scope that it
18 is not likely to provide you any answers to the questions
19 that you pursue, and I appreciate the gentleman's comment
20 that -- and he is correct -- that we as an agency worry
21 about how much rainfall there is for hydroelectric
22 purposes, while our water friends down the street worry
23 about the quantities of water that are deposited in
24 California for water supply reasons, and our other
25 government friends worry about the qualities of surface and

1 ground waters, and yet another agency worries about the
2 quality of drinking waters. So I think some of us will ask
3 some questions of some folks. It is an intriguing issue.
4 I am a little bit, frankly, personally disappointed that
5 there is an allegation here that it is purposely being
6 done, but stranger things have happened, so we will let it
7 go at that. I move approval of the item.

8 COMMISSIONER ROSENFELD: Second.

9 COMMISSIONER DOUGLAS: All in favor?

10 (Ayes.)

11 This item is approved.

12 COMMISSIONER BYRON: However, if I may comment?

13 COMMISSIONER DOUGLAS: Please.

14 COMMISSIONER BYRON: I am saving my comments for
15 the end. I want to make sure that the folks that did make
16 the effort to be here today, we appreciate your input. I
17 certainly am anxious to speak to the subject, and I will
18 look into it personally. I hope you are not disappointed;
19 however, we did approve the item. And I think, as my
20 fellow Commissioners have indicated, this is not the body
21 to move on this, but your time is not wasted. We all
22 learned from your being here today and I would like to
23 thank you for taking the time to be here.

24 COMMISSIONER DOUGLAS: Thank you for those
25 comments.

1 Item 14. UC Davis Western Cooling Efficiency
2 Center. Possible approval of Contract 500-008-042 with
3 University of California, Davis for \$2,260,000 to fund the
4 Western Cooling Efficiency Center to conduct research and
5 develop technology to advance cooling system performance in
6 western climates.

7 MR. SCRUTON: Good morning, Commissioners. I am
8 Chris Scruton. I am with the PIER Buildings Team. The air
9 conditioning industry has neglected opportunities that dry
10 climates offer, and also our opportunities to mitigate
11 cooling-related peak demand in hot climates. As a result,
12 cooling-related electric power demand has led to the use of
13 inefficient peak load power plants and increased risks for
14 the Electric Power Distribution System. The Western
15 Cooling Efficiency Center began formally operating with
16 PIER funding in early 2008. Their mission is to promote
17 energy efficient technology development and market
18 transformation related to cooling buildings in dry Western
19 climates. They have already had some notable success.
20 With technical assistance from Cooling Center founder, Dick
21 Boren (phonetic), Wal-Mart developed a new cooling system
22 which relies on slightly cooling their entire floor slab.
23 This system has been able to dramatically reduce demand in
24 whole store energy use in the challenging Las Vegas
25 climate. They are now deploying this system in multiple

1 stores such as a newly opened store in South Sacramento.
2 The cooling center continues to assist with technology
3 development such as non-chemical water treatment. Target
4 Stores are also considering deploying new, more efficiency
5 cooling technology with help from the Cooling Center. The
6 Western Cooling Challenge is another Cooling Center project
7 aimed to create the specification and connect customers
8 with manufacturers of very efficient cooling equipment.
9 The major California utilities and the Public Utilities
10 Commission now recognize the Cooling Center as the go-to
11 place for the research, information, and market
12 transformation efforts, just as they do the Lighting
13 Technology Center up the street. If you approve the
14 contract, the Cooling Center will have staple funding for
15 three years to develop new technologies, to assist
16 manufacturers and customers with technical problems, to
17 facilitate market transformation, to act as an information
18 clearing house, and to expose graduate students to the
19 world of energy efficiency. We recommend approval and will
20 try to answer your questions.

21 COMMISSIONER DOUGLAS: Questions, comments?

22 COMMISSIONER BOYD: I move approval.

23 COMMISSIONER ROSENFELD: Second.

24 COMMISSIONER DOUGLAS: All in favor?

25 (Ayes.)

1 This item passes. Thank you.

2 MR. SCRUTON: Thank you.

3 COMMISSIONER DOUGLAS: Item 15. SENSUS MI.
4 Possible approval of Contract 500-08-050 for \$1,262,252
5 with Sensus MI to research and demonstrate technology
6 solutions for HVAC systems in buildings. Norm Bourassa.

7 MR. BOURASSA: Good morning, Commissioners. My
8 name is Norm Bourassa, from the PIER Buildings Energy End
9 Use Program. I am going to be with you for the next three
10 items. This contract, Sensus MI, has won 10 awards for
11 technology innovations for buildings and communities
12 solicitation for PIER Buildings Program Release in June of
13 2008. The next item on here is also a contract award from
14 that solicitation. The proposed \$1.2 million contract of
15 Sensus MI will research and demonstrate technology
16 solutions for heating, ventilation, air conditioning and
17 refrigeration in buildings. The contract includes \$404,000
18 of match funding, as well. The project builds upon some
19 already existing PIER Buildings research in Fault
20 Protection and Diagnostics, also referred to as FPD,
21 controls for HVAC, and research was done at the University
22 of Nebraska. Sensus MI has assembled a team of computer
23 programmers and that is a pretty important point with this
24 contract; they are not -- while they do have a team of HVAC
25 mechanical engineers, they are principally computer

1 programmers that plan to take the FPD technologies that
2 were developed by the energy and mechanical system experts,
3 and develop and deploy low cost, non-invasive, scalable,
4 and plug-and-play enterprise diagnostics, and optimization
5 technologies for the HVAC control systems in existing
6 buildings. The point here is they are going to use
7 advanced computer programming technologies to develop FPD
8 systems that can plug into your existing -- the most
9 possible existing legacy control systems out there. This
10 is a significant obstacle with respect to the large number
11 of software protocols in these control systems, so getting
12 systems that can work with any computing protocols that can
13 speak with all of these various legacy systems. It has
14 been a very difficult problem to solve. They are
15 partnering with the Target Stores and they will be
16 targeting big box retail building type for the first go-
17 round [inaudible] fault detection systems. Target has
18 pledged match funds and hopes to deploy this, the resulting
19 system, in up to 250 Target stores in the State of
20 California. The benefits, of course, will be to reduce
21 building operating costs and reduction of carbon emissions
22 and energy demand reductions also associated. So the
23 project is included in our 2008-2009 building budget, and
24 the R&D Committee has reviewed and approved this project.
25 And I hope we will answer all of your questions.

1 COMMISSIONER DOUGLAS: Questions?

2 COMMISSIONER BYRON: Brief comment that, you
3 know, this place continues to amaze me. We always are in
4 areas of interest. This one, I was not aware of until I
5 reviewed the binder and it is exactly the kind of research
6 that we need to do to link up these systems and provide the
7 information transfer. I wholly endorse the project.

8 COMMISSIONER DOUGLAS: Other comments?

9 COMMISSIONER LEVIN: I move to approve.

10 COMMISSIONER BYRON: Second.

11 COMMISSIONER DOUGLAS: All in favor?

12 (Ayes.)

13 This item is approved.

14 Item 16. New Buildings Institute. Possible
15 approval of Contract 500-08-049 for \$1,971.152 with New
16 Buildings Institute to document the critical indicators of
17 building energy performance. Mr. Bourassa.

18 MR. BOURASSA: Thank you. As I said earlier,
19 this is solicited [inaudible] in June. The proposed
20 contract with the New Buildings Institute will examine the
21 key design actual operation -- I butchered that sentence --
22 will examine the actual operation of existing high-
23 performance green buildings in order to provide feedback on
24 key information that can greatly increase the energy
25 performance of future green buildings. I wanted to get

1 that introduction in there. That is a key point here.
2 The \$1.7 million project will be looking at the leadership
3 in energy and environmental design, also known as LEED,
4 rating system. LEED is being widely adopted in California,
5 nationwide, as the principal rating system for the design
6 of high performance green buildings. New Building
7 Institute in March of 2008 released a study that they did
8 in conjunction with the U.S. Green Building Council, the
9 administrator for the LEED certification, and the study was
10 called Energy Performance of LEED for New Construction
11 Buildings. One of the findings in that study showed that
12 actually there is a wide scatter among the individual
13 building energy performance of the so-called high-
14 performance LEED certified buildings. They could not come
15 up with a strong correlation that said, "Yes, LEED
16 certified building will definitely produce a highly energy
17 efficient building." It did in some instances, but in
18 other instances, it did not. So they crafted this research
19 proposal that is going to investigate the design and
20 operation of 15 LEED certified buildings in California, in
21 the United States, and they will be looking at factors such
22 as the actual operation of skylight and big lighting
23 controls with respect to the available design tools for
24 designing those systems, assessing the opportunities to
25 reduce plug loads, which are growing at a very very rapid

1 rate in both commercial -- I think in all commercial
2 building types. And they will also develop consensus of
3 [inaudible] protection and diagnostics in HVAC equipment,
4 as I indicated in the previous item, it is a very difficult
5 problem to ubiquitously apply across all commercial
6 buildings. So in those example areas, the field study will
7 put together a master list of key performance indicators
8 which can directly affect the ability of the high
9 performance buildings to achieve their energy use
10 production targets. They will develop performance
11 indicators, as well, include considerations such as tenant
12 behavior, operational characteristics, maintenance
13 scheduling, and the quality of equipment installation. The
14 thought of this is to provide the marketplace with much
15 more rigorous feedback information to increase the energy
16 performance of future rated -- LEED rated buildings and,
17 indeed, all high performance commercial buildings. The
18 project is, again, included in our 2008-2009 Pier Buildings
19 Budget and the R&D Committee has reviewed and approved the
20 project.

21 COMMISSIONER LEVIN: Mr. Bourassa, I just want to
22 say, I do not know if anyone is here from the California
23 Lighting Technology Center, but I have met with several
24 companies and venture capital firms over the last few
25 weeks, and I think that they are universally impressed with

1 the Center, and appreciate all the funding that we are
2 doing there, and really see it not just as advancing our
3 energy goals in California, but our economic goals, really,
4 building new companies, new products, California-driven; I
5 mean, it just seems like such a successful effort from so
6 many different aspects, with the economy being a very
7 important one right now. But to hear that from a number of
8 different entities in the private sector was really great.
9 So I think this sounds very exciting.

10 COMMISSIONER ROSENFELD: I just want to back up
11 to Norm's point that the data on the effectiveness of LEED
12 platinum, silver, is really shockingly bad. I am part of a
13 National Academy panel on energy efficiency in America's
14 future, and I tried desperately to get some decent data on
15 LEED buildings about six months ago, and just failed.
16 There are no data, there is no feedback. What Norm is
17 proposing to do is right on, right on course.

18 COMMISSIONER BOYD: Well, Mr. Bourassa, it sounds
19 like you are right on target, so I will move approval of
20 the item.

21 COMMISSIONER ROSENFELD: Second.

22 COMMISSIONER BYRON: If I may comment before the
23 vote?

24 COMMISSIONER DOUGLAS: Please.

25 COMMISSIONER BYRON: Although, of course, I am

1 going to vote for this. Mr. Bourassa, you know, buildings
2 are complicated systems. I am actually trained as a
3 structural engineer and worked for a company where we would
4 sit down and we built buildings, and we would sit down
5 before we built them and we would value engineer them,
6 which meant, how can we reduce the cost at the owner's
7 request? And then, after the buildings were built, we
8 would have a series of meetings to evaluate why they did
9 not turn out the way we had planned them to, not just from
10 an energy perspective, but there are many aspects of
11 buildings that do not turn out the way you planned them.
12 And I have got to think that some of it stems back to that
13 value engineering that takes place, and you know these may
14 be LEED certified buildings, but they are complicated and
15 there are things that are going on that we need to
16 understand as to why they are not performing. I find it
17 very distressing, as Commissioner Rosenfeld indicated, that
18 we are not seeing the kind of performance energy-wise, that
19 we would expect. So I very much endorse this work, but
20 also have a sneaking suspicion that it has something to do
21 with that value engineering that takes place early on
22 between the time of the design and the time they actually
23 get completed with construction. I would also support the
24 item.

25 COMMISSIONER DOUGLAS: Thank you, Commissioner

1 Byron. We have a motion and a second. All in favor?

2 (Ayes.)

3 This item passes.

4 Item 17. UC Davis California Lighting Technology
5 Center. Possible approval of Contract 500-08-053 for
6 \$3,200,000 with the University of California Davis to fund
7 the California Lighting Technology Center (CLTC). Mr.
8 Bourassa.

9 MR. BOURASSA: I am kind of handling this for
10 Mike Seaman, who is not present today. We request your
11 approval of a proposed \$3.2 million interagency agreement
12 with University of California, Davis, to carry on with the
13 Energy Commission's participation in the CLTC resumed
14 program. The proposed CLTC R&D agenda includes applied
15 research projects with daylight systems, interior
16 illumination, and outdoor lighting systems. The research
17 will engage manufacturers in the building industry to bring
18 to market lighting solutions intended to both meet
19 California's energy efficiency and our reduction goals.
20 This proposed contract represents an acceleration of our
21 initial commitment to the CLTC, which has been a very
22 effective mechanism for collaborative research and
23 information exchange for the Energy Commission since its
24 inception in 2003. The new CLTC R&D Program will leverage
25 investments from major lighting companies, other state

1 agencies, utilities, and the buildings industry. The
2 continued cooperation of these entities is essential to
3 accelerate California's R&D and the agenda, and ensure
4 coordination of research methods and results. Conducting
5 these research projects and the leveraging involvement of
6 other parties meets the goal of improving the energy costs
7 and value of California's electricity and addresses the
8 state's energy efficiency, DR, and AB 32 goals. And the
9 R&B Committee has reviewed and approved this as part of our
10 '08-'09 Budget. And I hope we can answer your questions.
11 Mike Seaman, our expert is not here, but I will do my best.

12 COMMISSIONER DOUGLAS: Thank you. Are there
13 questions or comments? On the dais.

14 COMMISSIONER BYRON: This is a slam dunk item
15 and, once again, I guess Mr. Bourassa gets credit for it,
16 but it is Mr. Seaman's project, correct?

17 MR. BOURASSA: Yes, Mr. Seaman's.

18 COMMISSIONER BYRON: I would move the item.

19 COMMISSIONER ROSENFELD: Second.

20 COMMISSIONER DOUGLAS: All in favor?

21 (Ayes.)

22 This item is approved. Thank you, Mr. Bourassa.

23 MR. BOURASSA: Thank you.

24 COMMISSIONER DOUGLAS: Moving on to Item 19.

25 Approval of the May 6, 2009 Business Meeting Minutes.

1 COMMISSIONER ROSENFELD: Move.

2 COMMISSIONER BOYD: Second.

3 COMMISSIONER DOUGLAS: All in favor?

4 (Ayes.)

5 The Minutes are approved.

6 Item 20. Commission Committee Presentations or
7 Discussion. Are there any Committee presentations today?

8 COMMISSIONER BYRON: Are we going to hear about
9 where three of the Commissioners were last week?

10 COMMISSIONER DOUGLAS: I think it would be
11 actually very good to hear a brief report from the
12 Commissioners, but I would ask you to keep it brief because
13 the room is going to be in use with another configuration
14 of tables and chairs at 1:00.

15 COMMISSIONER LEVIN: Are we also going to get an
16 update from staff about the stimulus?

17 COMMISSIONER DOUGLAS: That is under the
18 Executive Director's Summary, which is Item 22.

19 COMMISSIONER BOYD: Well, I will -- well, no, I
20 think the people who got to Washington first should start.
21 So Julia and Art.

22 COMMISSIONER LEVIN: Art, I think, actually
23 arrived first.

24 COMMISSIONER ROSENFELD: Well, Julia and Jim went
25 to Washington with 100 percent mission Energy Efficiency

1 and Transportation, and Stimulus. I had an extra mission,
2 which I am very happy with, I was selling white roofs. I
3 got invited to lunch, Julia and I, with the Secretary of
4 Energy and his new appointed David Sandalow, Assistant
5 Secretary for Policy International. They are all sold on
6 white roofs and decided it is time to push them for their
7 global warming direct effects. Chu talked about this in
8 London the day before yesterday and good a nice spread in
9 the Times UK and has asked people at the White House to
10 look into getting the Federal Energy National Program to
11 look into white roofs for all technical buildings and
12 military bases. So I am very happy with that. I think I
13 will go ahead and let Julia summarize some of the other
14 activities.

15 COMMISSIONER LEVIN: So we did have a number of
16 meetings with the Obama Administration, as Commissioner
17 Rosenfeld said, Secretary Chu, Carole Browner's Office,
18 Nancy Sutley, who is the President of the Council on
19 Environmental Quality, the Office of Management and
20 Budgets, and I do not remember who all else, on the
21 Stimulus to find out where Department of Energy, in
22 particular, is to raise some of our questions and concerns,
23 which they were largely able to answer, and to give them
24 kind of a general feel for where we are at this point,
25 making very clear that we have not many final funding

1 decisions, but what we are thinking of for short and
2 longer term funding, and to make sure that they thought
3 that was on the right track, and they did. We also had --
4 we and David Hungerford, Commissioner Rosenfeld's Advisor,
5 and Commissioner Boyd and I had a number of discussions
6 about various renewable energy issues in California, both
7 related to transmission, and to renewable energy
8 development in the desert, ways that we could work more
9 closely with federal agencies from Bureau of Land
10 Management and Fish & Wildlife Service to Department of
11 Defense, so that we can continue to build our cooperation
12 with the Federal Government on real energy development
13 throughout California, but with a particular emphasis on
14 the desert. We did discuss cool roofs in a number of
15 meetings, we discussed energy efficiency standards for
16 appliances and buildings, and current federal preemption in
17 that area, and existing language on the Waxman and Markey
18 Bill, so we are hoping we will be checking up on the Senate
19 side to address that preemption issue, which we see is very
20 important to our continuing pushing the envelope on
21 building efficiency standards. And I think those were the
22 main issues that we took up.

23 COMMISSIONER BOYD: I would just add to the list
24 that Commissioner Levin pointed out that we also had
25 Senator Boxer's office and staff on all subjects that we

1 covered, which she has elaborated on quite well. Of
2 course, one of my missions has always been the various
3 transportation issues that I talked about our 118 program.
4 I explained our ability to match any and all federal
5 stimulus monies they might want to throw our way with
6 regard to that general area, with our \$174 million
7 proposals, not knowing the folks at home are whittling away
8 at it, across the street. But, in any event, I think one
9 of my commitments was hydrogen and we did not get very
10 positive response, although I know the Governor had a
11 private get together, a 2D evening, with Secretary Chu and
12 thought he got some fairly positive signals, I believe, the
13 two Commissioners here got some very negative signals the
14 very next day. Commissioner Levin and I met with Senator
15 Levin of Michigan and talked about the issues of Detroit
16 and its future, and what have you, and hydrogen, and there
17 are other people interested in it, of course, and it does
18 appear there will be an effort on the part of Congress to
19 put some on the end to that, to not totally cut that
20 subject off at the legs, to indeed have a diversified
21 portfolio of R&D and D&D things going on at the same time
22 to match what California is trying to do. On Friday, I was
23 there alone and met with DOE in the biomass area, trying to
24 push our interests, not only on that topic, but the bio-
25 methane component thereof, which they have kind of written

1 off in their economic stimulus program, unfortunately, all
2 the biomass money being directed to liquid fuels. You can
3 only guess what that means. And then I had a fairly
4 lengthy discussion with some of the fossil fuel people, in
5 particular on our West Carb Program, on the general issue
6 of carbon capture and storage, in general, and then I also
7 had a very lengthy meeting with Margo Oge, who heads up the
8 whole mobile source program for U.S. EPA, and who did
9 participate in the Tuesday event, the White House then
10 wondered why we were not there. I will let that slide. In
11 any event, we had a pretty good understanding on
12 transportation fuels and the emphasis we want to put on
13 things and kind of a renewed pledge of working more closely
14 with U.S. EPA, ourselves, and the ARB, and the partnerships
15 that we use to have in the yesteryear on that subject. So
16 I think that was very pleasing to me to come away with that
17 particular result. We certainly made our presence known
18 and our programs known and, you know, the advanced stage of
19 a lot of what it is that we are doing, and answered a lot
20 of people's questions about various activities. Oh, yeah,
21 I forgot to mention -- I do not think you mentioned -- the
22 meeting with DOI, Department of Interior, that we had on
23 primarily the renewables program of California and the
24 desire, well, just re-emphasizing the need and desire of
25 the two agencies to work closely together, like compare

1 maps and things like that. And I was able to have a
2 biomass forestry-type discussion with the DOI people and
3 the problem we have with the U.S. Forest Service definition
4 of eligible -- I want to say forest biomass -- I had that
5 discussion with DOE, as well, and there seem to be pretty
6 general agreement that something needs to be done there.
7 So we will follow-up on that.

8 COMMISSIONER LEVIN: Two other quick things I
9 forgot to mention, we do have a number of meetings along
10 with Brian Turner from the Governor's office, with members
11 of Congress on a proposed bill by Representative Thompson,
12 which would help make changes in the Federal Tax Code, that
13 would help us with the Revolving Loan Fund authorized under
14 AB 811, and there is a lot of interest in that and staff
15 are already working to provide some language and a fact
16 sheet, and things like that, so that is very exciting. And
17 Representative Thompson's Office, in particular, was very
18 happy to hear that we would like to help with that. And
19 then we did have a number of discussions with various, and
20 already plan on follow-up from the Senate Armed Services
21 Committee and from Senator Reed's Office about ways that
22 the Department of Defense can really help California and
23 other states with our renewable energy goals. And Jim
24 Bartridge and I have already had quite a lot of follow-up
25 conversations, not just with Senator Levin's Office, but

1 the Armed Services Committee, and Senator Reed's Office,
2 who has said to us, "Tell us what you what. We are happy
3 to direct the Department of Defense," or help them remove
4 barriers to renewable energy development in California, so
5 it was very promising, as well, because they are obviously
6 such an important land manager in California.

7 COMMISSIONER DOUGLAS: Very good. Well, thank
8 you all for your reports. And thank you for going to
9 Washington, D.C. in these times. The communication between
10 the California Energy Commission Commissioners and folks in
11 Washington, D.C., or both, looking at what California is
12 doing for opportunities to partner and to discuss federal
13 policy and also the input, obviously, we can give to
14 federal policy, is very important. These are exciting
15 times and they are very good times for us to look outside
16 of California from time to time, and so I am pleased that
17 all of you were able to do that while Commissioner Byron
18 and I held the fort in Sacramento, California. Let's move
19 on to the Chief Counsel's Report. Is there a report today?

20 Item 21. Chief Counsel's Report.

21 COMMISSIONER CHAMBERLAIN: Thank you, Madam
22 Chair. As you know, our office filed a document in the
23 California Supreme Court about a week ago. I brought
24 copies of that for you to see, the substance of it. I just
25 wanted to let you know that our support staff in our office

1 does an awful lot of work to keep these documents looking
2 professional and according to the Rules of Court, and so I
3 wanted you to have a copy of the final for filing.

4 COMMISSIONER DOUGLAS: Thank you for bringing
5 those. And thank you to you and all of your staff for the
6 hard work on this submittal to the California Supreme
7 Court.

8 Item 22. The Executive Director's Report.
9 Melissa, this includes the summary of stimulus activities.
10 I would ask you to try to keep it brief and to the point
11 because I see PIER staff occasionally poking their heads in
12 around the door, and I think they are eager to start moving
13 chairs.

14 MS. JONES: Okay. I would just then point out
15 that, on our next business meeting on June 3rd, we will be
16 taking up the issue of opening the proceeding and
17 instituting investigation to develop guidelines for the SEP
18 and Block Grant, portions of the ARRA funding. We continue
19 to work on flushing out proposals for funding both under
20 the Block Grants and under SEP. And I think that is about
21 what I would like to highlight for today. Thanks.

22 COMMISSIONER DOUGLAS: Questions, comments from
23 the dais?

24 COMMISSIONER ROSENFELD: I will make one trivial
25 comment. One annoying thing that is going on and I think

1 we got it straightened out in Washington was that we, the
2 Energy Commission, gave proposals for Stimulus money and we
3 made up rating sheets and the DOE, which really trumps up
4 as he is trying to make up rating sheets, and it would be
5 very nice if we could use the same rating sheets. So he
6 talked to Matt Rogers, and they agreed they would send us
7 e-mail of their rating sheets so we can really be on the
8 same page, which is --

9 COMMISSIONER LEVIN: That would be very helpful
10 for us.

11 COMMISSIONER DOUGLAS: Yes, it would. Well, thank
12 you for that.

13 Item 23. Public Advisor's Report.

14 MS. MILLER: I respectfully have nothing to
15 report this week. Thank you.

16 COMMISSIONER DOUGLAS: Thank you very much. And
17 I know, despite having nothing to report, you have a
18 significant amount of work to do and public inquiries all
19 the time. So thank you for that.

20 Item 24. Public comment. There is at least one
21 member of the public left in the room, but apparently no
22 public comment. I have no more blue cards. So thank you
23 very much. The business meeting is adjourned.

24 (Whereupon, at 12:20 p.m., the business meeting
25 was adjourned.)

CERTIFICATE OF REPORTER

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

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

IN WITNESS WHEREOF, I have hereunto set my hand this ___ day of June, 2009.

TAHSHA SANBRAILO