

CALIFORNIA ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION  
ENERGY EFFICIENCY COMMITTEE

JOINT COMMITTEE HEARING  
INFORMAL PROCEEDINGS AND PREPARATION OF THE  
2003 INTEGRATED ENERGY POLICY REPORT  
PUBLIC INTEREST ENERGY STRATEGIES REPORT  
Docket No. 02-IEP-01

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

THURSDAY, AUGUST 28, 2003  
9:38 a.m.

Reported by

Peter Petty

Contract No. 150-01-005

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

A P P E A R A N C E S

COMMITTEE MEMBERS PRESENT

James D. Boyd, Commissioner, Presiding Member

William J. Keese, Commissioner, Associate Member

John L. Geesman, Commissioner

Arthur H. Rosenfeld, Commissioner

STAFF PRESENT

Christopher Tooker, Advisor to Commissioner

Geesman

Michael Smith, Advisor to Commissioner Boyd

Rick Buckingham, Advisor to Commissioner Keese

Don Schwartz, Project Manager

Pierre duvair, Transportation Energy Division

Tim Olson, International Program

Terry Surles, R&D Program

ALSO PRESENT

Irene Stillings, SDREO

William F. Bolton, HUD

Bobbi Glassel, NCEIC

Les Guliasi, PG&E

Kathy Treleven, PG&E

Manuel Alvarez, Southern California Edison

Steven Kelly, IEP

Raul "Bernie" Orozco, Sempra Energy

## I N D E X

	Page
Proceedings	1
Opening Remarks, Commissioner Boyd	1
Staff presentation of findings and conclusions of Public Interest Energy Strategies (PIES) Report	7
Staff presentation of findings and conclusions on climate change	43
Public comments and presentations on PIES issues	57
Closing Comments	127
Adjournment	129
Reporter's Certificate	130

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

CHAIRMAN BOYD: I'd like to welcome you all to what I have to say is yet another in what has been a long series of public workshops.

I'm not complaining, just a long series of public workshops and hearings at the Energy Commission leading up to preparation of the Integrated Energy Policy Report that is due to the Governor by November 1st of this year, and eventually to the Legislature.

For the record, I'm Jim Boyd, the Chairman of the subcommittee of the Commission on the Integrated Energy Policy Report. And with me today, in addition to several Commissioners, is my Associate on this Committee, Commission Chairman Keese. And I'll call on all of you in just a minute to make any remarks.

And having broached the subject, I will introduce everyone up here. In addition to Chairman Keese we have Commissioner Rosenfeld on my left, Commissioner Geesman on the right.

We have two of the bevy of Advisors that we have, Rick Buckingham, Advisor to Commissioner Keese; Chris Tooker, Advisor to Commissioner Geesman. And I'm Advisor-less today, as is Art,

1     apparently. Susan's at a doctor's appointment,  
2     and speeding in here eventually I trust.

3             In any event, today's hearing is to take  
4     comments. For us as a Committee, and  
5     Commissioners, to review and receive comments on  
6     the Public Interest Energy Strategies draft Report  
7     of the staff. This is one of the major components  
8     of our overall Integrated Energy Policy Report.

9             This Report was posted to the CEC  
10    website on August 8th. Printed copies are  
11    available on the table in the lobby of this  
12    hearing room for those who don't have a copy.  
13    It's another lengthy report, and with appendices  
14    it exceed 200 pages.

15            Feel free to return your copy if you  
16    don't want to drag it out of here at the end of  
17    the day. Or don't want to get autographs and keep  
18    it as a keepsake for some reason. And all the  
19    various supporting reports that back up this  
20    report are also available on the table outside.

21            There's many familiar faces in the  
22    audience, and there's some new faces. Just so you  
23    put this in context a little bit, last week we had  
24    a hearing on the Transportation Fuels Report.

25    This past Tuesday and Wednesday we held the public

1 hearings on the staff's drafts of the Electricity  
2 and Natural Gas Assessment.

3           And as indicated, today's is to review  
4 the Public Interest Energy Strategies. Those  
5 constitute the three major reports, covering four  
6 major areas. We lump electricity and natural gas  
7 together. They're joined at the hip, but they're  
8 two major areas in and of themselves.

9           Those are the major topic areas of the  
10 Integrated Energy Policy Report. And they are  
11 supported by draft reports on those basic  
12 subjects. And a host of backup reports on each and  
13 every one of these legs to the stool that this  
14 whole process sits on. So you're now seeing the  
15 culmination of days, weeks, and months of hard  
16 work by the staff and the public on this very  
17 important topic.

18           Again, the purpose of today's hearing is  
19 to receive public input and comments that the  
20 Committee And Commissioners will take under  
21 consideration, and that will assist us in  
22 formulating and developing our policy  
23 recommendations on, in this case, the Public  
24 Interest Energy Strategies.

25           These policy recommendations that get

1 formulated and identified will be forwarded in our  
2 final, as we call it, IEPR Report, to the  
3 Governor, as I said earlier.

4 In November, under the procedures of the  
5 law, the Governor will receive this report, he  
6 will have an opportunity and a time frame within  
7 which to review the report. And then pass the  
8 report with any changes that he or she may see fit  
9 to make to the report, to pass it on to the  
10 Legislature.

11 I want to, as I've said in every one of  
12 these hearings, try to indicate that we'd like to  
13 keep this forum as informal as possible. As I've  
14 said repeatedly, this room doesn't lend itself to  
15 informality. These tables are nailed in place,  
16 and so we're up here behind them.

17 But this is a public meeting on a draft  
18 report, and we would like to facilitate as much  
19 discussion as possible. However, because there  
20 are people listening on webcast, and because we  
21 are recording this hearing for purposes of  
22 posterity, and to give us a record to refer back  
23 to as we and the staff review the results of our  
24 days of hearings, we ask you, if you have a  
25 comment, to please step up to a microphone and

1 identify yourself when you make that comment.

2           And I would caution the staff to please  
3 remember to do that, because we get going in quite  
4 an exchange, and there are comments coming up from  
5 the audience which sometimes we can hear, but rest  
6 assured the people out there can't hear if you're  
7 not speaking to a microphone.

8           So we ask you to just dash up to a  
9 microphone and pose your question or make your  
10 comment, both staff and public. So those  
11 listening -- and there are a number of people  
12 listening based on the phone calls we receive  
13 afterwards -- so they can take advantage of that.

14           Today the staff will make a brief  
15 presentation summarizing today's subject report,  
16 after which we'll open things up to comment and  
17 questions, for any of you to make a formal  
18 presentation. If you want to say something, I ask  
19 you to take a blue card, like this, off the table  
20 out in the lobby and fill it out. And leave it  
21 there, staff will collect it and see that we get  
22 the card up here and such that we can call on you.

23           However, you will note, throughout the  
24 course of the hearing, that I/we will ask you if  
25 there's anything anybody wants to say on a

1 subject, and don't be reluctant to just pop up and  
2 be recognized and come forward and pose a  
3 question.

4 Because the purpose of the presentations  
5 is to perhaps stimulate some reactions and  
6 thoughts, some dialogues and questions or what  
7 have you. And so, as I indicate, we'll try to be  
8 as informal as our procedures will allow us.

9 I can't tell you how long this hearing  
10 will go, because I don't know how many people will  
11 want to testify. It's conceivable we could be  
12 done roughly by lunch time. If we are almost done  
13 I'm going to just keep going until we finish. If  
14 we have a lot of people that need to speak, then I  
15 will take a break.

16 A couple of folks up here do have  
17 noontime commitments that we will honor, but it  
18 depends on exactly how far we need to go and when  
19 we can finish, on when we'll call time out. With  
20 that, I think that's all the housekeeping issues.

21 I would call on my Associate Member, Mr.  
22 Keese, if he has any comments he'd like to make,  
23 and then I'll refer to the other guest  
24 Commissioners.

25 CHAIRPERSON KEESE: I'll pass on

1 comments, I think. Let's get into the program.

2 COMMISSIONER BOYD: Thank you.

3 Commissioner Rosenfeld, anything you'd like to  
4 say? Nothing. Commissioner Geesman?

5 COMMISSIONER GEESMAN: No, thank you.

6 COMMISSIONER BOYD: All right, thank you  
7 all. With that I'm going to turn it over to  
8 staff. Mr. Don Schwartz, I believe, is next to  
9 lead the presentation.

10 MR. SCHWARTZ: Thank you, Commissioner.  
11 I want to welcome everyone here to the PIES Report  
12 hearing. I'm going to make a fairly brief  
13 presentation. I just wanted to put this page up  
14 just to acknowledge the people, this is just a  
15 partial list, but this is some of the people that  
16 worked on the PIES Report, putting i together. It  
17 was a big effort, and I thought a well-done  
18 effort.

19 Now, the presentation I'm going to make  
20 today, I'm going to be pretty quick about it.  
21 There's a lot of slides, but I'm going to go  
22 through them very quickly. Pretty much all the  
23 slides that I'm going to be showing -- of graphs  
24 ad table and such-- are contained in the report.  
25 Either the PIES Report, or in some cases the

1 Electricity and Natural Gas Assessment Report.

2           And knowing that you've all had a chance  
3 to read the report word for word, about 153 pages,  
4 you're all very intimately familiar with this  
5 material. So I'll go through it fairly quickly.

6           As I said, I'm going to go through a few  
7 things from the Electricity and Natural Gas  
8 Assessment Report. My apologizes to those who  
9 have sat through two days of hearings on this  
10 already. I'm going to show a few more of the  
11 slides that you've probably already seen.

12           But for the rest of you I think it's  
13 important to take a look at the demand and supply  
14 picture, because it really sets the context for  
15 the PIES Report. The strategies in the PIES  
16 Report don't mean much if they're looked at purely  
17 in a vacuum, and so they in a sense follow on to  
18 the analysis that we do with demand and supply.

19           Then I'm going to go through the PIES  
20 Report, the Public Interest Energy Strategies  
21 Report. Talk about some goals and targets, and  
22 then go through each of the strategies that we  
23 cover in the report. Basically, with the same  
24 format for each of the strategies.

25           I'll try to, where I think it's

1 important to know exactly what we're talking  
2 about, give you a definition. Some of the  
3 findings in the report, some of the challenges we  
4 see facing some of these strategies, and some  
5 actions that might be taken.

6           Okay, well let's start with energy  
7 demand trends. Actually, this whole picture  
8 starts with demand. We need to get some kind of a  
9 feeling of what future energy demands will be.  
10 What we find is that California is projected to  
11 add five million to its current population of  
12 about 35 million by 2014.

13           This is probably the scariest thing that  
14 you'll hear today in terms of a statistic, I  
15 think. Three quarters of our electricity growth  
16 and all of our natural gas growth will be driven  
17 primarily by the need to serve these new citizens.

18           Commercial growth, spurred by the  
19 state's economic expansion -- if we have an  
20 economic expansion -- will be the largest user of  
21 electricity. The good news is that California  
22 uses electricity more efficiently than other  
23 western states or the U.S. as a whole.

24           You can see from this graph, California  
25 being the bottom line, U.S. in the middle, western

1 states on top, California has become very  
2 efficient in using electricity, and still keeping  
3 GSP high at the same time.

4 The electricity and demand forecast, as  
5 most of you probably know, is usually done with  
6 some kind of a range. The forecast was never  
7 intended to be a point-specific forecast. We have  
8 a base case, a high economic and a low economic  
9 growth case.

10 This particular graph will show, from  
11 1980 to 2012, historic and projected period, what  
12 the statewide electricity consumption is. The  
13 vertical shaded lines represent business cycles,  
14 particularly low cycles, recessions.

15 And you'll see the three branching lines  
16 coming off from 2002, representing --  
17 sequentially, the one on top is the high economic  
18 baseline, low economic. So this gives yo a bit of  
19 a range here for what might be expected in terms  
20 of demand growth.

21 To put this in a table form, we're  
22 looking at a baseline growth from 2004 to 2008 of  
23 1.7 percent. The high case is 2.2, the low case  
24 1.1. And you can see, in the column on the right,  
25 some indicating of what the megawatt difference

1 would be in 2008 given different economic growth  
2 scenarios.

3           Natural gas forecast, natural gas is  
4 usually looked at in three areas -- power  
5 generation, non-core and core. Natural gas use  
6 for non-electricity generation is expected to  
7 increase by six percent per year over the next ten  
8 years. Natural gas with power generation is  
9 expected to increase two percent over the next ten  
10 years.

11           Here's a picture of it in graphic form.  
12 Just, the core group is basically the people --  
13 residential, small commercial, medium commercial,  
14 pretty much the sort of captive audience there.  
15 And the non-core group are those larger  
16 customers -- large industrial or very large  
17 commercial -- who might be able to find their gas  
18 supplies elsewhere.

19           It doesn't look like much movement, but  
20 if you look at the axis on the right it's trillion  
21 cubic feet.

22           What are the demand issues? Well,  
23 really quickly, the demand issues center around,  
24 pretty much around the accuracy of the forecast.  
25 There is uncertainty in the forecast, all

1 forecasts have them.

2           There's uncertainty in the economic  
3 projections and the price projections. These  
4 forecasts assume a certain level of efficiency.  
5 Funding, there's uncertainty surrounding that.  
6 There's changes in the rate structure which may  
7 occur. And then there's also questions of  
8 privately supplied energy.

9           Okay, so that's in general the demand  
10 picture that we're looking at. What is the supply  
11 outlook? Well, pretty much, short-term outlook is  
12 pretty good, it's secure. We are currently  
13 running reserves in the state that are high, and  
14 haven't been this high since the 1980's.

15           We have some short-term uncertainties,  
16 such as retirements of aging plants, but pretty  
17 much we seem to be okay through 2006. However,  
18 after that the long-term outlook is uncertain.

19           New generation and new natural gas  
20 supplies will be needed. Some of that may be  
21 displaced by the public interest energy  
22 strategies, which we're going to be talking about  
23 in a moment.

24           Just a couple of points about this  
25 supply situation. Again, because it's important

1 to understand what the supply situation is like to  
2 understand how to craft these strategies --  
3 basically, California as you probably know has a  
4 system that's driven by peaks. There's a summer  
5 peak for electricity, there's a winter peak for  
6 gas.

7           But recently there's been the  
8 interrelation between natural gas and electricity  
9 generation that has compounded the peak problem,  
10 and we now have, since we now have natural gas-  
11 fired generation dominating the electricity mix,  
12 we get a double-peak for gas.

13           We get the normal peak in the winter,  
14 plus a peak in the summer, when the gas-fired  
15 plants are running. And the summer is usually the  
16 time when the gas is pumped into storage. So that  
17 creates a bit of a problem.

18           This is just a general draft to show you  
19 that peak demand during most of the year is pretty  
20 predictable. But in the summer months, between  
21 May and September, you can see that it's very  
22 erratic and very unpredictable, almost entirely  
23 based on weather.

24           Additional supply issues. We have  
25 congested transmission paths, local reliability

1 problems in San Francisco and the San Diego areas,  
2 insufficient transmission capacity to accommodate  
3 new renewable generation, and increasing costs of  
4 natural gas.

5 I'll just skip this slide for a minute,  
6 and move on to the public interest energy  
7 strategies. Okay, given this situation, given  
8 this demand and supply situation, what can these  
9 public interest energy strategies offer?

10 Now, the strategies that we're looking  
11 at here in this report are based on what was  
12 called out in the legislation directing this  
13 report be done, SB 1389. We're looking at four  
14 major types of strategies: energy efficiency and  
15 conservation, load management, renewable  
16 generation technologies, research development  
17 demonstration, and the commercialization of new  
18 technologies.

19 Also in this report we're covering local  
20 liability issues, and something we're calling  
21 international markets, which pretty much  
22 encompasses the export program that we have here  
23 at the Commission.

24 Now we have some goals and targets that  
25 we actually have going into this report. They

1 come out of a document called the Energy Action  
2 Plan, co-sponsored by three agencies here in the  
3 state -- the Energy Commission, the California  
4 Power Authority, and the California Public  
5 Utilities Commission.

6           Some of the strategies, some of the  
7 goals, excuse me, that are presented in this are  
8 meeting California's energy growth needs while  
9 optimizing energy conservation, resource  
10 efficiency, and reducing per capita electricity  
11 demand, accelerating the state's goal for  
12 renewable resource generation, promoting customer  
13 utility-owned distributed generation, ensuring a  
14 reliable supply of reasonably priced natural gas,  
15 and upgrading and expanding electricity  
16 transmission distribution infrastructure to reduce  
17 the time it takes to get needed facilities online.

18           I'll talk a little bit about each of  
19 these goals in a little bit more specificity as I  
20 go through each of the various strategies. Well,  
21 let's look at energy efficiency and conservation  
22 first. I'm sure you all know what this is.

23           Energy efficiency, of course, usually  
24 referring to various pieces of equipment or  
25 technology or ways of using energy in a more

1 efficient way to provide the same service that  
2 would be provided normally, with less efficient  
3 equipment, only cheaper.

4 Conservation generally refers to types  
5 of behavioral actions that people take such as  
6 lowering the thermostat, turning lights off, etc.

7 The findings that we have come up with  
8 in the PIES Report. The first one is the  
9 electricity crisis led to a decline in electricity  
10 consumption in 2001 compared to 2002. Residential  
11 customers cut use roughly by 6.5 percent, and  
12 commercial customers by five percent over the 2000  
13 levels.

14 A great deal of this savings was due to  
15 what we could call emergency conservation  
16 measures. People responded as much or more to the  
17 emergency of the situation, the need to conserve,  
18 as they did to the price situation. And much of  
19 the savings achieved during that period are still  
20 continuing to be saved, though not all of it.

21 The commercial sector accounts for  
22 roughly 35 percent of electricity consumption, and  
23 therefore becomes a very large target for the  
24 potential additional savings. Residential and  
25 commercial air conditioning and commercial

1 lighting contribute the most to peak demand.

2           And obviously we're interested in peak  
3 demand, because as we've shown before, this is an  
4 electricity and gas system that the choke point,  
5 if you will, is peak demand.

6           Doubling current program spending on  
7 electricity origin efficiency programs could  
8 reduce peak load by an additional 17-18 hundred  
9 megawatts over the next ten years.

10           Doubling current program spending on  
11 natural gas efficiency would cut the growth of  
12 natural gas demand by five percent over the next  
13 ten years.

14           I'll show a few tables, just to give you  
15 a sense of what kind of spending's been going on.  
16 These are thousands of dollars program year since  
17 1976. You can see the kind of dark purple  
18 mountain there, showing there has been some  
19 gradual acceleration, but program spending  
20 basically is pretty uneven.

21           Down here, this particular area here,  
22 shows the amount of spending on measurement  
23 evaluation. That is, looking at these programs  
24 and trying to determine if they've saved the  
25 amount of money that they claimed to have saved.

1           It's a little slightly different picture  
2 here. Take a look at the annual spending on gas  
3 efficiency programs over the past decade. You  
4 don't see the big jump that you did in the last  
5 slide here, this big slug of spending here that  
6 went on, pushed through by legislation in response  
7 to the energy crisis. You still see the relative  
8 small amount of the total spectrum that's done on  
9 measurement and evaluation, and almost nothing  
10 anymore.

11           We took a look at three baseline DSM  
12 scenarios. One is continuing the current funding  
13 level, the PGC funding, through 2013. A high  
14 case, which was doubling the PGC funding, a low  
15 case, which was assuming no additional funding  
16 beyond this point. And there's this maximum DSM  
17 scenario, which doesn't appear on the slides I'm  
18 about to show, but it's represented by the  
19 quadrupling of PGC funding.

20           This particular graph gives an  
21 indication of what this would look like in terms  
22 of therms. This is, as you might expect, the  
23 middle case is the baseline. This is the low DSM,  
24 which would be the highest usage. This is the  
25 baseline, and then this case here is the high DSM.

1           Here's the megawatts per capita. The  
2 number we're looking at, you can see how it  
3 bounces around historically. The commercial is  
4 the green line, and the high DSM case bends that  
5 down quite a bit. The residential is the purple  
6 line and that is also brought down by the high DSM  
7 case. This is the megawatt hours, pretty much the  
8 same kind of picture.

9           What are some of the challenges in this  
10 area? Well, I think one of the big challenges,  
11 and the thing we stress in the report quite a bit,  
12 is that if we're going to count on savings that we  
13 get from energy efficiency and conservation in  
14 order to develop resource plans, then we need to  
15 be sure that we have unbiased, realistic estimates  
16 of the expected program savings impacts.

17           And I think this will require greatly  
18 expanded redesign measurements and evaluation  
19 process. Other challenges, that efficiency needs  
20 to be made more responsive for realtime needs.  
21 Again, to meet the peak demand challenge.

22           And thirdly, social science research  
23 that links economics with sociology, anthropology  
24 and psychology, along with expanded data  
25 collection, should be supported.

1           So what kinds of actions are we talking  
2 about? The first one comes pretty much right out  
3 of the Energy Action Plan. And that is the so-  
4 called loading order, in which, when you're  
5 looking for resources you go to energy efficiency  
6 and conservation first.

7           And, of course, as I just mentioned,  
8 this requires a large commitment to improve  
9 evaluation, program design, program  
10 administration, and the whole complex of  
11 activities that go around developing these kinds  
12 of PGC programs.

13           We also, in order to meet that, some of  
14 the goals that have been set, need additional  
15 strategies beyond the ten percent air conditioning  
16 and efficiency figure that's in the Energy Action  
17 Plan, and the five percent building improvements  
18 figure.

19           Okay. That's the first strategy. The  
20 second strategy is dynamic pricing. I'm going to  
21 break this up. Sometimes it's included in the  
22 whole energy efficiency discussion, but for the  
23 purposes of this report we're breaking it up.

24           What is dynamic pricing? Well, let me  
25 define it by giving you a comparison. First of

1 all, most residential people are familiar with  
2 flat rates. Flat rates are pretty much retail  
3 prices that we all pay that we know about for  
4 weeks or months ahead of time. These rates don't  
5 vary, given wholesale prices or system conditions.

6 Now the dynamic pricing is, the retail  
7 prices can be adjusted on short notice based on  
8 system conditions. They can be either realtime  
9 pricing -- these prices adjust by the minute -- or  
10 for critical peak pricing there's a 24-hour or so  
11 notice to the people that there's going to be a  
12 change in the pricing.

13 I kind of like this particular graph  
14 here because it illustrates those three types of  
15 tariff schemes, pricing schemes. There's a lot  
16 more, I mean, I'm just throwing out some examples  
17 here. And this is from the experimental PG&E  
18 tariff.

19 Here's an example that I was talking  
20 about with the flat rate here. You can see the  
21 bottom line in military or European time, this is  
22 the hours of the day. And the flat rate you pay,  
23 whether it's one in the morning or whether it's  
24 three in the afternoon you pay the same amount.

25 For the standard time of use rate you

1 pay a little less than you do for most of the day,  
2 but then for the critical peak hours when the rate  
3 is higher than it would be for the base line. But  
4 then it drops down again.

5           And for the critical peak load pricing,  
6 super-peak days, really hot days of the year, you  
7 can see, if you're on that schedule, you pay less  
8 than you do even for the time of use rate for most  
9 of the day. However, if you choose to use energy  
10 during that critical peak hour you pay for it, and  
11 then for the rest of the day the rate drops down.

12           So these are some examples of ways of  
13 arranging the tariff schedule to help alleviate  
14 the demand during the peak hours of the day, with  
15 price signals and monetary incentives.

16           What are the findings? Well, time-based  
17 or dynamic pricing rates could help large  
18 commercial and industrial customers reduce their  
19 peak demand by 500 megawatts by 2005.

20           Installing advance meters to support  
21 dynamic pricing rates will produce improvements in  
22 customer service by reducing the cost of billing,  
23 reducing down time outages, giving customers more  
24 accurate information on the daily fluctuations of  
25 energy prices.

1           A number of challenges in this area.  
2    It's still in a sort of contentious, sort of a,  
3    people are still doing experiments and inquiry  
4    stage. Some of the questions that need to be  
5    answered are should dynamic rates be made  
6    voluntary, mandatory, or simply the default rate  
7    for customers?

8           Does it make sense to install these  
9    advanced metering in automatic control systems on  
10   a widespread basis or only to those customers who  
11   choose the tariff? And questions of that nature  
12   still need to be answered.

13           In addition to that we have challenges  
14   based on the low customer awareness of the  
15   benefits of these rates, and really a lack of  
16   consensus on the cost-effectiveness of installing  
17   advanced metering.

18           What kind of actions can we take? Well,  
19   we can continue doing something that we're already  
20   doing, which is the continuing joint agency  
21   collaboration on education activities, between the  
22   Energy Commission and the CPUC and it's  
23   proceedings, R206001.

24           We could move to phase two of that  
25   Rulemaking and continue to pursue the development

1 of what's called the business case for advanced  
2 metering.

3 The other recommendation that we'd want  
4 to consider is that agencies should complete their  
5 review of the costs and benefits of different  
6 strategies to deploy interval metering and dynamic  
7 pricing by the end of the summer of 2004.

8 Now, this has nothing to do with  
9 anything in the presentation, but I think it might  
10 wake everybody up this morning, give us a little  
11 break. Okay, well, back to work here.

12 Renewable energy. What are we talking  
13 about with renewable energy? Electricity  
14 generated from geothermal, organic waste, wind,  
15 solar, and the portion of hydro electricity that  
16 are systems that are 30 megawatts or smaller.

17 Now there's something called the  
18 renewable portfolio standard. This was set up by  
19 the Legislature in SB 1078 to address the problems  
20 raised by the 2000-2001 energy crisis.

21 This renewable portfolio standard, often  
22 abbreviated as RPS, requires investor-owned  
23 utilities, electric service providers, and other  
24 regulated entities to provide 20 percent of retail  
25 sales from renewable electricity sources by 2007.

1           We'll talk about, in a second, how the  
2 Energy Action Plan seeks to change that,  
3 accelerate it. Municipal utilities also are given  
4 some instruction, under this RPS, to improve their  
5 renewable resources.

6           This is a trend in renewable energy  
7 production in California. We see here there's two  
8 things being graphed here. One is the total here,  
9 including all the different sources that we  
10 defined in the beginning. And this is the total  
11 without the small hydro. Obviously you can figure  
12 out the difference, here's the small hydro.

13           We did have a few people do some studies  
14 for us to figure out what the potential is,  
15 technical potential in California for four  
16 different renewable sources -- wind, geothermal,  
17 biomass and solar. I think the important thing,  
18 really, to look at here is where we are with  
19 existing and where we could be if we maxed out on  
20 the technical potential in each of these areas.

21           Notice where solar is, here in this  
22 picture. I wanted to just sort of highlight this,  
23 because I thought it was rather interesting. The  
24 potential for rooftop solar electrical systems is  
25 considerable in the state. We've got a lot of

1 rooftops, we've got a lot of sun, we've got lot of  
2 people that could use PV's if the conditions were  
3 right, about 9,450 megawatts worth.

4           So far as municipal buildings and  
5 schools, there's a potential of about 198  
6 megawatts on municipal buildings, and 1,500  
7 megawatts on schools.

8           Findings. 2001, about 10.5 percent of  
9 retail electricity sales in California came from  
10 renewable energy sources. Energy Commission  
11 simulations suggest that accelerating RPS to 20  
12 percent renewable resources of all retail sales by  
13 2010 could reduce the state's reliance on natural  
14 gas to produce electricity in this western  
15 electric coordinating council area by five  
16 percent.

17           Accelerated RPS could reduce NOX  
18 emissions by about 31,000 tons. And it could  
19 reduce CO2 -- this number here should be 64  
20 million tons.

21           Challenges. Well, one of the challenges  
22 is the transmission lines that link renewable  
23 energy sites, which are often in isolated or rural  
24 locations with load centers, can be costly. They  
25 can meet with a lot of resistance by the people

1 that live in the areas, etc.

2 Often difficult for renewable power  
3 plants to get contractual access to transmission  
4 lines. Not all forms of renewable energy provide  
5 the type of power on demand that the system counts  
6 on for reliably servicing California customers.

7 Much of this renewable resource is  
8 what's called intermittent, though there are ways,  
9 perhaps, of grouping large areas of intermittent  
10 resources like wind in a such way that, while some  
11 areas are not producing, other areas might be  
12 producing.

13 And there's still some environmental  
14 concerns associated with renewables. The need to  
15 reduce bird kills with wind, and improve fish  
16 passage and water quality with small hydro  
17 facilities.

18 Actions. We can take reevaluating the  
19 adequacy of the public good funding at the  
20 conclusion of the first solicitation for RSP, to  
21 determine if funding should be increased.

22 Commercializing R&D of renewable energy  
23 storage technologies. Working closely with  
24 transmission system operators so renewable power  
25 has access to the system, and monitoring RPS

1 implementation for community source service  
2 providers and electric service providers.

3           The fourth large area of PIES that we  
4 look at is the RD&D area. RD&D can be defined as  
5 the process of advancing science and technology  
6 from the initial stages of exploring a concept  
7 through the laboratory, and application testing of  
8 components and systems to eventually introduce it  
9 to the marketplace. Typically here you're kind of  
10 looking at going from what I think of as Buck  
11 Rogers to Home Depot.

12           PIER program. Primarily, when we're  
13 talking about RD&D in the PIES program we're  
14 talking about the PIER program. PIER program was  
15 set up following the 1996 deregulation  
16 legislation, and it authorized the Energy  
17 Commission to conduct public interest energy  
18 research development demonstration.

19           The goal of the PIER program is to help  
20 make California electricity more affordable,  
21 diverse, clean and safe. PIER takes on critical  
22 RD&D initiatives that offer near and long-term  
23 benefits to California.

24           As listed in the report, these are some  
25 of the products that have been commercialized

1 through the PIER program through 2002. This gives  
2 you an idea of what's been going on with the  
3 California investor-owned RD&D expenditures as a  
4 percent of operating revenues over time.

5 Not unexpectedly, starting during the  
6 year of deregulation it has fallen off, mainly to  
7 be picked up by some of the public good charge  
8 funding through the PIER program.

9 This doesn't look good. RD&D funding by  
10 year at the Gas Research Institute. Some of the  
11 findings. PIER program activities help to  
12 stimulate the economy by focusing on producing  
13 successful commercial products.

14 Public interest RD&D portfolios should  
15 maintain a focus on near-term development and  
16 application. People like to see results. They  
17 like to see results in their lifetime. They like  
18 to see a program make a difference.

19 Public interest RD&D funding.  
20 Initiatives should focus on areas where there are  
21 other related state programs, such as building  
22 standards, and tied on to that most RD&D programs  
23 are closely tied to some kind of policy  
24 initiative.

25 Challenges. Well, leveraging public

1 funding, and finding niche research areas where  
2 the dollars will make a difference. PIER has  
3 money, but it doesn't have nearly the kind of  
4 money that other federal-funded programs do, so we  
5 have to be very selective about where we put the  
6 dollars in this program to get results.

7 All RD&D projects should have exit  
8 strategies, they must be clearly terminated when  
9 the goals will not be realized. On the other  
10 hand, there must be marketing strategies for  
11 products which do meet their goals.

12 Just to give you a rough idea. From  
13 2000-2002, how PIER has leverage their current  
14 money with DOE, other federal or state agencies,  
15 and also in the private sector.

16 Finally, some actions here. We need to  
17 continue to look at additional ways to encourage  
18 commercialization of promising new technologies.  
19 Too often what seems like a successful technology  
20 is not able to penetrate the marketplace.

21 Governments should become first buyers  
22 of new technologies, which endorse the technology  
23 certifying programs for energy efficiency  
24 technologies, and a few other actions.

25 Finally, the last two areas here we're

1 going to talk about are the international energy  
2 markets section. California, through this  
3 particular program, provides assistance to small,  
4 middle-size, and larger energy companies to help  
5 them export their energy technologies, products or  
6 services.

7 Part of the problem here is that many of  
8 the smaller companies don't really understand  
9 international financing techniques, have trouble  
10 competing on a level playing field with Japanese  
11 and European companies, and so this program aims  
12 to sort of put them on an even footing with  
13 foreign firms to help them increase their market  
14 share in those countries.

15 The 12 distinct energy sector  
16 categories, such as wind and geothermal.  
17 California represents a significant portion of all  
18 U.S. energy companies. A recent study of 152 of  
19 these particular California companies indicates  
20 that their international markets account for about  
21 24 percent of their total sales. This is a  
22 percentage, really, large enough to make or break  
23 a small or medium-sized business.

24 So many California industries, as a  
25 result, are shifting their attention away from

1 domestic markets and towards international  
2 markets.

3           This particular table, it's kind of  
4 interesting, I think I would have arranged it a  
5 little bit differently if I had time, but  
6 basically what you're looking at here is all kinds  
7 of business that various companies can be in --  
8 biomass, coal, co-generation, etc. and who appears  
9 to be there best market, foreign market, for what  
10 it is they do.

11           For example, co-generation, you see  
12 Mexico, China, Canada. If you look through this  
13 you can see a lot of names coming up over and over  
14 again, most prominently being Mexico.

15           So the challenges here of this  
16 international energy market program. Well, taking  
17 advantage of an emission trading policy that's  
18 emerged from an international agreements on  
19 greenhouse gas emission caps allows these  
20 governments and companies to trade emission  
21 credits to reduce the overall emissions.

22           This means that things such as these  
23 strategies we've been talking about -- energy  
24 efficiency, renewable energy, co-generation,  
25 methane recovery, etc., can be banked to meet a

1 country's own goals and/or sold as foreign  
2 investments to private companies.

3           The bottom line being there's an added  
4 benefit to these companies from moving to these  
5 kind of strategies. Some of the things we need to  
6 do is take advantage of that as a public agency.

7           Plus, given what I showed you at the  
8 previous table, develop some kind of joint  
9 environmental strategy with Mexico to address how  
10 renewable energy, energy efficiency, and new  
11 technologies can improve energy and all other  
12 environmental kinds of conditions on the  
13 California-Mexico border.

14           Finally, we'll talk about local  
15 reliability concerns. The two areas, as I  
16 mentioned in the beginning, San Diego and San  
17 Francisco peninsula, have reliability problems.  
18 They are characterized by limited generation  
19 within their electric boundaries, and limited  
20 transmission capacity to resources outside the  
21 boundaries.

22           Supply analysis says at least 100  
23 megawatts of new capacity will be needed in the  
24 San Diego area in 2006 and another 100 megawatts  
25 in 2007. And San Francisco will need new

1 generation or transmission upgrades, otherwise  
2 local reliability will be violated by 2006.

3 We found that stakeholders preferred to  
4 have a role in selecting solutions to energy  
5 problems, so they can ensure that they're own  
6 local objectives and needs are considered. Both  
7 San Diego and San Francisco have determined that a  
8 diversity of energy resources makes the most sense  
9 for them.

10 And smaller-scale generation, renewable  
11 energy and DSM are more desirable to local  
12 residents than more transmission lines and  
13 traditional power plants.

14 Actions. Well, we found that it's very  
15 important in these kinds of local energy processes  
16 to educate the stakeholders and solicit their  
17 input early, in order to get a consensus on  
18 regional issues and solutions.

19 And one of the things that we propose  
20 these areas consider is a new intermediate local  
21 organization that could coordinate planning and  
22 lobbying in the regions, which would be helpful to  
23 develop balanced energy portfolios. Possibly a  
24 joint power authority that could serve group  
25 energy efficiency projects and take advantages of

1 economies of scale.

2           And that's it. Want me to go back to  
3 the ostrich?

4           COMMISSIONER BOYD: Thank you, Don. Any  
5 questions from folks up here on the dais? Any  
6 questions from -- ah, Mr. Tooker. Make sure --  
7 you need a little green light.

8           MR. TOOKER: I've got a green light.

9           COMMISSIONER BOYD: Okay, you're a go.

10          MR. TOOKER: Thank you. Going back to  
11 the slide towards the beginning on energy  
12 efficiency conservation findings, talking about  
13 recommending doubling of current programs. And  
14 talk about, you quantified those benefits. What  
15 are those benefits like compared to historic  
16 spending levels?

17          MR. SCHWARTZ: Chris, I was so busy  
18 figuring out how to use this piece of equipment  
19 that I wasn't paying attention to your question.  
20 Now what slide are you referring to?

21          MR. TOOKER: It's the slide entitled  
22 "Energy Efficiency and Conservation: Findings."  
23 And the last two bullets recommend doubling of  
24 program spending?

25          MR. SCHWARTZ: This one right here?

1 MR. TOOKER: Yes.

2 MR. SCHWARTZ: Okay, go ahead.

3 MR. TOOKER: What would the benefits be  
4 of that proposed doubling compared to the historic  
5 spending on energy efficiency?

6 MR. SCHWARTZ: Let's see, I think  
7 there's a graph. You want a quantitative number  
8 here?

9 MR. TOOKER: Well, you give a  
10 quantitative --

11 MR. SCHWARTZ: Here's a -- this would  
12 show the double --. This is therms, we'll move  
13 over to megawatts. This is the current benefits  
14 here, of basically keeping the funding where it  
15 is. A doubling is the high DSM case, so the  
16 benefits in terms of at least savings, would be  
17 this much here for commercial, this much here for  
18 residential.

19 If you wanted to translate benefits into  
20 dollars you could multiply that savings by the  
21 dollar cost of the energy.

22 MR. TOOKER: Okay. I think it would be  
23 interesting to show what the benefit per dollar is  
24 of current programs versus the benefit, let's say  
25 per dollar of proposed doubling. Whether you get

1 the same benefit from each dollar invested, or  
2 whether you're going to get more or less benefits  
3 from additional --.

4 MR. SCHWARTZ: Oh, I see what you're  
5 saying, is there some kind of falloff here.

6 COMMISSIONER ROSENFELD: Chris, I can  
7 make a comment on that. Just quoting from the  
8 supply curve analysis, a document called the  
9 secret surplus, from Hewlett Foundation. The  
10 estimate is that if you double -- the present  
11 funding on conservation programs is about \$250  
12 million a year.

13 Their assertion is if you double it you  
14 roughly double the savings. If you quadruple it,  
15 however, you only get another relatively small  
16 increase in savings, because you're beginning to  
17 get into situations where you have to give  
18 rebates, which almost -- you don't share rebates  
19 with the customer any more, but you have to  
20 basically give huge rebates.

21 So the recommendation from the  
22 conservation supply curves is that it's pretty  
23 efficient to double spending, and after that  
24 you're going to run into a wall.

25 MR. SCHWARTZ: Yes, that's right. And

1 Chris, when you have time, i'd refer you to table  
2 3-1 on page 47 of the report, where there is a  
3 table here that shows that the baseline business  
4 as usual scenario, gigawatt hour savings, is about  
5 9,600. If you double that, advance to the DMS  
6 high, it's 19, and if you go the maximum it's 30.

7

8 So, it's as Commissioner Rosenfeld said.  
9 You double it you get about double, but as you go  
10 up four times you don't get four times as much.

11 MR. TOOKER: Thank you.

12 COMMISSIONER BOYD: Any questions,  
13 comments from anyone in the audience, just on this  
14 presentation, before we move to your presentation?  
15 If not, Don, I'm going to take this opportunity to  
16 make what I'll call observations, which I've done  
17 in some of the other hearings about what I've seen  
18 so far.

19 And we're going to have another staff  
20 presentation, by the way, on the climate change  
21 component of this. But just an observation, as  
22 Chair of the Transportation committee, and having,  
23 along with Commissioner Geesman and Commissioner  
24 Keese, sat through many a hearing of late on  
25 either IEPR related or other legislatively

1 directed studies of transportation issues.

2           The Energy Commission has the benefit of  
3 being the sole energy agency with responsibility  
4 for transportation fuels. Which is a blessing, I  
5 won't go beyond that. And works closely with  
6 other agencies, such as the Air Board, who have an  
7 interest in this.

8           And therefore we kind of get  
9 transportation-centric in that arena, and we've  
10 had hearings and a report on that, and that report  
11 did make reference to research. And this is  
12 public interest energy issues, but it has a very  
13 deep research foundation, this discussion today.

14           And conspicuously absent from this  
15 report, in my mind -- almost absent, I did see  
16 reference in reading the report to transportation.  
17 But conspicuously absent to me is more emphasis on  
18 transportation fuels, which is the -- I mean, if  
19 you want to talk about pure energy, the three legs  
20 of that stool, these days -- natural gas,  
21 electricity and transportation fuels -- and  
22 alternatives thereto.

23           We don't have a lot of discussion about  
24 public interest activities in the transportation,  
25 or transportation fuels arena. The transportation

1 report will talk more about that. But we at the  
2 Commission need to define our research program as  
3 one that cuts across all of our areas of  
4 responsibility.

5           So I have a concern that we need more  
6 connections to, and more discussion of  
7 transportation issues in this report. One of the  
8 reasons we don't have that, besides not having to  
9 share the agenda with so many other agencies, is  
10 the fact that there's not a lot of funding.

11           In fact, there's very little funding for  
12 transportation and public interest-use activities,  
13 and maybe that's a deficiency or policy issue that  
14 perhaps we need to call out -- we Commissioners,  
15 when we finish the overall umbrella report on this  
16 subject.

17           And one of the reasons it really sticks  
18 with me is, as some of my fellow Commissioners and  
19 many staff know, one of the reports that we did  
20 recently, which is part of the foundation for all  
21 that we talk about, i.e. the report relative to  
22 reducing our dependence on petroleum.

23           Job one was efficiency. And job one in  
24 electricity and natural gas have become more or  
25 less efficiency. The Energy Action Plan, which

1 only discusses electricity and natural gas, it's  
2 efficient. And we need to drum up more support,  
3 and discuss more in other venues this issue of  
4 efficiency with regard to that other leg of the  
5 stool, transportation fuels.

6 The second major thrust of that report  
7 was alternative fuels, which you can call, like  
8 renewables, are to the electricity area. And I  
9 think we need to make that connection and we need  
10 to push alternative fuels/renewable approaches in  
11 the transportation arena more.

12 And since transportation fuels actually  
13 include electricity and natural gas, although  
14 electricity is sliding away painfully and slowly,  
15 the ramifications of policy decisions and demand  
16 forecasts and what have you for natural gas and  
17 electricity in these days -- although the plug-in  
18 hybrid is coming back, so that still uses  
19 electricity.

20 Shows that there is a connection between  
21 these issues, and I'm personally worrying, as I've  
22 said in this forum before, about the supply of  
23 natural gas, the uses of natural gas, what should  
24 be the priority uses of natural gas.

25 In another life I thought natural gas in

1 transportation sector was just great, and it still  
2 may be, but the connection between the use of  
3 natural gas and efficiencies in uses of fuels,  
4 includes the vehicle, the transportation arena.

5           So this is jut kind of a, since I don't  
6 sit on a research committee, an opportunity to  
7 point out that I do think we need to emphasize the  
8 connections there, and I think maybe the public  
9 expects a little bit more of that, and maybe, in  
10 finishing this report, this is such an  
11 opportunity.

12           Actions we take in all arenas affect --  
13 I mean, it's a complete system, the whole  
14 transportation, energy -- I should say the energy  
15 arena is a whole arena, the stool doesn't stand  
16 if all three legs aren't working properly anymore,  
17 and the economy sits on that energy stool,  
18 frankly, and we can't deny the connection.

19           And the ostrich there didn't have his  
20 head buried in the sand -- I want to borrow that  
21 slide by the way, Don, I think it was very  
22 effective. But we need to show that the ostrich  
23 doesn't have his head in the sand, and we  
24 recognize all these areas.

25           Okay, with that little taking

1 opportunity, the privilege of the chair, I'd like  
2 to move on to our next presentation, which is Dr.  
3 DuVair's going to talk to us about climate change,  
4 which is part of the broad public interest energy  
5 arena.

6           Since the world sees energy as the root  
7 cause of, the major contribution to greenhouse gas  
8 emissions, it is now a component of this agency's  
9 program.

10           MR. DUVAIR: Good morning,  
11 Commissioners, Advisors, Energy Commission staff,  
12 and visitors here for this hearing. My name is  
13 Pierre duvair, and I'm in the Transportation  
14 Energy Division here at the California Energy  
15 Commission working on climate change issues.

16           I've got just a handful of slides here  
17 to talk about. Climate change and the potential  
18 to include it in the Integrated Energy Policy  
19 Report.

20           Climate change has been covered in a  
21 number of the workshops to date. We had a  
22 workshop on hydroelectric power and the potential  
23 impacts of climate change affecting the hydrology  
24 within California and how that might influence  
25 hydro-electric generation.

1           The transportation fuels workshop had a  
2 discussion on climate change, with a focus on the  
3 need to do life cycle analysis of greenhouse gas  
4 emissions associated with a variety of  
5 transportation fuels.

6           The energy efficiency workshop talked  
7 about the potential to mitigate greenhouse gas  
8 emissions, and the renewable energy workshop also  
9 covered climate change. And finally, we had an  
10 air emissions workshop. so we've covered climate  
11 change in a number of the workshops to date.

12           We just released a draft staff report  
13 earlier this week that really has a lot of the  
14 background information that identifies the  
15 inventory of statewide emissions within  
16 California, the trends and the sources.

17           You've all seen this, I know, which is  
18 -- we had a report that summarized the  
19 California's greenhouse gas emissions over the  
20 1990's. And in 1999 we found that the  
21 transportation sector is by far the largest source  
22 of California's greenhouse gas emissions.

23           For CO2 it accounts for about 58 percent  
24 of CO2, from the combustion of fossil fuels. And  
25 the electricity sector falls a distant second

1 behind for CO2, which is 84 percent of the  
2 greenhouse gases.

3 California also has emissions of methane  
4 and nitrous oxide and then other synthetic gases  
5 that trap heat in the atmosphere.

6 Some of the strategies that have been  
7 developed to try and both mitigate greenhouse gas  
8 emissions and adapt, include transportation and  
9 electricity generation being the two largest  
10 sources.

11 We heard Commissioner Boyd discuss a  
12 recent report and recommendations related to how  
13 California can reduce its dependence on petroleum.  
14 The is a large source of greenhouse gas emissions,  
15 and the strategies within that report can go a  
16 long ways toward helping California cut its  
17 greenhouse gas emissions.

18 Another key transportation effort would  
19 be the implementation of Assembly Bill 1493. This  
20 is the Pavley bill that was passed last summer.  
21 And the Air Board is in the process of developing  
22 standard to achieve the maximum feasible cost-  
23 effective reductions of greenhouse gas emissions  
24 from new motor vehicles, starting with the 2009  
25 vehicle class.

1           That is definitely an important effort  
2 that can help California reduce its emissions  
3 certainly in the future. It's a little ways off.

4           Then there's a wide range of other  
5 transportation measures that potentially could cut  
6 greenhouse gas emissions. Everyone from helping  
7 public fleets increase their fuel efficiency, the  
8 managers of large fleets can try and pool their  
9 resources to try and get more affordable prices  
10 for hybrid electric vehicles.

11           We can do a lot on improving tire  
12 efficiency through labeling and marketing for  
13 replacement tires to help improve fuel economy and  
14 reduce petroleum consumption.

15           Electrify truck stops to reduce idling  
16 and fuel consumption at our truck stops. Improve  
17 the commercialization of grid connected hybrid  
18 electrics. There's a broad range of  
19 transportation strategies that will all help  
20 reduce greenhouse gas emissions that should be  
21 considered.

22           In the electricity sector there's a  
23 broad range of tools that are being looked at  
24 right now by other states, other countries, to try  
25 and reduce their greenhouse gas emissions from

1 generation of electricity.

2 Obviously, improved energy efficiency  
3 and conservation will reduce the need for  
4 electricity generated by fossil fuels that emit  
5 greenhouse gases.

6 Some states have set fuel-efficiency  
7 benchmarks, and required offsets for new sources  
8 for CO2 as a type of measure. We, of course, are  
9 looking toward renewable energy as a way to reduce  
10 fossil-fuel based electricity generation. That  
11 can go quite a ways to reducing greenhouse gas  
12 emissions in the electricity sector.

13 And then there is a variety of market  
14 and non-market mechanisms being tested. Europe is  
15 looking to launch a cap and trade system for their  
16 greenhouse gas emissions for their large emitting  
17 sectors, starting in 2005. The east coast states  
18 are looking to design and implement over the next  
19 year to two years a cap and trade system for east  
20 coast states.

21 So there are a number of, a lot of other  
22 countries are looking towards fees or energy or  
23 carbon taxes as a means of incentivising reduced  
24 energy consumption and mitigating greenhouse gas  
25 emissions.

1           There's a broad range of strategies  
2 outside of transportation and electricity  
3 generation that the state can look at and try to  
4 better prepare for possible effects of climate  
5 change. And California certainly, being a coastal  
6 state, is very susceptible to a number of the  
7 risks associated with climate change.

8           The first is to develop a much more  
9 comprehensive adaptation plan. Much of the  
10 atmospheric scientists will tell us that we're  
11 going to be facing some warming in the future, and  
12 even if we mitigate our emissions for the  
13 foreseeable future. So California really does  
14 need to develop a more comprehensive adaptation  
15 plan.

16           We also need to improve our ability to  
17 predict future climate. The PIER program  
18 certainly is taking a close look at this. We can  
19 improve the data collection and observations that  
20 will help regional scale modeling of climate  
21 change.

22           And there's much to be done here to help  
23 us predict our future climates, which of course  
24 will help us better plan adaptation strategies.  
25 We need to support the export of clean and low

1 greenhouse gas energy technologies. Don Schwartz  
2 covered some of that with the emerging efforts  
3 here for international energy markets, that we can  
4 promote California companies to help export  
5 greenhouse gas technologies.

6           We can also shift demands towards goods  
7 and services with lower greenhouse gas emissions.  
8 And the economics literature is replete with all  
9 kinds of tools and mechanisms that can be used to  
10 shift demand, maintaining the quality of the goods  
11 and services, but just with a lower greenhouse gas  
12 output.

13           Examples of those, you've heard of using  
14 rebates and fees for fuel efficiency in vehicles.  
15 And there's different insurance mechanisms where,  
16 you know, you pay as you drive or pay at the pump,  
17 that could provide insurance, but also have  
18 incentives to reduce vehicle miles traveled.

19           And then finally, a few other key  
20 climate change initiatives that could be pursued  
21 is for California to look at regional  
22 partnerships, and some discussions have already  
23 started on this.

24           East coast states and the eastern  
25 Canadian provinces have formed a partnership.

1 They are setting greenhouse gas reduction targets  
2 as a region. There's a lot of advantages to  
3 regional partnerships, and California certainly  
4 can pursue partnerships with its neighboring  
5 states and countries to develop climate change  
6 plans and actions.

7 Regional partnerships can help  
8 coordinate on research and development, and the  
9 Energy Commission did just receive support from  
10 the Department of Energy for a regional carbon  
11 sequestration partnership in the western states.

12 Finally, we need to focus more on life  
13 cycle analysis and evaluating strategies that  
14 really look upstream, because greenhouse gas  
15 emissions affect atmospheric concentrations no  
16 matter where they are emitted.

17 It's important to look at sort of  
18 upstream implications of alternative fuels and any  
19 other strategies, in terms of how does that affect  
20 greenhouse gas emissions upstream or outside of,  
21 you know, just the actual use of the alternative  
22 fuels and vehicles.

23 And then we need to improve our  
24 inventory methods here at the Energy Commission,  
25 where we are responsible for the statewide

1 emissions inventory. As we make improvements in  
2 that inventory we'll be able to better evaluate  
3 how effective future climate change strategies are  
4 at cutting the state's greenhouse gas emissions.

5           And with that, let's see -- ah, one  
6 more. We did hear about how there are emerging  
7 global greenhouse gas markets. I think that the  
8 Energy Commission needs to focus on how we can  
9 help California businesses take advantage of these  
10 emerging markets.

11           There's wide-ranging estimates of how  
12 big these markets will be in terms of the  
13 billions of dollars annually. But it is important  
14 for California's economy that we do promote our  
15 participation in these markets.

16           We can increase public education and  
17 outreach efforts on climate change. There's a lot  
18 of potential we have to share the information and  
19 the knowledge we have on climate change, the risks  
20 to California and ways that individuals and  
21 households and businesses can mitigate potential  
22 impacts.

23           We can expand data collection and  
24 sharing of observations. Also, the PIER program  
25 is very aware of the importance of networking to

1 increase our information base on climate change.

2 And then finally, we've started efforts  
3 to coordinate across agencies with local  
4 governments as well as other California state  
5 agencies to really come up with more integrated  
6 plans and addressing the risks and opportunities  
7 that California has to deal with climate change.  
8 With that I'll conclude.

9 COMMISSIONER BOYD: Thank you, Pierre.  
10 Any questions up here? Mr. Smith, I didn't  
11 welcome you. My Advisor, Mike Smith, joined us a  
12 little late.

13 MR. SMITH: Thank you. Good morning,  
14 Pierre. I do have one quick question on a  
15 recently signed initiative between Mexico and the  
16 United States. And I hope I'm getting the title  
17 right. It's the Bi-national Climate Change  
18 Initiative, something like that.

19 MR. DUVAIR: Yes, I'm only vaguely  
20 familiar with it. I think you probably are more  
21 familiar than I.

22 MR. SMITH: All right. I think you just  
23 answered my question. I wanted to explore with  
24 you just for a moment how that -- I know the ink  
25 is still wet. It was only signed, I believe, in

1 February or March.

2           And I was hoping to explore with you  
3 perhaps how that vehicle might be -- or how we as  
4 the Energy Commission or as the state of  
5 California might be able to use that as a means as  
6 affecting climate change strategies or objectives  
7 in the border region.

8           MR. DUVAIR: I think you saw in one of  
9 the slides that Don presented, the opportunities  
10 with Mexico. Mexico did show up in about every  
11 one of those cells that Don had in his table, in  
12 terms of the types of arenas within energy that  
13 California has the opportunity to work with  
14 Mexico.

15           I know Tim Olson's program is very  
16 focused in that arena, and he probably can answer  
17 that question a lot better than I can in terms of  
18 what are the specific opportunities that  
19 California has to partner with Mexico. And I don't  
20 know, Tim, if you want to try and tackle that or  
21 not?

22           COMMISSIONER BOYD: Well, I would note,  
23 while Tim's coming to the table, that in that  
24 chart you referenced, our NAFTA partners are  
25 referenced in every single box. One or the other

1 or both of them, so the opportunities are  
2 seemingly endless.

3 MR. OLSON: Tim Olson with the  
4 International Program. We're familiar with that  
5 agreement with the US-EPA and the equivalent EPA  
6 of Mexico, Summernacht. And I think the Energy  
7 Secretary of Mexico is a part of that, too.

8 One way of exploring that is negotiating  
9 -- a U.S. treaty is basically what it is, a U.S.  
10 and Mexico treaty. And there are channels for  
11 states to participate on that. And I think one  
12 thing worth exploring is how we can be a partner  
13 in that as a member of the U.S.

14 And the details of that agreement, from  
15 what I know, are very sketchy. And I think they  
16 are probably looking for suggestions on how to  
17 flush it out.

18 COMMISSIONER BOYD: Thank you, Tim. Mr.  
19 Tooker?

20 MR. TOOKER: I do have a question,  
21 Pierre. In the list of recommendations you talked  
22 about developing better methods for being able to  
23 predict weather or climate. Does that include  
24 working with the international community to better  
25 understand the relationship between global climate

1 change gases and impacts in reducing the  
2 uncertainties regarding that?

3 MR. DUVAIR: Well, Terry Surles is here,  
4 and Terry can probably best answer that question.

5 COMMISSIONER BOYD: Terry, you've got to  
6 come all the way up here.

7 MR. SURLES: What was the question?

8 MR. TOOKER: Terry, Pierre had talked  
9 about the need for us to improve our ability to  
10 predict climate, I believe that's what you said.

11 And I was wondering if that's going to  
12 include initiatives to work with the international  
13 community to better understand the relationship  
14 between global climate change gases and impacts?  
15 There's been a lot of political debate about that  
16 and uncertainties, and I would expect that's an  
17 important area.

18 MR. SURLES: Right. I'm Terry Surles, I  
19 run the R&D program here. We were looking at  
20 developing relationships with a number, or  
21 certainly at least a couple of groups now that are  
22 going to enhance that.

23 One, we're working with Scripps, because  
24 they can be working not only in terms of helping  
25 us with providing better information and

1 observations here in the state of California but  
2 because they actually have been working with the  
3 Department of Water Resources for some time  
4 looking at climate variability issues.

5 But Scripps also works back, as part of  
6 their work, in the Pacific to Asia. In fact, they  
7 have a close working relationship with the  
8 Japanese.

9 And we're also planning to work with a  
10 multi-funded organization called the Global  
11 Strategic Technology Partnership, for the same  
12 reason, because we're looking at working with them  
13 because there's a number of Japanese and European  
14 groups that are collaborating right now, and we're  
15 going to be working with them because we want to  
16 bring an energy efficiency component into some of  
17 the things we're thinking about.

18 Because right now their models -- which  
19 actually most of the models currently are better  
20 than the American models are, or the European  
21 models. So we want to be able to play in that and  
22 also affect the outcome of what they're doing by  
23 adding an efficiency component.

24 And another thing, back on what we're  
25 doing with Scripps, in terms of the regional

1 activities, is that while the global models aren't  
2 as well understood as they could be, we still feel  
3 that we need to try and get a handle on regional  
4 modeling, and particularly where we might be  
5 looking in the near-term at climate variability.

6           Because, as I think both Don and Pierre  
7 said, one of the things we're trying to do right  
8 now is, even in the near term can we be developing  
9 information with these programs that can better  
10 inform decision-makers here in Sacramento. So  
11 that's what we're trying to do with some of the  
12 early regional models.

13           MR. TOOKER: Thank you.

14           COMMISSIONER BOYD: Thank you. Any  
15 other questions? Comments? Thank you, Pierre.  
16 Well, with that, I believe we've concluded the  
17 staff presentations. We can turn now to  
18 discussion with the stakeholders and public. And  
19 I'll start going down through my list of cards  
20 here.

21           First, I'd like to call on Irene  
22 Stillings, who is the Executive Director of the  
23 San Diego Regional Energy Office.

24           MS. STILLINGS: Thank you. And good  
25 morning to all the Commissioners. We appreciate,

1 on behalf of the San Diego Regional Energy Office,  
2 or SDREO, as you'll hear me refer to it, we  
3 appreciate the opportunity to be here and to  
4 support your efforts to bring more integration to  
5 what sometimes seems to us to be a fragmented  
6 process.

7           So we are very supportive of the work  
8 you're doing, and hope we can add some value.

9 SDREO, San Diego Regional Energy Office, is an  
10 independent, non-profit organization who is  
11 working to ensure a sustainable energy future for  
12 the San Diego region.

13           Our mission is to provide objective  
14 information, inclusive and integrated policy and  
15 planning, and effective energy and efficiency and  
16 self-generation for the community.

17           We were formed in 1995, though didn't  
18 really get our wings so to speak until around  
19 1998. We often act as the energy arm of the San  
20 Diego Association of Governments, or SANDAG. Our  
21 funding mostly comes from CEC programs, from CPUC  
22 programs, and from the DOE.

23           San Diego County's been active in  
24 community energy planning for 25 years. I've been  
25 a resident of California and in this position at

1 SDREO for one year.

2           Just to tell you, a touch of my  
3 credentials to address this topic. I've spent  
4 about 30 years in the energy industry. 22 of  
5 those years I was an executive at an east coast  
6 electric and gas investor-owned utility.

7           And in that capacity I often had the  
8 opportunity to interact and share the podium with  
9 Commissioner Rosenfeld. It's nice to see you  
10 again, sir. And in that time I also managed the  
11 demand-side management programs for this utility,  
12 to the tune of somewhere in the neighborhood of  
13 200 million dollars over five years.

14           So I understand what's going on right  
15 now in energy planning and in the move toward more  
16 energy efficiency.

17           As I said, San Diego County has been in  
18 this business for 25 years. They developed a  
19 regional energy strategy in 1978, another regional  
20 energy strategy in 1984, a third regional energy  
21 strategy in 1994.

22           And all three strategies very nicely sit  
23 on the shelves gathering dust, because there was  
24 never any entity to really pick up that bill and  
25 move with it.

1           As the San Diego Regional Energy Office  
2 became more active, in 2001 San Diego came to us  
3 again and contracted with us to develop a new 30  
4 year energy plan to incorporate into their  
5 developing regional comprehensive plan. As I  
6 said, SANDAG is an association of governments that  
7 focuses on planning for the county.

8           Their comment was we need to plan for  
9 our future differently than we have our past. And  
10 they gave us a small amount of money and said go  
11 to it. Our first step, we recognized that in  
12 order to create a policy document with teeth we  
13 had to have a real, secure, solid base of  
14 information about what the current infrastructure  
15 is in San Diego County.

16           So the city of San Diego, the county of  
17 San Diego, SANDAG, the Port Authority, the Water  
18 Authority, UCAN, the Consumer Action Network, and  
19 REO retained an independent party, happened to be  
20 the SAIC, to develop a snapshot of where we were  
21 in the fall of 2002 in our ability to meet the  
22 energy needs of our present population and to grow  
23 with our growing population.

24           In December of last year they issued the  
25 regional energy infrastructure study, I see some

1 of you have seen it. In which it was very clear  
2 that San Diego County was not ready to meet the  
3 demanding growth patterns.

4 In a whole host of ways not ready, but  
5 primarily in the energy industry we foresaw a  
6 doubling of electricity demand in the next 30  
7 years, and an increase in population and  
8 transportation needs, and a increasing reliance on  
9 natural gas which concerned the group very much  
10 because of perhaps dwindling U.S. supplies of that  
11 resource.

12 This process was started in 2001. It  
13 was done and started before the activities of  
14 procurement and planning were returned to the  
15 investor-owned utilities, and so we ended up with  
16 a very interesting aspect of having the local  
17 utility, San Diego Gas and Electric, producing a  
18 20 year plan while we were producing a 30 year  
19 plan.

20 And they agree in some aspects, and they  
21 disagree in some aspects. Our plan was developed  
22 with the help of a regional energy policy advisory  
23 council, REPAC, which consisted of elected  
24 officials, representatives from business,  
25 academia, advocacy groups and environmental

1 groups.

2 Over the period of about 15 months this  
3 group met more than 20 times to discuss, to learn,  
4 to debate, to dialogue, on all the issues facing  
5 the county. San Diego Gas and Electric, though  
6 not a voting member of REPAC, was very active in  
7 an advisory capacity, and participated fully.

8 In order to learn our lesson from the  
9 past and not have another report that sat on the  
10 shelf, we decided to develop our report in two  
11 pieces. Part one, what do we need to do. And  
12 then an addendum, Part two, how are we going to do  
13 it.

14 Our goal, like the IEPR, was to look at  
15 all aspects of energy in an integrated way. I  
16 think what's interesting about our process is,  
17 prior to our deliberations and discussion, we set  
18 objectives and we set guiding principles, and I'd  
19 like to share just a few of these with you.

20 Our objective was to provide an  
21 integrated approach to meeting the energy needs of  
22 the region, to ensure that adequate, reliable and  
23 competitively priced electricity and natural gas  
24 was available, to ensure fair distribution of  
25 energy cost, to create an enduring framework for

1 energy planning that would incorporate the diverse  
2 interests and capabilities of key stakeholders in  
3 the region, to strongly -- and that's underlined  
4 -- the development of clean, safe, and  
5 environmentally benign resources, and to look  
6 forward towards preparing the region for a  
7 potential transition from a fossil fuel economy to  
8 new supply sources and technologies.

9           This was very important as we looked  
10 forward, and it drove a lot of the decisions we  
11 made. As an aside, in this same time period, the  
12 San Diego Regional Energy Office led, with the Gas  
13 Technology Institute, the development of a 100  
14 year vision for creating a sustainable urban  
15 system design for San diego and Tijuana.

16           A cross-border, bi-national activity,  
17 which we submitted in an international competition  
18 to the World Gas Conference in Tokyo in June. And  
19 we competed against nine other countries and we  
20 took second place in the competition. And at some  
21 time I'd be delighted to share with you the vision  
22 that this team created for the year 2103.

23           The guiding principles of developing our  
24 regional energy strategies were that the supply  
25 portfolio would be diversified, cost-efficient,

1 environmentally sound, self-sustaining, secure and  
2 reliable. Much the same, I think, as your guiding  
3 principles.

4           We were determined that the process  
5 would be open and inclusive, that the energy  
6 projects and policies would protect the interest  
7 of the vulnerable and the disadvantaged in both  
8 San Diego and Mexico. That we'd have adequate  
9 indigenous resources to ensure reliability and  
10 stabilize prices.

11           This group was very concerned by the  
12 fact that currently more than 50 percent of the  
13 energy needs of the county are being imported from  
14 outside the state. And it was a great concern, I  
15 suppose, in light of the terrorist threats and  
16 activities, in light of the fact that this means a  
17 lot of money and a lot of jobs are going out-of-  
18 state rather than being in-region, and it was a  
19 very important guiding principle for them.

20           The energy efficiency and demand  
21 management programs were to be preferred over the  
22 development of new fossil fuel generation. And we  
23 wanted to make sure that there was an integration  
24 of energy policies and economic development  
25 activities to ensure the creation of new jobs in

1 the region.

2           The regional energy strategy was passed  
3 by a unanimous vote in May of 2003, submitted to  
4 SANDAG at that time, and adopted by SANDAG in  
5 July. Which means that this document will become  
6 part of the regional comprehensive plan for San  
7 Diego.

8           Our goals, first and foremost we have a  
9 public policy goal, it was goal number one, that  
10 because the community felt that local needs, local  
11 concerns, stakeholder activities were not being  
12 adequately represented in San Francisco, in  
13 Sacramento, in Washington D.C., that the region  
14 should form an agency or an entity that would  
15 build that consensus and be a voice for the  
16 consumer and stakeholder in the proceedings in  
17 those cities.

18           The goals relating to electricity  
19 demand, the goal was to reduce per capita  
20 electricity peak demand and per capita consumption  
21 back to 1980 levels. Regarding electric supply  
22 and infrastructure, the goal was to achieve and  
23 maintain capacity to generate 65 percent of summer  
24 peak demand with in-county generation.

25           Again, a great concern about improving

1 the reliability and the availability of indigenous  
2 county resources. And that number goes up to 70  
3 percent by 2020.

4 Fourth goal was to increase the total  
5 electric supply from renewable resources to 40  
6 percent of peak demand in 2030, much higher than  
7 the RPS sets right now. And to increase the total  
8 contribution of clean, distributed generation  
9 resources to 30 percent of peak by 2030.

10 That's the order in which these were  
11 selected. Following that would be to increase the  
12 transmission system capacity as necessary to  
13 maintain required reliability and promote better  
14 access to renewable sources of energy, as has been  
15 discussed here already.

16 On the gas side, to develop policies to  
17 ensure adequate, secure, and reasonably priced  
18 natural gas to the region. This includes LNG,  
19 which I find not enough discussion taking place  
20 about the potential of LNG to meet some of our  
21 more immediate gas needs.

22 COMMISSIONER BOYD: You missed  
23 yesterday.

24 MS. STILLINGS: I apologize. And I  
25 candidly admit I have not read that document.

1           COMMISSIONER BOYD: Extensive discussion  
2 about LNG.

3           MS. STILLINGS: Well, that's very good,  
4 I'm glad to hear that. And also, to reduce  
5 regional natural gas per capita consumption by 15  
6 percent in the next 20 years.

7           And our 9th goal was to complete a  
8 transportation energy study and get involved with  
9 transportation fuel issues, and I can only echo  
10 the comments that were made a few minutes ago.

11           As a point of interest, the San Diego  
12 region has recently established a regional  
13 transportation center -- where they pump at full  
14 service -- they pump gasoline, propane, CNG, bio-  
15 diesel, you can charge your car there, and coming  
16 up is hydrogen and fuel cells.

17           It really is an initiative that came  
18 mostly out of the private sector, and I'd be  
19 happy, again, to talk more about that.

20           We're very concerned about  
21 transportation fuels in San Diego. We seem to be  
22 putting all our money into building new roads, and  
23 not into looking at what needs to be done to make  
24 the air cleaner. In fact, the whole push for that  
25 sustainable city competition I mentioned was

1 concern over global warming.

2 I just leave a note. I heard an NPR  
3 report last week in which the reporter stated that  
4 50 percent of the cars sold last year in  
5 California were -- this is this reporter's  
6 statement -- gas-guzzling SUV's. And why is  
7 California allowing this to happen.

8 As I said, our goals and our project was  
9 sent and adopted by SANDAG, and then our advisory  
10 team developed a second document on  
11 implementation. And the idea being that, it is in  
12 the public interest to have a regional energy  
13 entity that acts as a counter-point to the  
14 investor-owned utility, that provides some  
15 competition for the investor-owned utility, and  
16 that can present the interests of the stakeholders  
17 through a different form.

18 Many people that participated in this  
19 process did not feel that their interests were  
20 being represented here. And so the implementation  
21 plan is now being studied at SANDAG. They weren't  
22 so quick to pick this one up. And I cannot tell  
23 you now exactly where this is going and whether  
24 it's going to be a regional energy authority  
25 established by state legislation as we did a

1 airport authority in San Diego, or whether it will  
2 be a joint powers authority, or whether it will  
3 just be an energy committee at SANDAG. More to  
4 come on that.

5 But I have been asked to share this with  
6 you, and I'd like to just take a minute to give my  
7 comments on your document. We agree with a great  
8 deal of what you have put in your document.

9 There are some concerns in the south bay  
10 of the San Diego region about a power plant there,  
11 similar to the concerns that you detailed in San  
12 Francisco, and it was missing from that document.

13 And it's probably my fault because most  
14 of what's in that chapter came from an interview  
15 with me, so I apologize for that. And I 'd like  
16 to see that added in.

17 In the area of best practices we support  
18 your call for diversity, we support your plans  
19 that reflect community concerns. In all the talk  
20 about what do we do about energy, it is -- and I  
21 accept some of the comments from Commissioner  
22 Loretta Lynch and Commissioner Wood in opposing  
23 adoption of the Energy Action Plan -- is there  
24 isn't enough talk about what the people and what  
25 the community wants, and what it is the community

1 needs to do. And I think that needs to be more  
2 integrated into the planning that goes forward.

3 We believe that successful local groups  
4 can have an impact, but they definitely need  
5 funding to get the message out. To educate, to do  
6 workshops, to involve them in the planning  
7 process, to get them educated.

8 And San Diego is rather unique, not only  
9 for its geographical restrictions on transmission  
10 which have already been detailed, but the fact  
11 that the political jurisdiction of San Diego  
12 County almost totally matches the SDG&E territory  
13 map.

14 And it makes us an ideal place to try  
15 out and to sum up these new ideas about regional  
16 planning. Our stakeholders want to be included,  
17 they very definitely do. And they believe that  
18 there needs to be more energy efficiency, there  
19 needs to be more attention paid not only to energy  
20 efficiency but to distributed generation.

21 And the evaluation of these programs  
22 should be done by some independent third party.  
23 Currently the evaluation and measurement of  
24 programs is often done by and performed by  
25 contractors who are under contract to the entity

1 they are evaluating, and this doesn't make sense  
2 to us. And it doesn't seem that it is the way  
3 that it should be done.

4           And our group has recommended that the  
5 CEC should take over the responsibility for EM&V  
6 of these energy efficiency programs, that this is  
7 the place it belongs.

8           Regarding dynamic rates, this is my  
9 opinion, I can't say this is on behalf of the  
10 whole REPAC group, I think dynamic rates should be  
11 mandatory. I think until we send a price signal  
12 we are never going to get the kind of efficiency  
13 and demand reduction that is potentially out  
14 there.

15           In my consulting days -- because I was a  
16 consultant for eight years -- I worked a lot with  
17 utilities, who were setting up, who were  
18 installing the automatic meter readings all  
19 through their territory. And they were doing it  
20 because they saw benefits besides just cutting  
21 down meter reading costs.

22           The benefits come from being able to do  
23 a lot of this dynamic pricing, to combine this  
24 with energy efficiency and conservation. And I  
25 think we will, as a state, get the kind of demand

1 reduction that we need.

2 I worked with Puget Sound Energy when  
3 they installed their personal energy management  
4 program, they called it. They did a pilot project  
5 there -- 8, 900,000 customers, their pilot project  
6 was 400,000 customers. In a very brief period  
7 they achieved a peak reduction of two percent.  
8 And that's with a flawed design.

9 And they did it by putting everybody on  
10 the rate, and they could opt out. And they found  
11 less than one percent of the residential  
12 commercial customers there opted out. So I urge  
13 you to take aggressive action regarding dynamic  
14 pricing. I think it's the way that we get  
15 reductions.

16 As far as renewables, you talked a lot  
17 about SB 1078. There was not too much discussion  
18 in the document about AB 1685, which mandates a  
19 self-generation incentive program.

20 Currently, 1685 is due to run out in  
21 December of '04. It is under some attack, it  
22 needs support. And it needs support to have it  
23 not just photovoltaic, but also clean, non-  
24 renewable distributed generation, and we urge you  
25 to do that.

1           Impediments to integrated resource  
2 planning -- you asked about that -- is basically  
3 that there's not enough local involvement. And I  
4 think there's a false distinction between self-  
5 generation and energy efficiency. I think they go  
6 together.

7           A kilowatt is a kilowatt, whether it  
8 comes from photovoltaic cells on a roof, or from a  
9 lighting retrofit. Both of them involve hardware,  
10 both of them involve new installation, and they  
11 both result in a reduction of demand on the  
12 transmission system. And we urge you to remove  
13 some of that distinction.

14           There is an assumption, and a lot of  
15 talk going on, about the implementation of public  
16 good charge funding. And there seems to be a bias  
17 and an assumption that only the investor-owned  
18 utilities are capable of doing this work.

19           We are not looking to bash anybody, we  
20 are not looking to get into a fight. I think  
21 there's enough there for all entities to be able  
22 to perform this service for the community.

23           But there are places where the non-  
24 profit, the community-based organization, has  
25 better access and can do a better job on promoting

1 and implementing the public good charge programs.

2           You asked in your questions about  
3 integrated stakeholders, how do you get them in.  
4 Well, we think it's pretty easy. We've done it,  
5 we're still doing it.

6           All we need to do is to educate, to hold  
7 workshops, to make the process open and region-  
8 wide and with a commitment to the public goals.  
9 We have, frankly, no real idea of what's in the  
10 procurement plans that are currently being  
11 considered by the CPUC.

12           On the other hand, you can go to our  
13 website and you can find every document that went  
14 in to our regional energy strategy. Now I  
15 understand there are some needs for discretion and  
16 confidentiality.

17           But the process of planning needs to be  
18 more open, it needs to be more transparent, it  
19 needs to be more inclusive, and it needs to  
20 involve the stakeholders and the residents of the  
21 communities they serve.

22           You need the right process and the right  
23 people at the table, and you certainly need data.  
24 And you can't do a truly regional integrated plan  
25 that's responsive to local needs without those

1 three elements.

2           Unfortunately, it appears at times that  
3 this open and inclusive process works against the  
4 traditional utility business model. And I think  
5 it's our challenge, and your challenge, to find a  
6 way to make that go away. That tension between a  
7 fully open process.

8           In closing, SDREO process was open and  
9 inclusive and transparent. We developed a  
10 resource plan with education outreach, public  
11 participation, and everything available to anyone  
12 who wanted to see it. We think this provides a  
13 model for other entities in the state to form  
14 other regional offices.

15           Not to replace the planning of the  
16 utilities, but to complement it, to be that voice  
17 over here that maybe at times can provide balance  
18 and support with each entity. We believe that you  
19 can get stakeholders involved, as I said, and they  
20 want to be involved, but they need to trust the  
21 information that's provided them, they need to  
22 trust that they will be listened to, they need to  
23 trust that action will be taken.

24           And unfortunately, because of the  
25 activities of the last half dozen years, some of

1 that trust has dissipated. And it is very  
2 important for the future, I believe, of our state  
3 to rebuild the trust in the utilities, and to  
4 rebuild the trust in the state that we can in fact  
5 look out for the consumers.

6 Organizations like the Regional Energy  
7 Office, of course, needs more support. We operate  
8 as a counterpoint to the investor-owned utilities.  
9 We do create some competition. We think it's an  
10 important role. And particularly as the utilities  
11 have returned to the more, potentially the more  
12 vertically integrated, monopolistic position that  
13 they held in the past.

14 As a non-profit community-based, of  
15 course, we never have any money. So funding is a  
16 big issue for us. And if you really want to  
17 encourage public participation there needs to be  
18 some funding.

19 Again, as I say, San Diego is unique  
20 because of the overlapping of the political format  
21 and the IOU service territory. And it makes us a  
22 good place to do these things. We are committed to  
23 creating stakeholder consensus. We are committed  
24 to using a collaborative program design.

25 We will continue pressing for the

1 inclusion of consumer and community needs in the  
2 IRP process. And especially we look forward to  
3 working with you and all your staff at the CEC to  
4 achieve these goals.

5 I appreciate the time, I think I took  
6 more time than I intended to. Can I answer any  
7 questions, please?

8 COMMISSIONER BOYD: Thank you. I was  
9 going to ask, any questions or comments here? Mr.  
10 Geesman?

11 COMMISSIONER GEESMAN: I think one of  
12 the best investments that our Commission has made  
13 over the years has been the effort to support the  
14 San Diego Regional Energy Office. And I've had a  
15 familiarity with the San Diego community and its  
16 energy needs for a lot longer than I probably  
17 should try to remember.

18 I first appeared in front of this  
19 Commission representing ratepayers opposed to the  
20 San Diego, actually the Sun Desert nuclear power  
21 project. And it was in the wake of the collapse  
22 of that project in the regulatory process that the  
23 initiative was started to create the southwest  
24 power link, which I think subsequently has been a  
25 lifeline to your community.

1 I've followed the development of your  
2 most recent plan fairly carefully, and I doubt  
3 that it is destined to sit on a shelf for very  
4 long. I would observe that a 40 percent renewable  
5 target in 30 years, or in 20-30, is not  
6 necessarily different than a 20 percent target in  
7 2010.

8 So I'm not certain that you're being  
9 more aggressive than the Energy Action Plan or  
10 not, you're just expressing it in a different way.

11 MS. STILLINGS: Commissioner, at the  
12 time that this was written, it was 20 percent in  
13 2017.

14 COMMISSIONER GEESMAN: The one thing  
15 that I guess I would flag as an area of potential  
16 concern and friction are your objectives for  
17 indigenous resources. I think that your community  
18 has suffered for being transmission isolated.

19 Your isolation has prevented you from  
20 having access to the low-cost hydro resources in  
21 the northwest, and other than to the extent  
22 mitigated by the southwest power link, some of the  
23 cheaper coal and now natural gas-based resources  
24 in the southwest.

25 California benefits greatly by the

1 weather differences and seasonal differences in  
2 electrical needs across the western region. I  
3 think your community in particular has suffered  
4 for not being better connected.

5           And I do believe that, if you're going  
6 to accomplish your goal in renewables,  
7 particularly with regard to diversity of renewable  
8 sources, you're going to need to be much better  
9 connected in terms of the bulk transmission system  
10 than you are today.

11           I realize no community wants to see  
12 transmission lines brought into their  
13 neighborhood. And I think siting those lines is  
14 going to be a tremendous challenge for the state.  
15 But I think it's going to be a necessity if your  
16 community is going to accomplish the quite worthy  
17 objectives that your plan outlines. And I thank  
18 you for your comments.

19           MS. STILLINGS: Thank you very much.

20           COMMISSIONER BOYD: Thank you. We'll  
21 be, in early October we'll be taking this show on  
22 the road, and I think your organization is helping  
23 us facilitate that meeting, so thank you.

24           Next, I have Mr. Bill Bolton of HUD of  
25 Sacramento. It says here "HUD."

1           MR. BOLTON: I guess I've got to say  
2 "I'm from the federal government, I'm here to  
3 help." Real briefly, I'd like to make a few  
4 comments on what FHA activity is in California,  
5 and give an opportunity I think for the Commission  
6 to tweak our efforts.

7           To date, through July, FHA has insured  
8 86,740 mortgages in the state of California.  
9 That's through July 30th. Of those 86,000  
10 mortgages 853 have been energy efficient  
11 mortgages, and there's a combination of those are  
12 new homes that exceed Title 24 regulations, and a  
13 bonus has been paid to the developer, where those  
14 are homes that we've utilized our energy-efficient  
15 mortgages to make them cost-effective.

16           Less than one percent of our business is  
17 cost-effective homes. We, FHA, for the last ten  
18 years, have had an energy efficient mortgage  
19 program which is a keep it simple, stupid add-on  
20 mortgage that can be placed on a mortgage when a  
21 home buyer wants to make simple, cost-effective  
22 mortgage improvements.

23           And the way that works is, we allow them  
24 to raise the mortgage the cost of any cost-  
25 effective improvements. So their net household

1 income at the end for the month is improved  
2 because the cost savings are going to be more than  
3 the cost of money.

4           We've been doing this for ten years.  
5 We've outreached the program. The Energy  
6 Commission has helped us outreach the program, our  
7 partners have outreached the programs. We've  
8 done, I think, everything to support this  
9 voluntary program. It just doesn't have enough  
10 effect on the state of California.

11           And so, I bring, as an opportunity here  
12 in this need of California, if we can make that a  
13 little more mandatory, or a little more inclusive.  
14 A mortgage transaction is a golden opportunity to  
15 deal with energy conservation, because you have a  
16 source of non-government money where a home buyer  
17 can make a cost-effective improvement.

18           And that's what the energy efficient  
19 mortgage program does. FHA has it, Fannie Mae now  
20 has it in California. So if we could figure out a  
21 way to get that home buyer, when they're doing a  
22 mortgage, to think about energy conservation, we  
23 have the avenue to make it happen very simply.

24 Thank you.

25           COMMISSIONER BOYD: Thank you. That's a

1 very interesting factoid for this body. Let me  
2 ask you one quick question. It sounds like public  
3 education is key to the objective you're trying to  
4 accomplish with energy efficient mortgages.

5           And how effective a reachout program do  
6 you think exists today, and how can we and others  
7 help improve that?

8           MR. BOLTON: We've done a lot of public  
9 outreach, through the industry groups, through  
10 large trade fairs, through large home ownership  
11 events. I think it's sort of like one of the  
12 examples you talked about earlier. How much more  
13 money, do you get bang for the buck in putting out  
14 something.

15           I think we're almost to the point now  
16 that that public outreach, without something else  
17 going on, isn't as effective as it should be.  
18 Because the reality of at least mortgage banking  
19 in California in the last couple of years, it has  
20 been such a hot program that most lenders will not  
21 take the time to do anything out of the ordinary.

22           So a lender is so busy now that, even if  
23 somebody knows about our program and they come to  
24 the lender, probably the lender is going to say  
25 we're too busy to deal with this.

1           So, greed is an interesting word that  
2 gets in the way of a lot of things, but I think we  
3 can always do more public outreach, we can always  
4 put more information on sales contracts, that kind  
5 of stuff, but I think we need the next nudge up to  
6 make it a little more than just a decision for the  
7 lenders to make.

8           COMMISSIONER BOYD: I can appreciate the  
9 dilemma. We're all hoping that we don't lose the  
10 lock on that refi we were quoted. Okay.  
11 Commissioner Rosenfeld?

12           COMMISSIONER ROSENFELD: Mr. Bolton,  
13 that is very interesting, and you've certainly got  
14 my attention. I would have thought that every new  
15 residence built in California automatically --  
16 because of Title 24 is pretty strict -- would  
17 qualify for an energy efficient mortgage, in which  
18 case we ought to be at more than one percent. So  
19 how does it work with new homes?

20           MR. BOLTON: With tech FHA bureaucracy,  
21 we are only going to give credit for an energy  
22 efficient mortgage if that new home exceeds your  
23 Title 24 program. So if a subdivision just meets  
24 your Title 24, it's a good subdivision meeting for  
25 energy standards.

1           The number that I gave you, the 853, is  
2 only if the developer exceeds your Title 24.

3           COMMISSIONER ROSENFELD: So part of the  
4 problem is that Title 24 is pretty good, and so  
5 being it isn't all that easy. But we still ought  
6 to work together, sure.

7           COMMISSIONER BOYD: Thank you very much.

8           MR. BOLTON: Thank you.

9           COMMISSIONER BOYD: Continuing with this  
10 theme, I think I should call on Bobbi Glassel.

11           MS. GLASSEL: Good morning,  
12 Commissioners. I do the energy efficient  
13 mortgage. My name is Bobbi Glassel. I'm in the  
14 trenches, I'm the one that gets it done. Did a  
15 little bit of analyzing what the EEM -- energy  
16 efficient mortgage -- can do for our state.

17           We had approximately 575,000 homes sold  
18 in the -- existing homes -- in California in the  
19 second quarter of 2003. If 20 percent of the  
20 existing homes -- and when I say existing, let's  
21 say they're 12, 13 years or older, not your newer  
22 homes before Title 24 -- we would have 460,000  
23 homes be, have the opportunity to have energy  
24 upgrades.

25           If every one of those homeowners saved

1 \$50 on their utility bill, that would put \$23  
2 million back in our economy. Between the HERS  
3 rater, the contractor, miscellaneous people, the  
4 lender, \$345 million would be put back in our  
5 economy for jobs.

6 \$46 million could be created back to  
7 that homeowner in rebates from the utility  
8 companies and the manufacturers. I can go on and  
9 on, I love figures. In five years time, in the  
10 last five years, if we had been doing the energy  
11 efficient mortgage to 20 percent of the existing  
12 homes that were sold, we would have 2,300,000  
13 homes in California with energy improvements.

14 If you're not familiar with the energy  
15 efficient mortgage, the buyer has the opportunity  
16 to look into energy improvements. We call a  
17 rater, which is certified by the state, that goes  
18 out and looks at that home and gives us a list of  
19 what can be done.

20 Other people I work with are good,  
21 hardworking people. They're buying homes for  
22 \$200,000, \$250,000, that when I was in real estate  
23 I sold those homes for \$30,000. A quarter of a  
24 million dollar junkers are what they are.

25 What I can do for these folks, I can put

1 attic insulation in, wall insulation, new heat and  
2 air, new hot water heaters, new whole house fans.  
3 Almost every loan product -- FHA, VHA, Fannie Mae,  
4 Conventional -- have, I'm going to call it an  
5 overlay, that allows that buyer to have energy  
6 improvements, and to get them the only thing I  
7 have to do is prove that their payment goes up \$25  
8 and their base loan amount, and I'm going to save  
9 them \$26 or more.

10 My people love it. In the years that  
11 I've been doing the energy efficient mortgage I've  
12 never had a home buyer tell me "no, I don't want  
13 to save money, I want to pay high utility bills,  
14 and I love my wall heater and my five window air  
15 conditioners."

16 I'm going to make this really short.  
17 The energy efficient mortgage is the best-kept  
18 secret in real estate. I'm a sixth-generation  
19 Californian, my folks came here with covered  
20 wagons, orange trees, and dairy cows.

21 We have a golden opportunity to upgrade  
22 existing housing with a program that Jimmy Carter  
23 created that is tried and true, nationwide, it's  
24 in place ready to go. And there's no reason --  
25 like Bill said from FHA -- give us a little bit of

1 a push.

2           Maybe on the purchase order when people  
3 buy the house, an addendum that says "would you  
4 like to look into your opportunity of energy  
5 improvements?" Maybe a mandatory thing -- I don't  
6 think that's been brought to my attention.

7           But if we can upgrade 500,000 houses,  
8 200,000, a hundred houses, we're just, we've  
9 absolutely abused and ignored an opportunity for  
10 our state to save a lot of money, and to put a lot  
11 of money back in circulation. Is there any  
12 questions?

13           COMMISSIONER BOYD: I want to thank you.  
14 You've got a lot of attention going up here. I  
15 have a feeling our staff knows about this, but it  
16 sounds like --.

17           MS. GLASSEL: I've talked to other  
18 Commissioners, and I've -- I'm the one that's out  
19 there stirring the pot, guys, I talk to anybody  
20 that'll listen to me. I talked to one  
21 Commissioner that had never heard of this program.  
22 Had never heard of it.

23           I talk to lenders that have been in the  
24 business 20-25 years, and they go "the what?" In  
25 the VA package loan it's mandatory for it to be in

1 there. That's the only -- and we don't do many  
2 VA's in California anymore, maybe when the guys  
3 come home we'll start doing more.

4 But we have to get the public's  
5 attention. A lot of things have been tried. I  
6 think getting it on that offer of purchase, on a  
7 little box that says "you have this opportunity."  
8 I think that would be a step forward. And it  
9 doesn't cost you guys, the state of California, or  
10 us, one penny. It pays for itself.

11 COMMISSIONER BOYD: Thank you.

12 MS. GLASSEL: Thank you, gentlemen. Any  
13 questions?

14 COMMISSIONER BOYD: Thank you. Oh,  
15 Commissioner Rosenfeld?

16 COMMISSIONER ROSENFELD: The Energy  
17 Division here is -- Valerie Hall's sitting next to  
18 you -- is working on a report on what to do with  
19 existing homes. And so you sure got our  
20 attention, and I thank you for stirring the pot.

21 COMMISSIONER BOYD: Thank you. Next I  
22 have -- maybe it's a team here. Les Guliassi and  
23 Kathy Treleven of PG&E.

24 MR. GULIASI: Good morning, or is it  
25 almost afternoon? Thank you again, Commissioners.

1 For those of you who were here Tuesday you heard  
2 me compliment the staff on the high quality and  
3 professionalism of the various reports, and  
4 likewise I think the PIES report and all the  
5 supporting documents meet that same high standard  
6 of professionalism.

7 I'm going to tag team here with my  
8 colleague, Kathy Treleven. I'm going to discuss  
9 the energy efficiency and conservation issue, and  
10 then briefly comment on the local reliability  
11 issues chapter. Kathy will address dynamic  
12 pricing, renewable energy, and touch briefly on  
13 R&D.

14 I think the chapter on energy efficiency  
15 and conservation has an abundance of very good  
16 information. I think it adequately describes the  
17 energy demand and supply picture for the state. I  
18 think it references the environmental challenges  
19 very well, and most importantly I think it  
20 identifies the most serious energy challenges that  
21 face California.

22 Parenthetically, I would add that the  
23 report does a good job of reflecting comments from  
24 participants in the June 4th workshop, and I want  
25 to thank the staff for listening and incorporating

1 people's concerns.

2 I think the place to start is with the  
3 Energy Action Plan and reference back to the  
4 Energy Action Plan statement that to meet  
5 California's energy growth needs, we need to  
6 optimize energy conservation and resource  
7 efficiency if we're going to reduce per capita  
8 electricity demand.

9 The report recommends that, to achieve  
10 this objective, the CPUC must take action in a  
11 proceeding, and create a strategic framework for  
12 energy efficiency programs, and to create a system  
13 for multi-year funding.

14 I think this is an extremely important  
15 first step. You heard me the other day talking  
16 about regulatory stability and predictability, and  
17 I think stability and predictability from tech  
18 regulators is key if we're going to see the kinds  
19 of investments that we've seen in the past.

20 And the kinds of investments, evidently,  
21 that we need according to the report, if we're to  
22 achieve the kinds of savings and reduced demand  
23 for the state. A strategic framework and  
24 regulatory stability are also necessary if you  
25 want to get the attention of utility management,

1 and if you want to send a signal that energy  
2 efficiency and energy conservation, demand side  
3 management, are important activities, and if you  
4 want to get the utilities to make necessary  
5 investments in these programs.

6           While there is funding available through  
7 rates and essentially mandates from Commission  
8 decisions, CPUC decisions, I have to tell you  
9 that, when you're a utility executive and you're  
10 looking at competing priorities for every single  
11 dollar it does help if there is some continuity  
12 and stability in these programs from year to year,  
13 so that utility executives will make that right  
14 choice, and put the dollar into these energy  
15 efficiency programs.

16           And it also goes, you know, beyond just  
17 the spending on the programs, the rebates and so  
18 forth, it really goes toward hiring good people,  
19 retaining good people, making sure that they are  
20 rewarded adequately within the company and that  
21 their programs are valued, and employees see  
22 energy efficiency as an important place to work.

23           The report, on page 37, discusses the  
24 history of expansion and contraction of funding.  
25 And I think and I hope that we're entering another

1 period where we're going to see an expansion of  
2 funding in this area.

3 I think that, under the capable hands of  
4 Commissioner Kennedy, who is committed to  
5 restoring order and stability in this area, we're  
6 going to see more attention from utility  
7 management. And I think we're going to see  
8 greater investment on the part of utilities.

9 One of the most critical issues to  
10 resolve here is the role of administration of  
11 these programs. I think the report does a good  
12 job of describing the various models that have  
13 been discussed, whether it's utility  
14 administration, third party administration, or  
15 some hybrid.

16 I have to say that the utilities have  
17 had, you know, considerable amount of experience  
18 in administering these programs. We may not ever  
19 see the day when utilities monopolize  
20 administration, but I have to say that even during  
21 the period of time when we were essentially  
22 monopolies administering these programs, we always  
23 relied on third parties.

24 They were important partners in our  
25 efforts. They were the ones who often carried out

1 conservation measures, they played a very  
2 significant role in the measurement and  
3 evaluation. They helped us plan and design  
4 programs.

5           So no matter what model, where we end up  
6 -- whether it's a hybrid approach or whatever --  
7 there is going to be an important need to develop  
8 partnerships and strategic partnerships, if we're  
9 going to be successful in reducing electricity  
10 demand.

11           Let me make a brief reference to one  
12 such partnership. I know there's a lot of interest  
13 in developing partnerships between utilities and  
14 communities, cities. We have such a partnership  
15 with the city of San Francisco, and I think there  
16 are tremendous opportunities to expand that model  
17 and partner with other cities, other communities.

18           So those are the three critical steps --  
19 to establish a framework and multi-year funding  
20 for energy efficiency; second, to resolve the  
21 issue of program administration -- and I guess the  
22 one I failed to mention, the third one, is to  
23 restore the role of incentives or rewards for  
24 investments in energy efficiency and performance.

25           The Energy Action Plan speaks to this

1 issue, and I think it's very important that we,  
2 again, in terms of restoring some stability and  
3 credibility, we once again pay attention to the  
4 important role that incentives or rewards play in  
5 getting corporate attention and making energy  
6 efficiency a priority.

7           The report, on page 45, points out that  
8 there is still much potential for energy savings  
9 through existing technology, and we've seen over  
10 the years that energy efficiency and conservation  
11 have proven to be cost-effective investments.

12           I want to spend just a moment on  
13 measurement and evaluation, and then address  
14 briefly the whole issue of funding. There was a  
15 lot of attention already paid to funding in the  
16 very fine presentation we heard this morning.

17           In terms of measurement and evaluation  
18 there is no doubt that more work needs to be done  
19 in measurement and evaluation to ensure that the  
20 investments that we make pay off, and that the pay  
21 for themselves. I think the CEC has, arguably has  
22 the most capable collection of individuals in the  
23 state to help us and guide us to advance our state  
24 of knowledge in measurement and evaluation.

25           I'm not here suggesting that the Energy

1 Commission itself become the sole measurer and  
2 evaluator, I'm not sure that's where we want to  
3 end up. But I do think that we need to put our  
4 heads together and collaborate.

5 But with the stakeholder and the Energy  
6 Commission in the forefront to decide what's best  
7 to go into measurement and evaluation of the  
8 programs, and how that kind of measurement and  
9 evaluation should be designed and administered.  
10 And I think there's a leadership role here for  
11 this Commission.

12 In terms of funding, I know that the  
13 workshop participants spent a lot of time talking  
14 about the bang for the buck. I know the  
15 Commission has sponsored some studies to try to  
16 help answer this question, I think we've seen the  
17 results in the presentation from this morning.

18 But frankly, I don't think we really  
19 know exactly how much savings we're going to get  
20 for every dollar spent. And I do want to refer to  
21 the study that Commissioner Rosenfeld mentioned  
22 this morning. I still think there's a lot to be  
23 learned in this area.

24 We as a company recognize that  
25 investments in energy efficiency are important.

1 We have committed, in the proceeding before the  
2 Public Utilities Commission, to invest an  
3 additional \$300 million over what we're currently  
4 spending over the next five years in energy  
5 efficiency.

6 We think that the additional amount we  
7 spend will achieve savings of over 1,400 gigawatt  
8 hours, and reduce demand by more than 350 megawatt  
9 hours. So while we're not, I don't think the  
10 state of the art is here, I think there's a lot  
11 more work that needs to be done, I would maybe add  
12 one work of caution.

13 If we're going to increase spending, and  
14 if we're going to make a big push for energy  
15 efficiency and energy conservation statewide, we  
16 really need to do so cautiously and take an  
17 incremental approach.

18 I think that, you know, too rapid of an  
19 increase is an unwise strategy. I'm afraid if we  
20 just rush out there we're not going to be spending  
21 our money wisely, and we might find that a very  
22 big upswing will just lead us to a very big  
23 downturn later on.

24 So I think a very cautious approach is  
25 warranted. I think the approach we're putting

1 forward -- a fairly aggressive energy conservation  
2 and energy efficiency program, is the kind of  
3 approach that we'd like to see, and we'd like to  
4 get permission to take, and I think others should  
5 take as well.

6           Turning now just briefly to the chapter  
7 on local reliability, I was asked by the staff to  
8 pay particular attention to the report. I was  
9 asked if the report adequately addressed the  
10 comments that we submitted, and I'm pleased to say  
11 that yes, indeed, they do.

12           The way the comments were solicited was  
13 actually a very interesting process. The staff  
14 created a virtual workshop where, you know, I  
15 liken it to sort of a chat session, a chat room,  
16 where the staff asked for participants in that  
17 workshop to provide comments over a week's period  
18 of time.

19           Some participants in that virtual  
20 workshop had a dialogue with others. We didn't  
21 quite have the time to create a dialogue before  
22 the deadline to submit some comments. This is a  
23 very interesting, innovative and unconventional  
24 approach.

25           I have to say, just as a recipient of

1 that, and speaking for my colleagues, there was  
2 sort of a mixed reaction. I think the first  
3 reaction is, my God, look what they're doing.  
4 They're just asking us to do something, this is  
5 ridiculous. There are no guidelines, there's a  
6 very short time frame, we have other, more  
7 important work to do.

8           If you suspend that kind of judgment and  
9 you step back for a moment I think you end up  
10 saying, this is interesting, this is an innovative  
11 approach. And I think we should keep our minds  
12 open to using this kind of approach. It certainly  
13 saves a lot of time and energy driving up to  
14 Sacramento to sit in a room. So I want to commend  
15 the staff for thinking outside of the box.

16           The whole issuer here, as the staff  
17 correctly describes, at least for PG&E, is that  
18 the San Francisco Peninsula suffers from  
19 insufficient resources, perhaps both generation  
20 and transmission. Leaving it vulnerable to, as we  
21 were talking about the other day, low-probability,  
22 high-impact events, such as what we saw a couple  
23 weeks ago in the northeast.

24           And frankly, as we demonstrated on  
25 December 8th of 1998 -- although I have to say not

1 intentionally -- but the staff set out to find out  
2 if there were any lessons learned from the ISO  
3 stakeholder planning process.

4           And the issue for PG&E boils down to  
5 what can we do, and what needs to be done to honor  
6 our pledge to the city and county of San  
7 Francisco, and to the community, to shut down the  
8 Hunter's Point power plant.

9 The San Francisco planning and study group, under  
10 the auspices of the ISO, was established to  
11 address this issue and to get stakeholder  
12 involvement.

13           Where we ended up, and where we are  
14 today, is that after a great deal of study and  
15 discussion with the community, with the city, and  
16 others, we concluded that the most effective  
17 strategy -- and frankly, the one that we can most  
18 reasonably control the outcome to shut down  
19 Hunter's Point -- is to reinforce our transmission  
20 system, and to build a new line up the peninsula,  
21 the Jefferson-Martin transmission project, which  
22 is described quite accurately in one of the  
23 reports.

24           What we take away from this stakeholder  
25 process I think are four lessons or four

1 conclusions. From a stakeholder perspective, it's  
2 virtually necessary for one to have commitment to  
3 work with the local community. In this day and  
4 age I think that's a virtual necessity.

5           You have to work with people who live in  
6 the area, people who's lives are going to be  
7 affected by whatever hardware investment there's  
8 going to be. From the developers perspective, I  
9 think it's important to have a single process. I  
10 think the ISO stakeholder process is a good place,  
11 but we see through various bureaucratic processes,  
12 they are often in conflict.

13           The city and county has a process, the  
14 ISO has a process, the California Public Utilities  
15 Commission has a process, this agency has a  
16 process -- and I'm not here in any way saying that  
17 the public should not have adequate opportunities  
18 to participate in a process or multiple processes.

19           But in order to get a job done it's  
20 necessary to integrate these processes, if there  
21 is going to be multiple processes. But from the  
22 developer's perspective I think it is good to have  
23 one process to bring everybody together in an  
24 integrated way. Decisions can be made, and  
25 developers can move forward.

1           From the community's perspective I think  
2 a streamlined process is important. And actually  
3 from the developer's perspective too. But I think  
4 especially from the perspective of the community  
5 it's important to have kind of a road map.

6           I think back to post-AB 1890, when the  
7 Commission was given the responsibility for  
8 implementing that law. Well, what the Energy  
9 Division at the Commission did was to establish a  
10 road map. And that road map told all interested  
11 parties what was going to happen and how.

12           And I think if you take that -- and that  
13 was very helpful from my standpoint, working for a  
14 utility, trying to get through, you know, years  
15 and years of very difficult and complex  
16 proceedings.

17           If you just take that analogy and put it  
18 outside the bureaucratic process, if you think  
19 about what a community needs, they need a clear  
20 road map, and without that road map it's difficult  
21 for people to know how to participate, when to  
22 participate, and what to expect at the outcome.

23           And then finally, I think strategic  
24 partnerships are necessary. As I mentioned, we  
25 have entered such a partnership with the city of

1 San Francisco to look at both the supply side and  
2 the demand side, and we do have a whole array of  
3 demand side activities going on, between PG&E and  
4 the city and county of San Francisco.

5 So those, I think, are four important  
6 lessons learned from the stakeholder process. And  
7 that concludes my remarks. Are there any  
8 questions?

9 COMMISSIONER BOYD: Thank you, Les.  
10 Questions? Thank you very much.

11 MR. GULIASI: Thank you again for the  
12 opportunity. And now, Kathy Treleven is here.

13 MS. TRELEVEN: Good afternoon,  
14 Commissioners. My name is Kathy Treleven, and I'm  
15 part of the Governmental Affairs group at PG&E  
16 involved with state agency relationships, as is my  
17 colleague, Les Guliassi, who just spoke.

18 PG&E is glad to be a part of this  
19 discussion that CEC is launching. I know  
20 launching may be a work that's a bit inappropriate  
21 now that we all have five binders of thick  
22 documents full of detail, and we and others have  
23 given comments that probably add another five or  
24 six inches to those binders.

25 But what feels new to us in this process

1 is that it seems like we're starting to move  
2 beyond crisis mode and fix the state's energy  
3 infrastructure. And it's refreshing at least to  
4 me that we're able to do this in a less litigious,  
5 less agenda driven way than in many of the forums  
6 that PG&E participates in.

7 It's the public interest component  
8 that's part of this report, the topics that we've  
9 covered today, that makes resolving these issues  
10 both more complicated and also makes the solutions  
11 more robust.

12 Back in some long ago heyday for energy  
13 engineers, maybe 50 years ago, the solution to  
14 growth and load demand was simple, just build  
15 another power plant.

16 Today when we look at low growth we  
17 struggle with a myriad of issues, from demand  
18 management, resource diversity, environmental  
19 justice, regional concerns, and of course the  
20 leftovers that we have from the energy crisis and  
21 unsettled market structure and utility credit  
22 limitations.

23 Those of you that follow the CPUC  
24 process and the generation procurement case know  
25 that PG&E is planning on meeting our relatively

1 modest short position in electricity over the next  
2 five years through a combination of expanded  
3 energy efficiency, demand response programs,  
4 renewable energy, and some contracts for peaking  
5 power.

6           While the market structure is unfolding,  
7 and our credit-worthiness is improving, these  
8 environmentally positive solutions also have the  
9 advantage of fitting well into our mix and being  
10 relatively flexible.

11           I'll say a bit about each of these, just  
12 touching lightly on energy efficiency, and what  
13 comments we have on the staff's policy discussions  
14 in the PIES report.

15           Les covered most of our thinking on  
16 energy efficiency, but I did want to add one more  
17 item. As you know, PG&E and the other utilities  
18 are proposing to move forward on expanded energy  
19 efficiency programs, beyond the public goods  
20 funded programs, and thus our forecasts of load  
21 are lower than those of the base case in the  
22 staff's demand projections.

23           We've shared some of these thoughts with  
24 our modelers, and we will add some more thoughts  
25 and comments to give to your modelers. But

1 overstating the generation needs also means  
2 overstating, to some extent, the generation-  
3 related natural gas demand.

4 Another component of our resource plan  
5 is dynamic pricing programs, where participants in  
6 several pilot programs work to improve customer  
7 response to price signals. We've included in our  
8 resource plans the significant targets for demand  
9 reduction that are part of the AMI decision.

10 These targets grow as large as five  
11 percent of our load, although it's unknown what  
12 our peak load responsibilities will be by 2007.  
13 The report is correct, there's a number of  
14 challenges, such as the political objections to  
15 changing the ways that rates are set to fully  
16 developing demand response programs.

17 And we agree with the staff's  
18 recommendations that, page 82, page 83, that the  
19 pilots that we are conducting now are valuable and  
20 will provide substantial information for moving  
21 forward and achieving these stretch goals.

22 On renewables, PG&E is already halfway  
23 to our 20 percent by 2017 goal, but getting to  
24 this goal in an accelerated way, by 2010, as the  
25 state's indicated it wants to do, will be

1 problematic for PG&E, given both our credit  
2 constraints, and the large lump of poorly shaped  
3 DWR power that we carry with our DWR contracts  
4 through 2008, 2009.

5           We really appreciate that the staff  
6 recognizes the operational challenges associated  
7 with integrating large amounts of renewables, and  
8 we agree with them that there are avenues to  
9 explore, such as development of more peak oriented  
10 renewable technologies that might be a solution to  
11 this problem.

12           Another path towards meeting our targets  
13 is in the advancement of renewable distributed  
14 generation. In fact, the advancement of all sorts  
15 of distributive generation will be helpful in  
16 meeting our targets.

17           Earlier this month, at a ceremony to  
18 celebrate the completion of a distributed  
19 generation integration test facility, our senior  
20 Vice President of utility operations praised the  
21 lead contractor, the CEC, and others, for helping  
22 us move forward with this project.

23           We see it increasing the safety and  
24 reliability of our transmission and distribution  
25 system, and the improved integration of small

1 power production, especially for renewable  
2 resources, will definitely help solve some of our  
3 resource problems.

4 Finally, a few comments on R&D. As you  
5 know, as you can see from Don's documents, PG&E  
6 has a diminished R&D program. It really hasn't  
7 totally gone away, compared to a decade ago, so  
8 much as been absorbed into the operational part of  
9 our company, and focused on technology assessment.

10 We're glad to see the maturation of the  
11 CEC's PIER program, and we hope our engineers and  
12 scientists continue to have a welcome role in that  
13 good work.

14 With that, I want to thank you for  
15 having the opportunity to comment on the public  
16 interest portion of these extensive documents. We  
17 will be filing additional comments, and we look  
18 forward to the Commission's final IEPR report.  
19 Thank you.

20 COMMISSIONER BOYD: Thank you very much.  
21 When somebody comes up and starts using  
22 metaphors -- launching, binders -- I tend to get  
23 carried away with myself. I made a note here, I  
24 hope the binders aren't seen as anchors on the  
25 launch of whatever this was. In your reference to

1 the frontier I said what frontier, it's gone.

2           There's 35 million of us jammed in this  
3 sardine-sized state now, etc. etc. But  
4 nonetheless, I appreciate your comments, and I  
5 appreciate your point that maybe some of the R&D  
6 activities haven't diminished, but somehow or  
7 other you led them through the valley of the  
8 shadow of death, and they came out the other end  
9 alive, and you've installed them into your system.

10           And I think that's one thing we need to  
11 kind of inventory, as to what people are doing,  
12 and I appreciate the financial condition of all  
13 our utilities and what we've all been through  
14 together.

15           Your reference to launch makes me think  
16 about my metaphor about what happened in  
17 California, you know, we built a ship,  
18 supertanker-size, we launched it, we said sail  
19 thataway. It caught fire, burned, and we caught  
20 it just before it sank. We punched holes in the  
21 sides, advocated oars, and said push on.

22           And while we're trying to figure out how  
23 to rebuild it, and where the pot of gold at the  
24 rainbow we thought we were heading for really is.  
25 But it's going to take a lot of work for us to

1 rebuild it and move forward. It's happening, in  
2 spite of government, so I wish us all well.

3 With that, I better shut up and ask if  
4 there's any other questions. I'm getting punchy  
5 after three days of hearings. Thank you very  
6 much.

7 MS. TRELEVEN: Thank you, Commissioner.

8 COMMISSIONER BOYD: Well, maybe I'll  
9 match utility with utility now, and call Manuel  
10 Alvarez up.

11 MR. ALVAREZ: Manuel Alvarez, Southern  
12 California Edison. Thank you, Commissioners. I  
13 actually want to be real brief. As you heard from  
14 your staff, there's a lot of --

15 COMMISSIONER BOYD: I've heard that  
16 before, but anyway --.

17 MR. ALVAREZ: As you've heard from your  
18 staff, there's a lot of people that have been  
19 working a lot of the issues that are in this  
20 particular report. Many advisory groups, working  
21 groups, and assistance going on.

22 And in those discussions, at least in  
23 the meetings that I've been in, there's many  
24 issues that are discussed and debated, and going  
25 back to an old school mentality in terms of taking

1 positions and trying to resolve those positions,  
2 and it's been quite effective in getting to a  
3 resolution.

4 I think the report before you today does  
5 a great job in bringing a lot of the issues across  
6 the board on the public interest area, but there's  
7 five areas that I want to bring to your attention,  
8 that you can focus on them as you deliberate what  
9 kind of policies you want to recommend for the  
10 state.

11 And in fact as you draft or develop your  
12 own policy document and recommendations, which, I  
13 think -- as was pointed out yesterday -- will  
14 probably be a focal point of discussion as we  
15 proceed through to the final adoption of this  
16 particular document.

17 The first thing I want to bring to your  
18 attention is the discussion in the report that  
19 talks about distributive generation and  
20 transmission. And the competition that is  
21 undertaken there.

22 The report in the staff's findings seems  
23 to draw a conclusion that I believe is still under  
24 debate and still under evaluation, that  
25 distributive generation is in fact a better

1 substitution for transmission.

2 I think the jury's still out on that  
3 particular question, and in fact in many of the  
4 distributive generation discussions and workshops  
5 we're having today, that evaluation is in fact  
6 being undertaken, so I ask you to go back to your  
7 staff and look at that particular question.

8 The advisory groups that are being  
9 formulated and discussed are debating that  
10 particular question, and so focus on that  
11 particular conclusion.

12 The second item I want to bring is the  
13 issue of demand response. And there's quite a bit  
14 of text in the demand response area throughout the  
15 report. In fact, there's a whole appendix that  
16 discusses some of the consumer behaviors and some  
17 of the consumer findings and implications of  
18 demand response programs.

19 And the point I want to bring up is, in  
20 one of the sections in the beginning, I believe  
21 it's on page 68, there seems to be a conclusion  
22 drawn that the consuming sector of our society is  
23 in fact ready to embark on a dynamic pricing  
24 program. I also like to believe that the jury is  
25 out on that particular question.

1           I think the pilots that are being  
2 undertaken, the tests that are being developed as  
3 we speak, are in fact trying to answer those  
4 particular questions. So I urge you to look at  
5 those results before you draw firm conclusions.  
6 And in our comments that we'll be submitting to  
7 you on the second, I'll point some of those items  
8 out that I believe just form a consistency there.

9           The third item is the issue of renewable  
10 development and transmission. There's a reference  
11 in one of the findings dealing with the linking of  
12 transmission expansion and renewables. And I've  
13 had similar discussions with your staff about the  
14 implications or the intent of that particular  
15 finding, and I believe I still need to have  
16 further discussions.

17           But I want to raise to your attention  
18 that transmission expansion, with the presentation  
19 that was presented today by the staff, and you  
20 have this technical potential, being able to build  
21 transmission lines to meet that potential is going  
22 to be very difficult. In fact, I would argue that  
23 it's probably impossible.

24           So there's going to have to be some kind  
25 of sequencing evaluation over what transmission

1 projects and what scope of transmission projects  
2 mesh with the development of the renewable  
3 programs. And I urge you to take a look at that  
4 particular area.

5           It would be useful, from a planning  
6 perspective, to be able to have some guidance of  
7 where the Commission sees the need for  
8 transmission, and what scope of renewable  
9 development that encompasses. And I'm aware  
10 that'll unfold here in the next few years, and  
11 it's a difficult task. But I believe you folks  
12 are the only folks who can do that.

13           The fourth item is in the area of RD&D.  
14 And it's probably an artifact of the entire  
15 process we went through over the last five years.  
16 There's a reference in the report that the staff's  
17 opinion about having regulated, funded RD&D once  
18 again.

19           And while hypothetically that perhaps is  
20 possible, I think that, as we look where 1890 has  
21 brought us, and where 995 is taking us, and where  
22 the PIER program is in fact undertaking, that is  
23 the public interest research program. And the  
24 distinction between the public interest and the  
25 regulated interest, I think there's a closer bond

1 between those two activities than there has been  
2 in the past.

3 I think the distinction probably was  
4 artificial at the creation of the areas, and  
5 historically, when the public agencies approved  
6 the regulated program it was intended to be  
7 serving the public and the public's needs.

8 So I think you need to look at that  
9 particular section and kind of address that issue  
10 between where the regulated RD&D components rest,  
11 and where the public interest RD&D components, and  
12 I believe you'll find a much more closer alliance  
13 between those two areas.

14 The final area I want to bring to your  
15 attention -- actually it's the fifth area and I  
16 want to just bring up one item on your questions  
17 that you presented this morning, is on the demand  
18 side management activities.

19 You saw your chart by your staff in  
20 terms of the fluctuation of program funding. Part  
21 of that I think is attributed to the nature of  
22 which program decisions are made, on an annual  
23 basis primarily. I urge you to take a look at a  
24 longer time frame of what that particular project  
25 needs to be undertaken.

1           I don't think I have a specific, whether  
2   it's five years, ten years, three years, in terms  
3   of a funding activity for a DSM program, but the  
4   sustainability of the programs once they're  
5   improved are an important element, both from an  
6   implementing perspective and from a consumer's  
7   perspective, and I urge you to focus on that in  
8   your report.

9           One minor item on the DSM activities. I  
10   think you heard earlier this week that the  
11   utilities are going through an auditing program of  
12   their DSM programs, and I believe that future  
13   public interest activities, DSM by third parties,  
14   and other folks are in fact going to be  
15   scrutinized under that kind of arrangement as  
16   well.

17           And so I urge you to kind of consider  
18   how you would evaluate the entire programs in the  
19   future, and whether an audit is the appropriate  
20   technique or not there needs to be some kind of  
21   judgment in terms of the final evaluation of what  
22   the public interest funding is.

23           This morning I saw the questions, I  
24   didn't get them on the Internet, but I saw the  
25   sheet of questions you asked us to look at. And

1 I'll look at those and provide you any responses  
2 that we may have when we do submit our comments.

3 But there is one question that was  
4 raised, dealing with distributive generation as an  
5 energy efficiency option. I think if the  
6 Commission goes back to its strategic plan, in  
7 June of last year I believe it was approved, I  
8 think that particular issue was addressed. The  
9 question of where the kilowatt hours produced and  
10 at what level and at what size and at what scope  
11 is an important consideration.

12 But ultimately that kilowatt hour is  
13 going to be consumed at some level and some  
14 resource. The production side and the consumption  
15 side are two distinct activities, and I think you  
16 need to keep that in mind as you evaluate the  
17 efficiency of distributive generation and its  
18 impacts, it still has to meet the load, and  
19 whether that is met by one facility, a combination  
20 of a thousand facilities, the consequences of the  
21 efficiency and the resource needs of that  
22 particular technology need to be evaluated.

23 And with that, that concludes my  
24 remarks.

25 COMMISSIONER BOYD: Thank you, Manuel.

1 Any questions? Thank you very much. Stephen  
2 Kelly.

3 MR. KELLY: Thank you, Commissioners. I  
4 will be brief. I have two minor comments on the  
5 draft report, and then I would like to move to  
6 responding to four of the questions that you  
7 raised in your list of issues of questions on the  
8 renewable section.

9 On the report itself, in the renewable  
10 section, on page 95 and following I think, is a  
11 continued reference to the RPS plan in the context  
12 of achieving that goal by 2017.

13 And in light of the Energy Commission  
14 having adopted the Energy Action Plan, which  
15 speaks to achieving that goal in 2010, I guess I'm  
16 a little bit confused about what the goal is and  
17 when it's supposed to be implemented.

18 My recommendation would be to use the  
19 Energy Action Plan that you've adopted, the 2010  
20 time frame, as the measure, recognizing that the  
21 Legislature has imposed a later date that is in  
22 legislative language.

23 Secondly, on page 108 there is a  
24 description of what the municipal utilities are  
25 doing in the context of renewable development, and

1 in light of the RPS legislation. And I was struck  
2 by the description of how they were to achieve  
3 that, and there are a number of municipal  
4 utilities that apparently are using as a  
5 measurement what I would call large hydro under  
6 the law, anything over 30 megawatts.

7 I think it's important that we have one  
8 definition of what is an eligible renewable. And  
9 I believe the definition in the law today applies  
10 to munis as well as the IOU's and it would be  
11 inappropriate to use large hydro as a measure for  
12 having achieved the RPS attainment. So I just  
13 bring that to your attention as well.

14 And now I'd just like to try and respond  
15 to some of the questions that you released  
16 yesterday on the Internet and then, coming at the  
17 end of this workshop it has allowed me the  
18 opportunity to pare down and remove some of my  
19 comments that I think now are probably not  
20 necessary.

21 You've asked the question about what  
22 could be done to encourage repowering of existing  
23 renewable energy generation facilities. And let  
24 me respond simply by, I think there are two ways  
25 to encourage repower. One is simply to get the

1 option process moving forward so that people can  
2 have a place to sell that output.

3           The second mechanism relates to --  
4 particularly in regards to the wind industry and  
5 the importance of the federal production tax  
6 credit. As you know, there is federal legislation  
7 called the California fix that was negotiated with  
8 IEP and the utilities a number of years ago that  
9 is still in place.

10           I think overcoming or changing that  
11 federal legislation is something that this  
12 Commission probably should not anticipate, but I  
13 think there's also another way to resolve the  
14 problem. A couple of years back IEP negotiated  
15 with PG&E a contractual mechanism that would allow  
16 the QF resources to split their output.

17           That historical output could go to PG&E  
18 under a standard offer contract format, and any  
19 incremental output above that would be eligible to  
20 go into the marketplace. That format, which we  
21 negotiated successfully with PG&E I think can  
22 become a model for use in other contexts in  
23 California.

24           It's a problem that I think technically  
25 has been solved, it's a problem that I think

1 contractually has been solved, and it would allow  
2 particularly the wind developers to compete in an  
3 option, move forward, develop their existing  
4 resources, allocate the historical portion under  
5 the standard offer contract, and provide any  
6 additional increment into the RPS process.

7           That mechanism means, in my mind, that  
8 the utilities will not be facing any additional  
9 costs under their standard offer contract terms.  
10 They'll be simply creating a convenient way to  
11 fill out the RPS mechanism.

12           You've also asked, regarding the  
13 discussion of least cost best fit, does the report  
14 identify the key issues. And in the context of  
15 best fit particularly, this standard, in many  
16 ways, creates a tougher standard for renewables  
17 than exists today for any thermal resource.

18           And I'd also observe that in the  
19 absences of having available to us information  
20 regarding what the utilities need -- and I refer  
21 back to the extensive amount of redacting  
22 materials in their planning documents.

23           It's very hard for developers to plan,  
24 to meet what is the "best fit" without being able  
25 to see some of that information in advance. We

1 don't have a common definition of best fit, and it  
2 seems to be something that's going to be  
3 determined by each utility.

4           But it doesn't seem to be determined  
5 until after the actual auction is going to be  
6 completed, which makes it difficult for people to  
7 plan in advance to meet that definition. So I  
8 think we need to do some work in that regard.

9           The other question you would ask is the  
10 question regarding the financing for new  
11 renewables, and is it still problematic. And I  
12 guess my answer to that is to refer back to the  
13 last couple of renewable procurements that have  
14 occurred, the interim auction and so forth, where  
15 there was a huge amount of renewables bid into  
16 those auctions, many of which were new projects  
17 which required financing.

18           I think the big impediment here is  
19 simply the absence of a procurement mechanism and  
20 long-term contracts to make that financing occur.  
21 The other particular problem that might impact  
22 financing of a renewable project is the lack of  
23 kind of stability in the market design.

24           We right now do not know how congestion  
25 is going to be addressed in the California market

1 design, and that makes it difficult for people to  
2 bid into auctions. It increases the risk factor.  
3 I think the ultimate impact is to potentially  
4 raise some costs until we get some stability  
5 there.

6 But when that stability comes I think  
7 that will further make financing of any projects  
8 in California much easier.

9 And then finally, I just wanted to  
10 close, you asked the question about were there any  
11 other driving policy issues related to the  
12 implementation of the RPS. And I would just pose  
13 one 40,000 foot question -- is 1078 going to be  
14 workable?

15 It's too early to tell at this point in  
16 time about its effectiveness, but we're about  
17 three fourths of the way through this year's  
18 regulatory proceedings to determine how it's going  
19 to be worked out.

20 My impression and observation is that  
21 every year or every couple of years we are going  
22 to be in regulatory proceedings, trying to work  
23 out the definition of best fit, what is the  
24 definition of the contract terms, and all these  
25 things.

1           And I really raise the question, without  
2 changing the standard at all, is 1078 going to be  
3 a workable mechanism? I think only time is going  
4 to tell on that. I'm hopeful that we can work  
5 about a process that is smooth and efficient.

6           But over time, as you continue to  
7 improve your report, this is going to be a  
8 critical question that is going to have to be  
9 raised by yourselves and back to the Legislature  
10 about whether there are fixes to 1078 that need to  
11 be made so that we can achieve that goal. And  
12 with that, those are my comments. Any questions?

13           COMMISSIONER BOYD: Questions? Mr.  
14 Geesman.

15           COMMISSIONER GEESMAN: Stephen, on the  
16 production tax credit and the California fix, does  
17 your organization represent the affected, I think  
18 it's pre-1987 wind QF contract holders?

19           MR. KELLY: We have many of those in our  
20 membership, yes.

21           COMMISSIONER GEESMAN: Are you aware of  
22 any efforts to negotiate with the utilities along  
23 the lines that you outlined for us?

24           MR. KELLY: there's nothing that's  
25 occurred to date, as far as I know, at least

1 within our organization, on behalf of a broad  
2 range of technologies. And so, right now I don't  
3 believe there is.

4 I know there's kind of public  
5 discussion, you have raised it to the floor on a  
6 number of public meetings, about the importance of  
7 being able to repower existing facilities. But --

8 COMMISSIONER GEESMAN: It seems to me  
9 somebody's got to step up on behalf of the various  
10 parties, and attempt to work this out, because I  
11 do think that it's an embarrassment to everybody  
12 involved to drive past those wind sites and see  
13 all of that old, outmoded junk out there, when in  
14 fact those are some of the best sites in  
15 California and ought to have the best technology  
16 on them.

17 And I would hope that it's within the  
18 capabilities of your industry, or the utilities,  
19 or some combination of both to sit down and try  
20 and get this resolved. It's been too long.

21 MR. KELLY: Yes. I agree with that,  
22 we'd be certainly happy to do that. When we first  
23 negotiated this concept with PG&E to split the  
24 production we had approached all the other  
25 utilities with the same concept, and PG&E was the

1 only one we were able to complete those  
2 negotiations.

3 But I still think that model has some  
4 value. I think it protects the utilities from  
5 excessive cost under the standard offer contract  
6 form, and it allows them to reach out and access  
7 these sites for RPS-related production at a  
8 different price.

9 COMMISSIONER GEESMAN: Thank you.

10 COMMISSIONER BOYD: Mr. Kelly, I think  
11 Commissioner Geesman has made a very significant  
12 suggestion to you folks in the industry. I know  
13 his feelings, and I know how outspoken he is on  
14 this subject, and he has gone national with regard  
15 to his concerns, and I'm sure he's volunteering to  
16 work with you to continue to pursue that subject.

17 So you might take that back to your  
18 membership and think seriously about starting a  
19 dialogue and finding a forum. Thank you very much  
20 for your testimony. With that, I have no more --  
21 uh, Mr. Guliassi would like rebuttal.

22 MR. GULIASI: No, not rebuttal, I just  
23 thought I would take a moment just to address  
24 Commissioner Geesman's question. I'm not aware of  
25 any discussion, in a formal way, between the

1 association IEP and PG&E.

2 But I am aware that there have been some  
3 discussions between PG&E and individual wind  
4 developers. But I think the suggestion here today  
5 for some kind of more formal discussion to take  
6 place is a brilliant idea.

7 And I think that I would endorse what  
8 Steve Kelly said. That the model that IEP and  
9 PG&E developed previously can be applied in this  
10 instance, and I think we'll, you know, soon be  
11 talking to IEP and its membership about this very  
12 idea. Thank you.

13 COMMISSIONER GEESMAN: Thank you.

14 COMMISSIONER BOYD: I have a gentleman  
15 rising in the audience. I keep trying to say I  
16 have no more blue cards, and I was going to invite  
17 anybody to say anything else, and Bernie jumps at  
18 the opportunity.

19 MR. OROZCO: Bernie Orozco, Sempra  
20 Energy. Just a real quick comment -- and our  
21 folks from Sempra Energy Utilities will be filing  
22 comments, and they are going through the process  
23 right now. We have so many different business  
24 units that we have to go through a vetting  
25 process.

1           When so many reports come out it tends  
2 to be a lengthy process. But one quick comment  
3 that I think the company is comfortable in  
4 making -- and there's a reference on page 117,  
5 under the research and development, RD&D section,  
6 and that's in reference to this debate that is  
7 kind of existing between the Energy Commission and  
8 with the three IOU's.

9           We have been looking at some of the  
10 projects that the Commission has been proposing,  
11 and in the area of T&D we are most interested in a  
12 larger participation for the IOU'S involved. We  
13 think a stronger collaborative effort in that  
14 arena would be beneficial to everyone.

15           This is an ongoing debate, I know it's a  
16 broken record, but I just wanted to take the  
17 opportunity to reiterate that. Thank you.

18           COMMISSIONER BOYD: Thank you. Your  
19 comment about so much produced, and the difficulty  
20 of commenting. I don't want to get too  
21 Churchillian here, but a lot of us are amazed that  
22 so few could produce so much. It's been an  
23 interesting period of months.

24           If you had a tough time, the public and  
25 stakeholders, keeping up with all this paper,

1 think of the Commissioners trying to deal with all  
2 of this and what-have-you. It's been a long,  
3 sleepless period of time for all, but it's been a  
4 big challenge.

5 And I want to take this opportunity,  
6 therefore, having no more blue cards, anyone else  
7 want an opportunity to speak, now is that time.

8 Seeing nothing, I want to then remind  
9 everybody, you've heard reference to it before,  
10 but there is a September 2nd deadline for written  
11 comments and all these items that we've heard over  
12 the last three days in a row and heard in the  
13 hearing last week. So, just to reinforce that.

14 I want to thank all of you for your  
15 testimony, I want to thank all the people for the  
16 patience and participation. I want to thank those  
17 stakeholder and state agencies in particular  
18 who've toughed this out with us for some period of  
19 time.

20 We've had an interagency working group  
21 dealing with this in the state of California,  
22 struggling to speak with one voice on this  
23 subject, which is not typical of government. I  
24 want to recognize the League of Women Voters  
25 representative Jane Turnbull, who have been

1 helping us and co-hosted a hearing with us earlier  
2 in this process.

3           And I want to note that our new Deputy  
4 Executive Director, Scott Matthews, has patiently  
5 sat through all three days of this, and so I  
6 appreciate that the Executive Office is here.  
7 It's meaningful to us, and it'll add to your work  
8 load of course, now we know you know about all of  
9 this.

10           And last, I want to thank Caroline  
11 Jackman for providing us staff services, staff  
12 support for the last three days here. Appreciate  
13 it, you've been very efficient in delivering blue  
14 cards and worrying about the audience, and I thank  
15 you for that.

16           With that, if there's no other business  
17 before the organization, and presuming my fellow  
18 Commissioners have no additional remarks, I'll let  
19 Commissioner Rosenfeld get to his chair. No? I  
20 adjourn this meeting, and thank you all.

21 (Thereupon, at 12:37 p.m., the meeting was  
22 adjourned.)

23

24

25

## CERTIFICATE OF REPORTER

I, PETER PETTY, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission 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 workshop, nor in any way interested in outcome of said workshop.

IN WITNESS WHEREOF, I have hereunto set my hand this 5th day of September, 2003.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345