

COMMITTEE HEARING
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:)
)
Preparation of the 2008) Docket No.
Integrated Energy Policy Report) 08-IEP-1A
Update)
_____)

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

WEDNESDAY, OCTOBER 9, 2008

9:00 A.M.

ORIGINAL

Reported by:
Ramona Cota
Contract No. 150-07-001

DOCKET	
08-IEP-1A	
DATE	OCT 09 2008
RECD.	OCT 15 2008

COMMISSIONERS PRESENT

Jeffrey D. Byron, Presiding Member, Integrated
Energy Policy Report Committee

Jackalyne Pfannenstiel, Associate Member,
Integrated Energy Policy Report Committee and
Associate Member, Renewables Committee

Karen Douglas, Presiding Member, Renewables
Committee

ADVISORS PRESENT

Panama Bartholomy

Laurie Ten Hope

Tim Tutt

STAFF and CONTRACTORS PRESENT

Jim Bartridge

Sylvia Bender

Gerry Braun

Pam Doughman (via telephone)

Mike Gravely

Michael Jaske, PhD

Chris Kavalec

Suzanne Korosec

Rachel MacDonald

Donna Parrow

ALSO PRESENT

Carl Silsbee, Southern California Edison

Edwin Sayre, Advocates for Clean Reliable Energy

Robert F. Williams, Advocates for Clean Reliable
Energy

Bob Burt, Insulation Contractors Association

Noah Long, National Resources Defense Council

Don Rodes, SolarAire

Fong Wan, Pacific Gas and Electric Company

Clinton Cole, CURRENT Group (via telephone)

Jane Turnbull, League of Women Voters (via
telephone)

Sanford Miller

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P R O C E E D I N G S

9:02 a.m.

PRESIDING MEMBER BYRON: Good morning, everyone. I'm sorry that we are just a few minutes late. I would like to welcome you all to a Committee Workshop on our Draft 2008 Integrated Energy Policy Report.

I am the Presiding Member of the IEPR Committee, Jeff Byron. And with me is my Associate Member of that Committee and our Chairman, Jackalyne Pfannenstiel, and to her right Commissioner Karen Douglas. My advisor all the way to the right, Laurie Ten Hope. And then all the way on the left here is Panama Bartholomy, Advisor to Commissioner Douglas and Tim Tutt, Advisor to Chairman Pfannenstiel.

I think what I will do is I will stop there, I will turn it over to Suzanne. I think we will come back, Suzanne, and allow my fellow Commissioners any comments but I think you may have some housekeeping issues you want to deal with. I know I am doing things a little bit out of order. Do you want to do the housekeeping things and then we'll come back?

MS. KOROSEC: It's good to shake things

1 up every now and again. Yes, I'll go ahead and do
2 the quick housekeeping.

3 PRESIDING MEMBER BYRON: All right.

4 MS. KOROSSEC: Just an introduction. I
5 am Suzanne Korosec. I am leading the IEPR effort
6 this cycle. For those of you who have not had the
7 joy of attending an IEPR hearing before the
8 restrooms are out the double doors and to your
9 left. There is a snack room at the top of the
10 stairs on the second floor under the white awning.
11 And if there is an emergency and we need to
12 evacuate the building please follow the staff as
13 we go out the building to the park across the
14 street and wait there for the all-clear signal.

15 Today's workshop is being webcast. And
16 for those of you listening in on the webcast who
17 may want to speak during today's public comment
18 period the call-in number is 888-566-5914 and the
19 passcode is IEPR.

20 And for parties in the room who wish to
21 speak we do ask that you fill out blue cards. The
22 blanks are on the table in the foyer. And if you
23 can give those to Donna Parrow who is manning our
24 phone there she can pass those on to the
25 Committee. And we will take those in the order

1 that they are received.

2 So if you would like to move on to your
3 comments, Commissioner.

4 PRESIDING MEMBER BYRON: Thank you. We
5 hope that we will be able to conduct this
6 proceeding this morning and finish by the lunch
7 hour. But again, what we are interested in is
8 public comment this morning on our Draft IEPR.
9 This is an extremely important document that this
10 Commission produces. I suppose probably not as
11 important as the odd-year IEPR but there are a
12 number of topics that we have taken up. Some that
13 are required by legislative mandate and others
14 that we think are timely and important to address.

15 Ms. Korosec will review those to some
16 extent and a number of the recommendations, I
17 believe, that we have made in this Draft IEPR. We
18 have got lots of firepower sitting around the
19 table. Key staff here at the Energy Commission
20 that we hope will be able to answer questions
21 and/or take the input that we receive today.

22 I am very interested to hear public
23 comment as well as comment from the investor-owned
24 utilities that are here. We hope that someone
25 will be here from the Public Utilities Commission

1 and I haven't had a chance to find out if there's
2 others. We, of course, are interested in hearing
3 from all the agencies that may be affected by our
4 recommendations. As you know we conduct this
5 process openly and publicly and we are truly
6 interested in feedback that we get.

7 Having said all that I would like to ask
8 if my fellow Commissioners have any opening
9 remarks.

10 ASSOCIATE MEMBER PFANNENSTIEL: Thank
11 you, Commissioner Byron. Let me just observe that
12 Suzanne began her housekeeping comments by saying
13 if there's anybody here who hasn't attended an
14 IEPR hearing before. I am firmly convinced there
15 isn't a living Californian who hasn't participated
16 in the IEPR.

17 But the value of what we do every year
18 on a regular basis and the two year full cycle is,
19 in fact, to raise some policy recommendations and
20 get them out into the public and then get
21 feedback. And the feedback is fundamental to the
22 final reports that finally get adopted by the
23 Energy Commission.

24 So I just want to thank people for being
25 here. Looking forward to a very meaty and useful

1 day and I look forward to your comments.

2 COMMISSIONER DOUGLAS: Thank you,
3 Commissioner Byron. I am also very pleased to be
4 here and very much looking forward to hearing from
5 the staff and the public on our Draft IEPR. Thank
6 you.

7 PRESIDING MEMBER BYRON: Commissioner
8 Douglas has been extremely busy so she doesn't
9 have to be here, as the Chairman and I do, being
10 on this committee. But we are glad to have you;
11 it is great to have additional commissioners here
12 as well. And I think that demonstrates the
13 interest in hearing comments on these
14 recommendations.

15 So having said all that, Ms. Korosec,
16 why don't you go ahead. Take your time, there is
17 no rush, and go ahead through the presentation and
18 the recommendations that you have.

19 MS. KOROSEC: All right. I will start
20 out today with a brief background on the IEPR and
21 a summary of the process and the schedule for this
22 document. And then we will move on to a summary
23 of all the recommendations in the Draft Report and
24 then we will take the public comment.

25 We do intend to finish up as early as we

1 can to accommodate the Commissioners' calendars
2 today. But we want to make sure that we have
3 enough time for public comment so we won't be
4 taking comments separately on chapter, we will
5 lump them all together. So if you do have
6 comments on more than one topic you can just
7 present all of those when you come up to present
8 your comments.

9 And as Commissioner Byron mentioned, we
10 do have our technical staff authors available here
11 at the table to answer questions and we will take
12 those questions at the beginning of the public
13 comment period.

14 So Senate Bill 1389 requires the Energy
15 Commission to prepare an Integrated Energy Policy
16 Report every two years in odd numbered years, as
17 well as a report in alternate years that updates
18 the analyses or identifies other energy issues
19 that may have arisen since publication of the
20 IEPR.

21 The IEPR gives an overview of major
22 energy trends and issues in California including
23 energy supply, demand, pricing, reliability and
24 efficiency. And in preparing the report the
25 Energy Commission consults with a number of other

1 state agencies including the Public Utilities
2 Commission, the Division of Ratepayer Advocates,
3 the Air Resources Board, the Independent System
4 Operator and the Departments of Water Resources,
5 Transportation and Motor Vehicles.

6 PRESIDING MEMBER BYRON: Ms. Korosec, if
7 you would, just cozy right up to that microphone
8 and be a little louder for us.

9 MS. KOROSEC: Okay. Sorry about that.

10 The IEPR is really meant to be the
11 foundation for California's energy policies and
12 decisions and so the statute does direct other
13 agencies to conduct their energy-related
14 activities using the analyses and the policies
15 that are contained in the IEPR.

16 As Commissioner Byron mentioned this is
17 a public process. It is developed with workshops
18 and hearings on specific topics where stakeholders
19 and the public can present their comments and
20 concerns. These then become part of the record
21 and are used by the Committee in making their
22 final policy recommendations.

23 We have conducted 12 staff and Committee
24 workshops between March and October of this year
25 to prepare this document. These were on the

1 topics that were identified by the Committee in
2 its Scoping Order that was issued May 15, which
3 are listed here.

4 First was the physical, operational and
5 market changes needed to support 33 percent
6 renewables in California.

7 Second is how the state's energy
8 efficiency goals and programs interact with the
9 Energy Commission's demand forecast.

10 Third is the status of efforts to
11 address recommendations in the 2007 IEPR on
12 electricity procurement, which included the need
13 to standardize assumptions in the long-term
14 procurement planning, extending the period of
15 analysis and adequately incorporating risk in the
16 evaluation of resources.

17 Fourth is an evaluation of the
18 vulnerability of the state's nuclear plants to
19 disruption due to a seismic event or plant aging,
20 which is required by Assembly Bill 1632.

21 Fifth is an evaluation of the PUC's
22 Self-Generation Incentive Program to determine the
23 costs and benefits of providing ratepayer
24 subsidies for renewable and fossil fuel,
25 distributed, generation. This was required by

1 Assembly Bill 2778.

2 And finally a summary of the joint
3 Energy Commission and PUC final opinion on
4 greenhouse gas regulatory strategies. On this
5 last item, because of the timing of the release of
6 that opinion, we did not include a summary of that
7 in this draft. At this point the joint decision
8 is scheduled to be adopted by both agencies on
9 October 16.

10 And we also included in this document a
11 report card on past IEPR recommendations. I
12 believe there are 44 recommendations that we went
13 through and discussed the status and progress on
14 those.

15 The schedule. We released this document
16 on September 25. Written comments are due on
17 October 16. We are going to turn that around
18 fairly rapidly and try to release a final draft on
19 November 3, for adoption by the full commission at
20 a Business Meeting on November 19.

21 So with that I'll move on to the
22 recommendations, starting with Chapter 1 on
23 renewables. This chapter identifies some of the
24 major barriers to reaching a 33 percent renewable
25 target in California and discusses some of the

1 potential strategies to help overcome those
2 barriers.

3 Some of these barriers include the need
4 for transmission additions or upgrades to access
5 renewable resource areas; challenges associated
6 with integrating renewables into the system,
7 particularly intermittent technologies and
8 variable technologies; the potential for renewable
9 contract delays and cancellations and the impact
10 that may have on reaching our goals; the cost and
11 rate impacts of adding renewables to the system;
12 and finally, potential difficulties in permitting
13 renewable generating facilities that are in
14 environmentally sensitive areas.

15 To help overcome some of these barriers
16 the IEPR Committee recommends to do further
17 analysis in the 2009 IEPR of the issues related to
18 transitioning to a higher renewables future,
19 including the effects of key issues like once-
20 through cooling, aging power plant retirements and
21 greenhouse gas reductions.

22 To address transmission barriers we are
23 recommending that we work with the publicly-owned
24 utilities and investor-owned utilities to try to
25 identify ways to remove barriers to joint projects

1 that could provide benefits for renewables.

2 This would include working
3 collaboratively with entities through the RETI
4 process, the Renewable Energy Transmission
5 Initiative, to provide information on potential
6 projects and corridors that might be necessary in
7 the future. And also identify opportunities for
8 joint project collaboration.

9 Also using the 2009 IEPR and the 2009
10 Strategic Transmission Investment Plan forums to
11 identify and evaluate regulatory or policy changes
12 that might reduce some of the obstacles to joint
13 project development. And finally, ensure that
14 land use and environmental issues are considered
15 in the RETI process.

16 We are also recommending that we restore
17 funding to the Energy Commission's local
18 assistance program to help local governments with
19 developing general plan energy elements that
20 recognize the importance of the state's goals for
21 renewable development and greenhouse gas
22 reductions. Also this can help better inform the
23 public and build public support for achieving
24 these goals.

25 For integrating technologies into the

1 system we recommend continuing to implement
2 recommendations from the integration work that was
3 done by the Consortium for Electric Reliability
4 Technology Solutions such as improved and long-
5 term and integrated transmission planning. Some
6 of these recommendations are outlined here.

7 Also to require load-serving entities'
8 procurement plans to show how those resource mixes
9 will address local reliability requirements to
10 help maintain system reliability.

11 We need to focus our R&D efforts on
12 energy storage technologies, on transmission
13 system improvements and technologies, distribution
14 level and building integrated renewables, and on
15 renewable heating and cooling technologies.

16 Also we need to increase the amount of
17 R&D funding that is devoted to transmission
18 activities. And we are recommending that we
19 increase annual funding to \$60 million above what
20 is already being allocated. And also that the
21 publicly-owned utilities be brought in to also
22 increase their transmission-related R&D
23 activities.

24 To address some of the issues with
25 contracting we are recommending that the PUC

1 should evaluate RPS proposals without direct
2 participation of the IOUs. Include cost criteria,
3 likely project success, locational benefits and
4 land use and environmental consideration in that
5 evaluation, assisted by non-market participants
6 and the Energy Commission.

7 And also to give policy makers more
8 information on where renewable contracts are going
9 and where costs are going. We would like the IOUs
10 to provide aggregate information on those prices,
11 on project locations and on the schedules.

12 We also are suggesting that the PUC
13 should make public the amount of above-market
14 funds that are being allocated to RPS contracts.
15 This was something the Energy Commission proposed
16 to do when the above-market funds resided here
17 under our renewable energy program. And we think
18 that that would provide value to show how much of
19 those above-market funds are being committed to
20 how many projects.

21 And finally that the two agencies should
22 develop a pilot program for feed-in tariffs for
23 renewable projects larger than 20 megawatts. We
24 do have a separate parallel proceeding going on on
25 feed-in tariffs so this recommendation may change

1 in response to comments and things that are
2 happening in that, in that venue.

3 Looking at price impacts. We need to
4 better understand the effects of increased
5 renewables on natural gas demand and prices as
6 well as the impacts of regional changes in natural
7 gas supply and demand on California's markets.

8 We also need to be continuing our work
9 on our Cost of Generation Model to really refine
10 the inputs and to update the changing technology
11 costs over time so that we have more accurate
12 information on which to base our cost analyses.

13 And that we also intend to be working
14 very closely with the PUC on their 33 percent RPS
15 analysis to estimate potential price impacts of a
16 33 percent target.

17 For the environmental issues: We need to
18 continue working with the RETI to identify the
19 competitive renewable energy resource zones where
20 renewable energy development is expected to be
21 least-damaging to the environment.

22 We should continue participation in the
23 Solar Programmatic Environmental Impact Statement
24 with DOE and BLM, and also continue to work with
25 BLM on environmental impacts of permitting solar

1 thermal facilities in California.

2 And we will also be assisting the PUC to
3 include land use and environmental considerations
4 when they are selecting their RPS contracts.

5 All right, I'll move on to Chapter 2,
6 which is on energy efficiency and the demand
7 forecast. This chapter discusses the challenges
8 with measuring and attributing electricity savings
9 resulting from energy efficiency programs and
10 other market forces within the Energy Commission's
11 demand forecast.

12 It talks about methods currently used to
13 incorporate energy efficiency programs into the
14 forecast and identifies the approach that the
15 Energy Commission staff will be using to clarify
16 the efficiency assumptions in the demand forecast
17 during the 2009 IEPR cycle and beyond.

18 Finally, it reports on progress made by
19 the utilities towards the efficiency requirements
20 of Assembly Bill 2021.

21 Recommendations from this chapter
22 include that the Energy Commission should analyze
23 the relationship between end use impacts that are
24 modeled in the demand forecast and impacts that
25 are used in efficiency program planning to

1 identify and resolve potential overlap between the
2 two.

3 The IOUs and POUs, regulatory agencies
4 and other stakeholders are encouraged to
5 participate in the working group that has been
6 established by the Energy Commission to address
7 technical issues and develop consistent efficiency
8 analysis metrics across the utilities and the
9 various agencies.

10 And we also recommend continuing
11 independent efforts to evaluate alternative
12 forecasting methods, focusing on matching methods
13 to the various purposes to which the demand
14 forecast is being applied.

15 The Committee is recommending that we
16 continue to work with the publicly-owned utilities
17 to understand how they set targets and estimate
18 their remaining economic potential. And also
19 continuing to assist them to achieve their
20 efficiency goals by improving overall evaluation
21 planning, developing program tracking systems, and
22 improving the savings reporting requirements for
23 the next AB 2021 cycle.

24 Chapter 3 is on procurement. The 2007
25 IEPR recommended that the Energy Commission and

1 the PUC work together to improve the analysis
2 methods that the IOUs used in their long-term
3 procurement plans.

4 The 2007 IEPR said that the IOU analyses
5 should use common assumptions as much as possible,
6 adequately reflect significant ratepayer risks,
7 extend over a 20 to 30 year period of analysis,
8 incorporate environmental impacts and risks, and
9 discount future fuel costs at a social discount
10 rate to properly reflect the risk that is
11 associated with that fuel cost volatility.

12 Chapter 3 talks about the progress that
13 has been made in the PUC's long-term procurement
14 plan proceeding on these issues. It discusses
15 reliability and resource adequacy issues that are
16 associated with moving away from the use of once-
17 through cooling in power plants. And talks
18 briefly about the relationship between electricity
19 procurement and the Energy Commission's power
20 plant siting process.

21 Recommendations in Chapter 3 include
22 that the CEC staff should continue to collaborate
23 with the PUC in the long-term procurement plan
24 proceeding to develop the 2010 plans. That we
25 should assess in the 2009 IEPR longer-run, say 20

1 year, uncertainties related to electricity demand
2 and natural gas prices and supply.

3 In the 2009 IEPR we may need to look at
4 issues associated with the development of gas-
5 fired plants for near-term reliability and the
6 need to reduce utility carbon footprints over the
7 long term. A lot will depend on the results of
8 the long-term procurement plan proceedings so that
9 maybe additional issues identified through that
10 proceeding that we will need to look at in the
11 IEPR.

12 Based on our analysis of the social
13 discount rate issue we are currently recommending
14 that those not be used in the procurement
15 planning. But we think that it would be valuable
16 for the PUC to reevaluate this when they are
17 refining their bid evaluation criteria in the
18 long-term procurement plan proceeding.

19 We are going to need additional analysis
20 on the implications of replacing once-through
21 cooling capacity. We are going to need to to use
22 the results of the CAISO study on aging plants.
23 This is due to be completed in early 2009 and that
24 may raise additional topics that we will need to
25 look at in the '09 IEPR.

1 And we will need to work with the PUC to
2 help develop criteria to incorporate project
3 planning and permitting progress in the bid
4 evaluations. And we would like to see the siting-
5 related criteria apply to all projects, not just
6 those that are under the CEC's jurisdiction.

7 Chapter 4 is the nuclear vulnerability
8 assessment. This is a summary of a consultant
9 report that was prepared in response to the
10 requirements of Assembly Bill 1632. Because of
11 the timing of that analysis the summary included
12 in this draft reflects findings but no
13 recommendations.

14 The Committee Draft AB 1632 Report,
15 which is based on the consultant report and does
16 include recommendations, is scheduled to be
17 released tomorrow in preparation for an October 20
18 Committee Workshop for the Electricity and Natural
19 Gas Committee and the IEPR.

20 This report, although part of the IEPR,
21 is on a separate and parallel track so we
22 encourage parties to comment on the
23 recommendations in that report at the October 20
24 workshop.

25 And the final findings and

1 recommendations from that report will be included
2 in the adopted IEPR Update.

3 For Chapter 5, this summarizes
4 preliminary findings from the Energy Commission
5 consultant's evaluation of the PUC's Self-
6 Generation Incentive Program, which was required
7 by Assembly Bill 2778.

8 Like the nuclear report this is a work
9 in progress and staff expect the final consultant
10 report to be available later in October. The
11 final results of that analysis will be included in
12 the final 2008 IEPR Update along with the final
13 recommendations.

14 However, we do have some preliminary
15 findings and recommendations. We recommend that
16 eligibility for the Self-Generation Incentive
17 Program be based on system performance rather than
18 fuel type. That the PUC should consider re-
19 instituting formerly eligible engine and turbine
20 technologies that use natural gas, digester gas or
21 biodiesel. And that the PUC should consider
22 providing incentives for energy storage
23 technologies that can provide capacity benefits.

24 Also preliminarily recommend that the
25 PUC should require the IOUs to meet some portion

1 of their distribution system upgrades with
2 distributed generation or combined heat and power
3 in areas where there are clear, locational
4 benefits to the distribution system.

5 Also that the Energy Commission and the
6 PUC should work with the IOUs to identify areas
7 where there are these locational benefits. And
8 that we need to define any additional studies to
9 determine that.

10 We also reiterate the value of
11 distributed generation, particularly combined heat
12 and power, that we have made many recommendations
13 in past IEPRs on this issue.

14 Some of those recommendations included
15 that the PUC should develop tariff structures that
16 will make DG and CHP projects cost and revenue
17 neutral; eliminating non-bypassable charges for DG
18 and CHP, regardless of interconnection voltage and
19 standby reservation charges; and developing a way
20 to estimate the value of Self-Generation Incentive
21 Program-funded projects as well as DG costs and
22 benefits.

23 Finally, we believe that the incentive
24 structure in the Self-Generation Incentive Program
25 should help meet specific targets for

1 environmental, transmission, distribution and
2 economic benefits of DG technologies.

3 Finally, Chapter 6 discussed progress on
4 prior IEPR recommendations. As I said, there are
5 44 recommendations in the report. I am not going
6 to go through these at all. But I do want to ask
7 parties to identify in your comments, either here
8 or in the written comments, any misstatements or
9 omissions or any progress that has been made since
10 the draft came out that we may not be aware of.

11 So with that I think we are ready to
12 take questions or move directly into the public
13 comment period, depending on the -- Do we have
14 questions from the audience on any of the
15 material?

16 PRESIDING MEMBER BYRON: Good point. As
17 far as I am concerned, Ms. Korosec, that was the
18 most important presentation I have heard all year.
19 A lot of material was covered in there. Before we
20 start taking public comment, are there any
21 questions anybody has specifically on this
22 presentation? We will have a wide open comment
23 period so everybody will get an opportunity to
24 speak. But if there's any specific questions now
25 let's take them. Commissioners?

1 ASSOCIATE MEMBER PFANNENSTIEL: No.

2 PRESIDING MEMBER BYRON: A lot of
3 material there. It's like, where do we begin.
4 All right. What I would like to do then, since we
5 are -- Our agenda as you can tell is fairly brief.
6 It is this presentation and comments.

7 Let's do this. Let me ask if there is
8 anyone here that is time-constrained. And I turn
9 first to Commissioner Douglas just in case we are
10 not going to have you for the entire workshop
11 period. Is there anything in particular you would
12 like to say?

13 COMMISSIONER DOUGLAS: No, take it in any
14 order that you think appropriate.

15 PRESIDING MEMBER BYRON: Okay. All
16 right. I have a number of folks that I have
17 received cards on. We will get to the folks on
18 the phone but I think we always give deference to
19 those that make the trouble to be here. I would
20 like to ask if there is anyone in the audience
21 that has a time constraint that would like to make
22 comments that may need to leave soon?

23 All right. Having seen no hands there
24 then I will just go down the list on the order in
25 which I have received them, if that is okay. I

1 have the first card from Mr. Carl Silsbee from
2 Southern California Edison.

3 MR. SILSBEE: Good morning,
4 Commissioners, advisors. It is good to be here
5 again. I have been here several times through the
6 course of this IEPR process.

7 We do plan to provide written comments
8 on the 16th. What I would like to do this morning
9 is highlight three areas, procurement obligations,
10 feed-in tariffs and the Self-Generation Incentive
11 Program evaluation.

12 We are a bit perplexed by the
13 recommendation for the CPUC to take complete
14 control of the IOU procurement process.

15 PRESIDING MEMBER BYRON: I know. It is
16 a startling thought, isn't it.

17 MR. SILSBEE: No, it is actually not.
18 We currently have two tracks of procurement. For
19 renewable power we file an annual RPS procurement
20 plan with the Public Utilities Commission. Once
21 it is approved we conduct a solicitation pursuant
22 to the direction of the Commission. We select
23 projects which we then take to the Commission for
24 approval.

25 For all-source and new generation

1 procurement, which takes place pursuant to a CPUC-
2 approved AB 57-compliant procurement plan. We
3 have a biennial review by the PUC of that plan.
4 We are required to have an independent evaluator
5 work directly with our staff and report back to
6 the Commission on the process for longer term
7 procurement under the AB 57 plan.

8 We don't really have skin in the game
9 here. We don't have an opportunity to make money
10 on procurement. It is a service we provide to our
11 customers. We very much appreciate the
12 involvement of the PUC in providing us direction.
13 If you go back to 15 years ago there were
14 significant, reasonable review risks. And we have
15 a very narrowly constrained area of discretion on
16 the AB 57 compliance plan, which makes us very
17 comfortable in terms of our procurement.

18 And given the existing extent of CPUC
19 control, it isn't clear to me what more the CEC is
20 recommending in terms of oversight of the process.
21 There are issues with regard to the CEC staff's
22 understanding of what we do in the procurement
23 process. I'd be more than happy to make sure that
24 we work with them and provide some of that insight
25 and visibility of the process.

1 Secondly I would like to point out that
2 with regard to feed-in tariffs we did proactively
3 support development of the water and wastewater
4 treatment feed-in tariff. We are not opposed to
5 the underlying concept. However, we do suggest
6 that the CEC be cautious in advocating further
7 development of feed-in tariffs. Our view is that
8 the primary impediments to development of new
9 renewable technology are the transmission, the
10 permitting and financing of projects, not so much
11 the contractual form.

12 PRESIDING MEMBER BYRON: I'm sorry,
13 would you please -- Maybe I didn't hear all of
14 that but I am not quite sure I grasp that,
15 Mr. Silsbee.

16 MR. SILSBEE: What I'm saying is --

17 PRESIDING MEMBER BYRON: Would you
18 repeat that or clarify it.

19 MR. SILSBEE: Okay, let me try to
20 provide a little more detail into what I was
21 attempting to communicate. The primary
22 impediment --

23 THE REPORTER: Mr. Silsbee, will you
24 please speak into the microphone.

25 MR. SILSBEE: Okay. I was actually

1 trying to step back from the mic so I could talk a
2 little louder. I always seem to have this problem
3 so let me know if you are not hearing me.

4 THE REPORTER: Thank you.

5 MR. SILSBEE: I think the report
6 recognizes the barriers that we in see the
7 renewable development. Transmission is obviously
8 a significant issue. Permitting can be an issue
9 and financing can be an issue. And that's one of
10 the reasons, of course, we are signing RPS
11 contracts that go 10 to 20 years, to provide some
12 of the financial certainty to project developers.
13 We don't see the form of contract as being as
14 significant with regard to the development of new
15 renewables.

16 And of course when we talk about a feed-
17 in tariff the issue we are taking here is instead
18 of having an RPS-type contract with a solicitation
19 it is either a fixed price that is subject to
20 periodic adjustment by the Commission or it is
21 some kind of a standard offer contract. And we
22 just don't see pursuing the development of feed-in
23 tariffs to have the same level of bang for the
24 buck in terms of renewable development as dealing
25 with some of the other issues, particularly

1 transmission.

2 PRESIDING MEMBER BYRON: Thank you, and
3 I think I do understand what you are saying. In
4 fact, my difficulty was the topic was feed-in
5 tariff and then you started talking about
6 transmission and procurement and standard offer.
7 Were you here at our feed-in tariff workshop last
8 week?

9 MR. SILSBEE: Unfortunately I was not.
10 I did review the presentation that Marcie Bergdorf
11 provided.

12 PRESIDING MEMBER BYRON: Your comments
13 exemplify one of my primary concerns. And that is
14 that the utilities only look at this through their
15 own lens. In fact, it seems everybody looks at it
16 through the utility procurement lens. What we are
17 really interested in is a way of getting to these
18 renewables. Not necessarily the transmission
19 level.

20 We are talking about, I believe we are
21 going to correct our recommendation based upon
22 that workshop to procurement. We are not going to
23 suggest a pilot project. We are going to suggest
24 that we look at feed-in tariffs for all renewables
25 less than 20 megawatts.

1 So I don't believe that most of those
2 will require transmission. I don't believe that
3 most of those will require utilities to enter into
4 contracts. What we are looking at is a way to
5 infuse more renewables into the system that don't
6 have to go through this complex and convoluted
7 utility procurement process.

8 Now we are very concerned about the risk
9 that that represents to the utilities and I hope
10 really what we are talking about is to your
11 customers. We can appreciate your concern but
12 that is going to probably be the recommendation.
13 Is there any other correction on that, Madame
14 Chairman? We were noting that while Ms. Korosec
15 was giving her presentation, that we have made
16 some changes.

17 ASSOCIATE MEMBER PFANNENSTIEL: Real-
18 time changes that are going on based on that
19 discussion.

20 MR. SILSBEE: I very much appreciate
21 that. One of the concerns, of course, was the
22 recommendation for pursuing feed-in tariffs above
23 20 megawatts.

24 ASSOCIATE MEMBER PFANNENSTIEL: But I
25 would also say that I think that the jury is still

1 out on the above 20 megawatts. Clearly
2 transmission and other issues need to be addressed
3 under any circumstances. You know, whether you
4 have feed-in tariffs or not you still have
5 constraints that are first in order of what we
6 need to deal with.

7 But we are hearing -- And we didn't hear
8 much at the workshop but we have heard otherwise,
9 and in fact we heard in the '07 IEPR process, that
10 dealing with the utilities and trying to secure
11 individual contracts and then getting financing on
12 those contracts has been an obstacle to the larger
13 developers, the RPS large developer, renewable
14 developers.

15 So, I mean, I don't think we have left
16 that issue but we did hear that probably sooner
17 than that we could get this group of one to 20
18 megawatts on-line faster with a fixed feed-in
19 tariff, and that is the idea of a feed-in tariff,
20 that would be cost-based, not MPR-based. And that
21 would be must-take. The energy would be must-
22 take. So our sense is if you do it there you get
23 something sooner rather than later. There was
24 just a correction on what we had in the original
25 report.

1 MR. SILSBEE: If I could ask for
2 clarification when you say cost-based as opposed
3 to MPR-based.

4 ASSOCIATE MEMBER PFANNENSTIEL: Right.
5 Technology-based rather than gas-fired based.

6 MR. SILSBEE: Okay. So the notion would
7 be a fixed payment amount by technology rather
8 than tying the payment to the MPR.

9 ASSOCIATE MEMBER PFANNENSTIEL: Yes.

10 MR. SILSBEE: Okay. I appreciate that.
11 We will take, you know, the comments that you have
12 made into consideration and we will have comments
13 on the 16th.

14 PRESIDING MEMBER BYRON: If I could
15 elaborate on one point. As you know we are
16 working on the transmission issue and the Energy
17 Commission is spearheading the RETI process. And
18 I feel very strongly that we need to get
19 transmission fixed and we can't put all our eggs
20 in that basket in order to get renewables moving.

21 And that's why it is so important that
22 we get the utilities and the system operators to
23 begin to embrace the notion that there's a lot
24 that can be done on the distribution system.
25 There's a lot of capital in the private sector

1 that's willing to put money into renewable
2 generation.

3 And we need to get out of the context of
4 looking at this just from the utility perspective.
5 We need to figure out how do we accomplish the
6 state's goals. And I really look to the ISO and
7 the utilities to embrace this rather than continue
8 to resist it.

9 MR. SILSBEE: I am not sure I would
10 characterize our position as resisting it. But
11 certainly one concern that we have expressed all
12 along the process is trying to balance the social
13 objectives here with the cost to our customers.

14 PRESIDING MEMBER BYRON: Right. But as
15 I have pointed out to others, executives in your
16 company and others, we don't hear your concern
17 about the price of natural gas fluctuating and
18 going up to \$15 a million BTU this last June or
19 July. You just pass that cost through to
20 customers.

21 And in essence I think that is the way
22 to begin looking at feed-in tariffs. We are
23 making a societal decision here and the state has
24 been pretty clear on this. And I think we can
25 anticipate knowing that Speaker Bass has assigned

1 to some assembly members to get an RPS bill done.
2 We know that the Governor's Office policy is to
3 move to 33 percent. It is the policy of this
4 commission for a long time. This is a social
5 decision that we are making.

6 And I am so glad that there is the
7 Public Utilities Commission in San Francisco to
8 protect customers from high costs. But this is
9 one of those issues that I think we need to start
10 saying, okay, we are going to pass this cost
11 through just like we do natural gas but we don't
12 like natural gas as much as we like renewables.

13 It is a philosophical difference here
14 that we are looking for transitioning, I think, on
15 the part of not just investor-owned but the
16 publicly-owned utilities. Mr. Silsbee, I am so
17 sorry to pick on you. You have other points you
18 want to make.

19 MR. SILSBEE: Just one more. I would
20 like to talk briefly about the SGIP. I did
21 participate in the workshop on the SGIP and it was
22 more of a question and answer session with the
23 consultants. I appreciate the openness.

24 My observation though is that we aren't
25 very far along in the process. There are some new

1 things that came out in the draft IEPR report that
2 really haven't been discussed at the workshop.
3 There's still work to be done to finalize the
4 numbers, which aren't yet there. And I would just
5 ask the Commission to consider the possibility of
6 trying to go on a little slower track here and
7 bringing this up at the front end of the 2009 IEPR
8 rather than trying to rush things into the 2008
9 IEPR Update.

10 There appear to be some fairly
11 interesting and intriguing new ideas presented
12 such as the attempt to link up feeder or
13 distribution system impacts on a project by
14 project basis. And we are doing some work in that
15 area with regard to distributed generation.
16 Excuse me, with regard to demand response, not
17 distributed generation. Where we are looking at
18 impacted circuits and looking at where the demand
19 response participants are with regard to those
20 circuits.

21 This is a different take on it. I am
22 very interested in what the consultant has done.
23 But I really would like the opportunity to have
24 some review process before this just kind of hits
25 the street. So I would ask you to consider

1 delaying the --

2 PRESIDING MEMBER BYRON: I appreciate
3 that. The reason I laughed a little bit to myself
4 is because I feel the schedule is very compressed
5 as well. And I agree with you, it is moving very
6 quickly. But there is a legislative mandate on
7 that particular review and that report must be
8 part of this IEPR.

9 I am also holding the staff responsible
10 to maintaining our schedule as well. We are
11 committed to get this IEPR out by the end of the
12 year so that we can get to work on the '09 IEPR
13 and the 40 or so workshops that we need to conduct
14 in order to do that.

15 So I appreciate your concern there. All
16 I can ask is that you please provide us thorough
17 written comments so that we can incorporate
18 necessary changes based upon those comments.

19 MR. SILSBEE: Is the obligation to put
20 the SGIP findings -- excuse me. Is the obligation
21 to put the SGIP findings in the IEPR or just
22 complete the Commission's evaluation by the end of
23 the year?

24 PRESIDING MEMBER BYRON: Well.

25 MS. KOROSSEC: It is to include it in the

1 IEPR. It says it will be included in the 2008
2 IEPR.

3 MR. SILSBEE: Okay. So you may not have
4 the flexibility.

5 MS. KOROSSEC: Excuse me. Rachel may
6 have a clarification.

7 PRESIDING MEMBER BYRON: Go ahead,
8 Ms. MacDonald.

9 MS. MACDONALD: Hi, Rachel MacDonald. I
10 would like to clarify that the actual legislative
11 obligation was to conduct the evaluation before
12 November 1 and it is inclusion in the IEPR.

13 I am running -- I am the contract
14 manager on this and yes, it is a very compressed
15 schedule. We are running a parallel kind of
16 process to this because we have got results and we
17 have the draft coming out as was stated, hopefully
18 later next week.

19 I am going to be publicly posting that
20 as a notice and then allow a comment period and
21 include that. So it is very compressed but there
22 is time for interaction still. So I would like to
23 volunteer that.

24 MR. SILSBEE: I appreciate that.

25 PRESIDING MEMBER BYRON: I had the

1 pleasure of going to Southern California and
2 meeting with some of the executives in your
3 company and I have done this with the other
4 investor-owned utilities as well. Soliciting
5 their input and the assignment of manpower to
6 this.

7 I know it is a tremendous commitment for
8 the public and for companies like yours to
9 participate in this process but we think it is so
10 important. I apologize for the compressed
11 schedule but I feel compelled to meet these
12 deadlines. As you know, we get taken to task as
13 well when we don't get the work done that we have
14 been assigned to do.

15 MR. SILSBEE: I appreciate if you have
16 deadlines to get back to the Legislature. It
17 behooves you to meet those deadlines. And we'll
18 work as best we can within the schedule.

19 That concludes my comments. I
20 appreciate your listening to my suggestions.

21 PRESIDING MEMBER BYRON: If you will
22 wait a moment we may have some questions for you.

23 ASSOCIATE MEMBER PFANNENSTIEL:
24 Mr. Silsbee, in talking about procurement you
25 indicated that Edison has no skin in that game.

1 Yet in fact your customers do, clearly.

2 And there seems like -- There doesn't
3 seem to be, I guess, a special incentive to the
4 utilities to minimize the gas costs that are
5 passed through. And yet as Commissioner Byron
6 just pointed out, there really is, you know, a
7 concern about passing through renewables costs. I
8 just think that's somewhat disingenuous. I think
9 that we need to be careful about where the
10 incentives are. And part of the Energy
11 Commission's recommendations on procurement is to
12 try to build some common ground for incentives.

13 But the other point on being indifferent
14 to procurement. I guess I have heard from the
15 utilities in the past, and I didn't see anything
16 on it this time, some preference or some
17 reluctance to take on too much in the way of
18 purchase power because of the debt equivalency
19 issue and there's a difficulty being too much
20 obligated on purchased power. Is that an issue?
21 Is that something that you have -- do you have a
22 certain amount of procured power compared to
23 utility-owned power that is your preference?

24 MR. SILSBEE: Certainly debt
25 equivalence, credit and collateral are all issues.

1 We don't have a particular target with regard to
2 some percentage of UOG. But, you know, clearly
3 additional rate-base investment helps enable more
4 support for IPP because of the leaning of the IPP
5 projects on our own financials.

6 Let me take on a couple of responses to
7 points you have made.

8 ASSOCIATE MEMBER PFANNENSTIEL: Please.

9 MR. SILSBEE: The CPUC did look into the
10 issue of procurement incentives a number of years
11 ago. Our very strong concern with procurement
12 incentives is that they create a misalignment
13 between the interests of our customers and our
14 financial interests as a company. I think our
15 most important consideration here is we want to be
16 able to freely act on behalf of our customers
17 without having to worry about any dissonance in
18 our decision-making. For that reason we can't --

19 PRESIDING MEMBER BYRON: So not to worry
20 about what? I'm sorry, you trailed off.

21 MR. SILSBEE: Any dissonance between the
22 goals of doing what's best for our customers and
23 what might be the financial ramifications to our
24 shareholders. We like to see a nice, tight
25 alignment. And we believe that not having

1 procurement incentives is the better way to go on
2 that.

3 When I said no skin in the game I was
4 really talking about the narrow financial.

5 ASSOCIATE MEMBER PFANNENSTIEL: You're
6 talking about the shareholder interest. The
7 shareholders have no skin in the game.

8 MR. SILSBEE: Yes. I think very clearly
9 electricity is an essential commodity for the
10 state. I think very clearly the economic well-
11 being of customers in our service area is
12 intrinsically tied to the financial health of our
13 company and an ability to support the
14 infrastructure of the state and vice versa. And
15 so we do care a lot about our customers. I don't
16 want to suggest by saying there is no skin in the
17 game that we don't.

18 ASSOCIATE MEMBER PFANNENSTIEL: I
19 understand that and I am not going to argue the
20 question of procurement incentives. But I do
21 think it raises fundamentally the question that we
22 have put on the table. Is the current procurement
23 process really balanced for customers in the way
24 that takes into account the many issues that we
25 have raised. I think that is still an open

1 question. I am not the least bit convinced the
2 current process does everything that we as public
3 policy people would want to have done, that's all.

4 PRESIDING MEMBER BYRON: Mr. Tutt.

5 ADVISOR TUTT: Carl, with regard to
6 feed-in tariffs. It is my understanding that in
7 the most recent RPS procurement plan Edison has
8 recommended expanding feed-in tariffs to all
9 renewables under 20 megawatts. Is that true and
10 can you explain a little bit about your thoughts
11 there.

12 MR. SILSBEE: I believe it is true but
13 unfortunately I don't have the details, which is
14 why I didn't raise this point earlier in response
15 to Commissioner Byron's questions on the topic. I
16 can provide some additional details to you if
17 you'd like but I'll have to go back to the people
18 in our renewable procurement area.

19 ADVISOR TUTT: Well, or perhaps in your
20 written comments then.

21 PRESIDING MEMBER BYRON: If that is the
22 case you can certainly preempt any one of our
23 recommendations at the PUC with your proposal, I
24 think that's a great idea.

25 MR. SILSBEE: Good.

1 PRESIDING MEMBER BYRON: Mr. Silsbee,
2 thank you very much for your comments.

3 MR. SILSBEE: Thank you.

4 PRESIDING MEMBER BYRON: The next card I
5 have is from Mr. Edwin Sawyer or Sayre, ACRE.

6 MR. SAYRE: Thank you. I am chairman of
7 ACRE, Advocates for Clean Responsible Energy. We
8 are a group of about 30 engineers, mostly retired.
9 A few are still working. And scientists who have
10 over 30 years of experience in energy systems.

11 The California Energy Commission
12 recognizes that renewables, primarily solar and
13 wind, are clean sources of energy. You cannot
14 ignore the physical fact that since they both have
15 a 20 percent capacity factor it will be impossible
16 to meet the future goals of California without
17 substantial amounts of safe, dependable and
18 economical energy storage.

19 Pumped water storage is the only safe,
20 dependable and economical storage source that has
21 been proven. If California is to meet its goal
22 for wind and solar power by 2020 it will require
23 8,310 megawatts of pumped storage. This will mean
24 four storage sites the size of Hoover Dam with two
25 large reservoirs each. If we need to meet the

1 goal of 2030 it will require 19,300 megawatts of
2 storage. This would require ten sites the size of
3 Hoover Dam. Where can we put these sites in
4 California?

5 Since solar and wind renewables are a
6 clean source of energy the California Energy
7 Commission must provide support for development of
8 efficient, safe and reliable energy storage
9 because meeting our goals for the use of
10 renewables depends completely on it.

11 Even though the majority of California
12 citizens are in favor of nuclear power, because of
13 pressure from anti-nuclear lobbyists the
14 Legislature has been against nuclear power. This
15 government anti-nuclear policy has had an adverse
16 effect on the assessment of California's operating
17 nuclear plants.

18 This is included in the 2008 Integrated
19 Energy Policy Report. It does not include that
20 over the last 50 years the nuclear power plants
21 have demonstrated being the safest, most
22 economical and most reliable and environmentally
23 clean power source in the world.

24 The report stated that Diablo Canyon and
25 San Onofre Nuclear Generating Station could have a

1 major disruption because of an earthquake or plant
2 aging. While this is a possibility for any energy
3 source in California, based on the world
4 experience the probability of this happening to
5 Diablo Canyon and San Onofre is extremely low.

6 Around the world the cause of shutdown
7 of a nuclear plant is not a problem of the basic
8 reactor system. It is usually caused by a problem
9 with the electrical system, such as a transformer
10 fire, turbine problems, heat exchangers, steam
11 generator cooling systems and so forth. The
12 earthquakes in Japan have proven that basic PWR
13 and BWR reactor system design can survive a 7-
14 level earthquake with no significant harm.

15 The majority of nuclear plants in the US
16 have been upgraded and extending their life for
17 another 20 years. California should take
18 advantage of this experience and do the same
19 thing. There is a huge economic advantage for the
20 utility users and the utilities.

21 Fear of stored nuclear fuel is cause for
22 the lack of knowledge of what it is. It is not
23 nearly as dangerous as some people believe. It is
24 a solid, hard-rock material with most isotopes
25 internal, the uranium oxide rock encased in

1 zirconium tubes.

2 When the used fuel comes out of the
3 reactor, because of the high decay reading, it
4 must have significant cooling with water. Within
5 a few months the cooling requirements have dropped
6 significantly. In the event cooling water in a
7 fuel pool leaks out the fuel can be sufficiently
8 cooled with a fire hose.

9 There is only a very small amount of
10 isotopes in the fuel that can be released and
11 taken up by the human body. And most of them do
12 no harm except for Iodine 129 which goes to the
13 thyroid gland. This can be taken care of if the
14 instance happens.

15 Used nuclear fuel is not a good target
16 for terrorists. Nuclear fission used in a modern
17 nuclear plant where the used fuel is reprocessed
18 and recycled and the fission product separated and
19 refined for commercial use and the non-usable
20 isotopes transmuted for short storage and then
21 returned to the environment, is the most safe,
22 economical and environmentally friendly source of
23 energy that can be used by California for the
24 future. The California Energy Commission must
25 give it full consideration for the future economy

1 of California. Thank you.

2 PRESIDING MEMBER BYRON: Thank you,
3 thank you for your comments. If you would like to
4 help provide some responses to a few of those
5 issues that you have raised, if I may.

6 MR. SAYRE: All right.

7 PRESIDING MEMBER BYRON: First of all I
8 am sure, Mr. Sayre, that you are familiar with the
9 law that has been on the books for a number of
10 years here in California.

11 MR. SAYRE: Yes.

12 PRESIDING MEMBER BYRON: And also you
13 may be aware that there was some effort. Assembly
14 Member DeVore last year attempted to introduce
15 some legislation to revise that law. So you are
16 aware of that also.

17 MR. SAYRE: Yes.

18 PRESIDING MEMBER BYRON: Apparently it
19 did not make it out of committee. I was at a
20 meeting with Assembly Member DeVore a couple of
21 weeks ago. The first that I had met him and heard
22 him speak and I was quite impressed. He has got
23 some very good arguments that he has put forward
24 as well to his colleagues.

25 But I believe, based upon my tenure here

1 at the Commission, that change in law will be
2 necessary before this Commission will be able to
3 make any kind of finding or take any kind of
4 action.

5 MR. SAYRE: The Warren-Alquist law is
6 holding you up from doing anything.

7 PRESIDING MEMBER BYRON: No, it is not
8 the Warren-Alquist law. I am not familiar and I
9 am not sure that there is anyone here that I can
10 turn to and ask specifically but it is not the
11 Warren-Alquist law. There is another law that has
12 been on the books, I believe, for over 30 years,
13 however. So I know that there is some movement in
14 the Legislature although, like I said, I don't
15 think it is has found its way out of committee.

16 The other, as you may well be aware,
17 that there is a group that seems to be getting
18 more sophisticated that we have met with more than
19 a couple of times, myself and other Commissioners,
20 from Fresno that is intent upon building a nuclear
21 power plant.

22 All I can tell you is that we have met
23 with them and we have tried to answer their
24 questions from a legal point of view in terms of
25 the law that is currently on the books. And I

1 think it is fair to say that they will persist. I
2 don't think they are going to give up any time
3 soon. So there are some, there are some things
4 that are taking place.

5 But this Commission is constrained in
6 terms of what we can do. The reason that is being
7 addressed in this IEPR is Assembly Member
8 Blakeslee did pass a bill, I believe it is AB
9 1632, that requires us to look at the impact on
10 reliability and safety for the unexpected shutdown
11 of large power plants, which happened to be the
12 two sets of large nuclear plants. So that's the
13 nature of the report that is involved in this
14 particular IEPR cycle.

15 And I think it is a really good
16 question. I think the Assembly Member is very
17 thoughtful in what he is attempting to do there.
18 There's a number of reasons that those plants'
19 units could shut down. You made reference, I
20 believe, to the Kashiwazaki-Kariwa power plant
21 that experienced an earthquake last year in Japan.
22 The largest single-site nuclear generator in the
23 world. I believe it is over 8200 megawatts of
24 power generation.

25 And the result of that earthquake, no

1 one was injured, no one was killed, no release of
2 radiation. But that unit, all five units have not
3 been operating for the last 16 months as a result
4 -- I'm sorry, 15 or 14 months as a result of that
5 earthquake. So that was --

6 MR. SAYRE: Yes, but none of them were
7 damaged. The nuclear system was not damaged one
8 bit in any one of those plants.

9 PRESIDING MEMBER BYRON: Correct,
10 correct. Well we don't know that for sure. We
11 know there's a great deal of inspections that have
12 been going on.

13 MR. SAYRE: Well most of us who were in
14 the nuclear area know that that's the fact so far.
15 We have all this prevention.

16 PRESIDING MEMBER BYRON: Right. So I
17 think it is a legitimate concern that the Assembly
18 Member has raised in passing his legislation and
19 that is really what we are looking at. Is the
20 impact that that would have if for whatever reason
21 those units were shut down. If there was a
22 licensing incident that took place in Wisconsin,
23 for instance. We know that could also potentially
24 affect those units as well. So that is the extent
25 of what we are looking at, this particular issue

1 in this IEPR.

2 MR. SAYRE: I think that's right. I
3 know you are looking at all these things. I think
4 though that the attitude of the CEC has been
5 negative and there has not been any push to look
6 further and look more in the future of using
7 nuclear power in California and taking advantage
8 of the fact that most of the states in the United
9 States now are in favor and are pushing nuclear
10 power for the future.

11 PRESIDING MEMBER BYRON: That is a fair
12 accusation. I can tell you, however, this
13 Commission last summer held two days of workshops
14 on this subject. And we had the Yucca Mountain
15 folks here and the Department of Energy folks and
16 we quizzed them extensively.

17 I believe that this is not just an issue
18 that needs to be discussed about the future of
19 nuclear power. We have four operating reactors in
20 this state. And the federal government has a
21 responsibility to take spent fuel and they are not
22 fulfilling that responsibility. So we are
23 concerned about it in that regard as well.

24 MR. SAYRE: Well the other thing I
25 pointed out in my comments is that California

1 should be also pushing reprocessing because that
2 is going to be very critical to our future. And
3 also we need fast reactors to really make it
4 economical.

5 The used fuel in California right now is
6 worth over \$3 billion. The economic value of it.
7 Every ton of used fuel is worth over \$20 million.
8 The fission products used fuels, most people think
9 they are very dangerous. Ninety-five percent of
10 them have economic value. Only a very small
11 percentage is not usable. That has to be taken
12 care of as waste.

13 PRESIDING MEMBER BYRON: Well if you
14 have a buyer for that fuel I'm sure that Southern
15 California Edison and PG&E would love to get rid
16 of it.

17 MR. SAYRE: I guarantee you there will
18 be a buyer. If they reprocess their fuel and
19 separate those out and purify them for commercial
20 use there's a buyer for every one of them.

21 PRESIDING MEMBER BYRON: Sir, any other
22 questions? Sir, thank you for your comments,
23 thank you for coming.

24 I have another -- My next card is also
25 from, I'm sorry, Advanced Clean and Responsible

1 Energy, Mr. Ray Williams.

2 MR. WILLIAMS: Yes, Robert Williams.

3 PRESIDING MEMBER BYRON: I'm sorry. I
4 should know that.

5 MR. WILLIAMS: I am very pleased to be
6 here. I have a one-page handout for members of
7 the Commission up here.

8 PRESIDING MEMBER BYRON: Actually if you
9 will save your comments until you are back at the
10 microphone. We will take your handout.

11 MR. WILLIAMS: Okay. And here's a set
12 of handouts to pass around at the head table here.

13 I am Robert Williams. I have a degree
14 in chemical engineering from Stanford, an MBA from
15 Santa Clara, three years of training in the GE
16 Advanced Engineering Training Program. I worked
17 for 30 years in the electric power industry. Ten
18 years at General Electric where I designed
19 reactors, 20 years at Electric Power Research,
20 where I was responsible for fuel cycle programs,
21 including the waste disposal.

22 I guess now that I am retired I have the
23 luxury of preaching to committees and things. And
24 I think the first preachment I would make is not
25 on my paper here. But it is very important and

1 very difficult to tell truth to power. You have
2 that luxury because you are a Commission with
3 access to the Governor and the Legislature. So
4 here are some of the things that I would alert you
5 to.

6 I think your forecast may be off. I
7 haven't followed all of the machinations of the
8 IEPR but I don't believe you are making an
9 adequate allowance for the electric power
10 requirements for electric power that is plug-in
11 and hybrid electric vehicles.

12 My recollection, I don't have all the
13 data I used to have access to, but the
14 transportation sector alone has about as many
15 quads of energy burned as the electric power
16 industry. So if you just electrified
17 transportation you would double the requirements
18 for electric power. So I think you are not making
19 enough allowance for a large growth scenario in
20 the electric power industry.

21 Secondly I would say some type of
22 common-sense confirmation of energy cost is
23 needed. Let me relate to you a personal
24 experience. I am a retiree. I just have sold my
25 house and moved to a retirement community in the

1 midst of the biggest financial crisis we have seen
2 in the United States.

3 I am very sensitive to the idea of
4 subprime mortgages. Subprime mortgages were a
5 societal mandate. Everybody thought they were a
6 wonderful idea but a few people didn't take into
7 account that extra regulation might be required.
8 And so truth didn't get told to power until it was
9 very, very late.

10 Now I think we are fooling around with
11 some subprime technologies. If we don't get
12 everything just right. My colleague, Ed Sayre,
13 has pointed out the vulnerability of these
14 advanced technologies to the need for reliable
15 storage.

16 There is a second element in that as
17 well which is the need to assign the
18 responsibility to provide reserve power margin.
19 If you don't have adequate power on the grid, you
20 don't have enough spinning reserve, you can lose
21 the whole grid. You don't just lose a fraction of
22 it, the whole thing can go unstable. And unless
23 there is a provision for a lot of load shedding
24 and blackouts the whole thing can black out. I
25 haven't seen anything in this report that deals

1 adequately with a requirement to provide reserve
2 margin.

3 The other thing I am skeptical about is
4 the economics. A great deal of my career was on
5 economics. And when you start putting together
6 things that add avoided costs and credits for
7 this, that and the other thing you need a touch-
8 point of sanity. And the touch-point of sanity
9 would be to start making annual comparisons of the
10 cost of power provided in different grids in
11 different parts of the United States and even in
12 different parts of the world.

13 I would be far more reassured if I -- I
14 have time of day metering in California. And I am
15 always a little bit taken aback when the cost of
16 my peak time of day is around 32 cents per
17 kilowatt hour for my electricity. That's way up
18 there in terms of affordability. If we made
19 gasoline -- If we powered automobiles with that
20 price of electricity we would be talking about \$10
21 or \$15 per gallon gasoline.

22 We are very vulnerable to taking small
23 prototypes which get subsidized with basically
24 built-in taxes in the electric energy supply
25 system and then discovering that they are way too

1 expensive when they start to be a significant part
2 of the grid.

3 So I am quite concerned that many of
4 these technologies are a subprime technology that
5 is going to lead us down the primrose path,
6 despite the fact that it is a very valid societal
7 goal imposed by the Legislature. We would all
8 love to keep the world safe from greenhouse gases.
9 But we better be realistic about how we do it or
10 we will have a technology crisis on our hands
11 similar to this mortgage crisis.

12 So having spent my career in nuclear
13 energy you can see the direction I'm headed. I
14 think if the transportation sector is taken into
15 account particularly, more consideration of
16 nuclear power is required. I heard your comments
17 to Mr. Sayre. We have both been up here
18 testifying on the need to amend the Warren-Alquist
19 Act. And I realize that that hasn't been done and
20 so you are under some constraints.

21 But I believe your main constraint is to
22 tell truth to power. If there are some
23 vulnerabilities in what you are being asked to
24 pursue I don't think you should your head down and
25 doggedly pursue them. You should say, gentlemen,

1 we have done this IEPR report. We have got all
2 these nomenclatures lined up. But we are talking
3 about producing gasoline at \$10 a gallon
4 effectively. We are afraid that will have some
5 severe energy impacts. We are talking about high-
6 priced systems with very great vulnerability to
7 outages and we are not sure who is going to be
8 responsible for the spinning reserve.

9 You can see my more carefully chosen
10 remarks in my written handout. Thank you.

11 PRESIDING MEMBER BYRON: Thank you.
12 Thank you for coming and providing these to the
13 Committee.

14 Mr. Bob Burt. And you abbreviated all
15 three words in your association. Would you please
16 expand them.

17 MR. BURT: I represent the Insulation
18 Contractors Association. And I rise to point out
19 that there is a hole in California's energy
20 efficiency process. At present virtually all of
21 the measures which we work on in energy efficiency
22 are either devised by the utilities which manage
23 the programs or with some input from the
24 regulatory staff.

25 I believe that it defies common sense to

1 assume that such a small group of people, even if
2 they all have active imaginations, is enough to
3 give us a thorough panoply of good measures.

4 And to that end I suggest that there be
5 some set of regular, a regular process. I would
6 assume noticed hearings, which possibly by the
7 PUC, which would consider proposed new energy
8 efficiency measures, reflect on those proposals,
9 and then consider to what extent they should
10 become part of our regular active proposal
11 actions.

12 And with that I complete my prepared
13 remarks. I can't resist while I am standing here
14 noting that there's not much recognition, anywhere
15 apparently, of the tremendous scale of
16 California's energy business. And blithe comments
17 about replacing 30-odd percent of it or some other
18 number within some short time have to be
19 recognized as just that.

20 I would go back further and say I
21 endured for some years of my life being an active
22 lobbyist and that led me to two conclusions about
23 the subject of law. Number one, it doesn't very
24 often make sense. And number two, it seems to be
25 fairly easy to change if, in fact, you have a

1 reasonable number of campaign contributions.

2 That doesn't necessarily help this
3 Commission. But at the same time there is in the
4 Legislature some considerable respect for those
5 agencies which are stuck with the job of dealing
6 with energy. So I will kind of support one of the
7 earlier comments about telling truth to power.

8 With that I withdraw and ask if there
9 are any questions about my initial proposal?

10 PRESIDING MEMBER BYRON: There's a
11 little cynicism in your comments about
12 legislation. Can you offer us any hopeful words,
13 Mr. Burt? I mean, let me ask you a specific
14 question with regard to your lobbying skills.
15 Have you been able to convince Mrs. Burt on using
16 compact fluorescent lights yet?

17 (Laughter)

18 MR. BURT: Well, there is another
19 aphorism which doesn't really affect here. And
20 that is that any man who claims he is the boss at
21 home will lie about other things.

22 (Laughter)

23 MR. BURT: So I have not had much skill
24 at convincing Mrs. Burt of things that she really
25 wished to disagree. But I don't believe that that

1 is apropos to the business of lobbying. Lobbying
2 is entirely a matter of, one, speaking
3 persuasively when you get the chance. But two,
4 having an audience willing to give consideration
5 to what you say.

6 And the second point is the reason that
7 I say that I observe that the Legislature does
8 seem to have a fair amount of respect for the
9 agencies that it sticks with the job of conducting
10 our energy process. That observation of mine is
11 not based on a lot of happy results, it is simply
12 based on a few times when it seemed to work. I
13 can't go much further than that, sir.

14 PRESIDING MEMBER BYRON: I would like to
15 only add one thing, and that is, of course, the
16 industry that you represent is extremely key to
17 what we are recommending first and that is, energy
18 efficiency. Beyond trying to address all of our
19 concerns by building additional generation.

20 This Commission and the Public Utilities
21 Commission have certainly pushed, we believe,
22 energy efficiency to the limits. You may be aware
23 in our Joint Proposed Decision on trying to reduce
24 greenhouse gases we are going to press for 100
25 percent economically efficient, economically

1 achievable energy efficiency.

2 MR. BURT: The reason I make this --

3 PRESIDING MEMBER BYRON: And insulation
4 is a big part of that.

5 MR. BURT: The reason I made this
6 recommendation is that I have taken part in
7 various workshops in the past and made suggestions
8 on new and different energy efficiency measures.
9 I have never seen subsequently any sign that those
10 suggestions were even given serious consideration.
11 So it seems to me that if there is a formal
12 process it is much more likely that serious
13 consideration would occur.

14 PRESIDING MEMBER BYRON: Well, I don't
15 know how to respond to that except to say thank
16 you. Is there anyone on our panel that would like
17 to speak to what Mr. Burt just said? Not
18 required. Mr. Burt, thank you very much for your
19 comments. I'm sorry, Mike, did you want to say
20 something?

21 MR. GRAVELY: Yes. This is Mike Gravelly
22 from the Commission's energy research and
23 development area. And I do think there are some
24 programs in place. You mentioned specifically
25 efficiency and I do think -- In research and

1 development we do and the efforts we try and get
2 to.

3 And we do have public hearings and a
4 public process and also other areas to get
5 different technologies through the validation
6 phase, then to the research and development
7 programs and then into the Commission -- the
8 utility incentive programs. And so if you have
9 suggestions I certainly would offer my assistance.

10 PRESIDING MEMBER BYRON: Please speak
11 into the microphone, Mr. Gravely.

12 MR. GRAVELY: Okay. I would certainly
13 say that we have a very aggressive research and
14 development program to bring new energy efficiency
15 technologies to the utilities and would welcome
16 your recommendations or comments to our staff.
17 I'll give you my card and feel free to contact me.

18 MR. BURT: I am well aware of that
19 process. The particular measure I am most
20 interested in does not require the slightest
21 amount of research and development, it simply
22 requires some effort to implement. Thank you.

23 PRESIDING MEMBER BYRON: Thank you,
24 Mr. Burt. The next card I have is Noah Long from
25 NRDC.

1 MR. LONG: Thank you very much,
2 Commissioner Byron and all the rest of the
3 Commissioners here who have worked so hard on this
4 report. And also thank you to the staff, I know
5 it has been a long time coming. I just would like
6 to say a couple of things as introductory here.

7 First of all, I will be reading comments
8 on a number of chapters. The comments were
9 prepared by staff across NRDC so if you have
10 questions on those comments I might be able to
11 answer them but I might just have to take them
12 back to other staff members and we can either
13 respond directly or put them in our, the responses
14 in our written comments.

15 ASSOCIATE MEMBER PFANNENSTIEL:
16 Mr. Long, if you have written material maybe it
17 would be more efficient then if you put them in
18 just in your written comments. Just comment today
19 on things that we could discuss.

20 MR. LONG: Sure. If you don't mind, I
21 would like to just briefly mention a number of
22 areas across the, across the chapters. I have
23 been asked by my colleagues to make sure that they
24 are brought up here. Just to make sure that they
25 are put into the record and that we have time to

1 discuss them in the days coming before the final
2 report.

3 So I'll speak first about the renewable
4 energy issue in Chapter 1. And with regard to
5 transmission, NRDC really commends the Commission
6 and the staff for the significant progress and
7 continued hard work on overcoming transmission
8 issues. The Legislature -- sorry.

9 As you know the legitimate concerns
10 about siting transmission projects. There's a
11 number of real obstacles with regard to
12 transmission in achieving our renewable energy
13 goals. And we appreciate the Commission's
14 leadership in the RETI process and we look forward
15 to continuing to work with the Commission in that
16 process.

17 Generally speaking we support the
18 identified recommendations for transmission
19 barriers as noted in Chapter 1. However, while we
20 have made significant strides toward addressing
21 these barriers, a lot of work remains to be done.

22 We agree that there are opportunities
23 for joint transmission projects, which may occur
24 as a result of planned collaboration efforts
25 currently underway. However, NRDC recommends that

1 the Commission actively work towards resolving
2 identified issues for joint transmission projects
3 to avoid multiple lines in the same area and
4 direction, which is noted, to create unnecessary
5 environmental burden, impact, controversy and
6 delays.

7 In addition, mitigating the impacts of
8 large scale renewable projects and new
9 transmission lines in the California desert will
10 be extremely difficult. Therefore we urge the
11 Commission to initiate planning for comprehensive
12 mitigation strategies as early as possible.

13 We fully support the proposed funding to
14 help local governments develop renewable energy
15 elements for general plans. This effort is an
16 important way to educate the public on the role of
17 new transmission and achieving our aggressive,
18 renewable goals. In addition to the proposed
19 funding NRDC urges the Commission to also offer
20 assistance and expertise in that planning process
21 to produce informed and effective decisions.

22 Lastly with regard to the transmission
23 effort. As everyone knows there's been a great
24 deal of controversy and continues to be
25 controversy with regard to transmission. And

1 while we obviously support the effort to pursue
2 further transmission we think that the side-by-
3 side effort to work on continued distribution, it
4 will really aid that effort. To be sure that we
5 are pursuing all possible approaches to renewable
6 energy and that those lines that are built are in
7 fact necessary to meet the renewable energy goals
8 as stated by the Governor and by the Legislature.

9 Moving on to Chapter 2 with regard to
10 demand forecasting. We appreciate the clear and
11 thorough discussion of demand forecasting
12 challenges in this chapter and commend the
13 Commission and your staff for the active role in
14 bringing together key players and identifying
15 potential solutions and time lines for addressing
16 the complicated issue of embedded energy
17 efficiency in the demand forecast.

18 We look forward to our continued
19 participation in this effort and we have just a
20 few comments in this regard. We recognize and
21 appreciate the challenge of treating energy
22 efficiency upgrades as 100 percent reliable since
23 some programs are subject to changing customer
24 behavior, as noted by the staff. However, the
25 assumptions that determine estimated energy

1 savings rely on EM&V studies that are based on
2 actual customer behavior.

3 And I will just add that any demand
4 forecast -- It is our position that any demand
5 forecast depends on possibly changeable customer
6 behavior. And so energy savings forecasts really
7 should be no different in that regard.

8 We suggest that the staff make the
9 distinction that while energy efficiency is
10 subject to different variables than power plants,
11 there also exist numerous methods to account for
12 the behavioral change and to further ensure that
13 estimated savings for energy efficiency programs
14 are in fact realized and can be relied upon.

15 We appreciate the staff description that
16 energy forecasters may need to discount the
17 savings from energy efficiency programs due to a
18 spill-over and double counting. But we request a
19 clarification as to whether and how the forecast
20 discounts savings as part of incorporating energy
21 efficiency in the demand forecast. We believe
22 that further discussion is merited in the final
23 report.

24 We appreciate the efforts of the staff
25 to identify common assumptions for planners and

1 policy-makers to use in the short term while the
2 Energy Commission pursues additional actions, as
3 laid out in the IEPR Update to modify the demand
4 forecast during the 2009 IEPR cycle and beyond.

5 We agree with the staff that instead of
6 altering the definition of uncommitted the Energy
7 Commission should run models with a second
8 scenario to consider and identify the impacts of
9 uncommitted programs.

10 We also reiterate the importance of
11 understanding the amount of embedded natural gas
12 efficiency in the demand forecast and urge the
13 Commission to include more explicit discussion of
14 the natural gas embedded efficiency issue within
15 the IEPR Update.

16 Lastly on this point. We support the
17 steps laid out in the 2008 Update for addressing
18 this issue and strongly recommend that CARB also
19 be an active participant throughout this process.
20 We really appreciate the Energy Commission's
21 leadership and we hope that CARB will continue to
22 be actively more and more involved.

23 With regard to AB 2021. Again we
24 publicly commend the effort of the Commission but
25 also that of the publicly-owned utilities towards

1 achieving their goals. And encouraging continued
2 collaboration to ensure that the POUs achieve all
3 cost-effective energy efficiency.

4 We have also noticed a growing and
5 impressive willingness on the part of the staff to
6 collaborate in moving forward on this effort. And
7 we understand that the initial potential studies
8 for the POUs were not necessarily tailored to each
9 utility and therefore may warrant some modest
10 adjustments.

11 And while we agree with the staff that
12 the POUs need to continue to be proactive in
13 meeting the adopted goals, we also recommend that
14 the staff include in the 2008 Update a specific
15 reference to the fact that energy efficiency is
16 required as a procurement resource. And not only
17 as a procurement resource but as the highest
18 priority procurement resource in the purchase --
19 along with the purchase and construction of
20 conventional sources of energy.

21 This requirement is not only in the
22 stated policy of the Energy Commission as noted in
23 the IEPR Update, but it is mandated by these laws
24 and should be reflected in the IEPR. Furthermore,
25 by pursuing energy efficiency as a resource the

1 POU's will be able to achieve even greater energy
2 efficiency savings that will not only help the
3 state meet the aggressive AB 32 goals, we will
4 save money for customers and reduce utility bills.

5 As noted by the staff, the public goods
6 charge allocations are insufficient to achieve the
7 savings needed to meet all cost-effective energy
8 efficiency. And we urge the Commission to include
9 recommendations that the Energy Commission work
10 with the POU's to identify procurement resources to
11 supplement the public goods charge funding and
12 provide additional guidance to assure that the
13 POU's identify all sources of funding for their
14 energy efficiency programs in the next SB 1037
15 report.

16 We recognize that time constraints led
17 to more generalized inputs for the last energy
18 efficiency potential. Therefore, not addressing
19 the unique characteristics of each POU, as I said
20 before. We therefore support staff's
21 recommendation that they continue working with the
22 POU's to understand the process used by the POU's to
23 estimate their remaining economic potential and to
24 continue to set targets.

25 NRDC recommends that the Energy

1 Commission provide additional specific guidance to
2 the POU's to ensure that the next round of
3 potential studies are more rigorous and provide
4 the necessary detailed information that will
5 enable the transparent review by the Energy
6 Commission and the stated parties.

7 With regard to Chapter 3 I just have one
8 comment. That we are supportive of the staff and
9 Commission decision to use the LTPP process for
10 accounting for an array of various natural gas
11 costs rather than using a social discount rate.

12 And moving on to Chapter 6. We just
13 would like to have a few comments on this point.

14 PRESIDING MEMBER BYRON: I noticed you
15 skipped over the nuclear vulnerability assessment.
16 No comments on that?

17 MR. LONG: No comments on that at this
18 time, Commissioner Byron.

19 PRESIDING MEMBER BYRON: All right.

20 MR. LONG: So yeah, just moving on to
21 Chapter 6 if I may. We commend the Commission for
22 the advancements towards meeting the previous
23 energy efficiency recommendations and we agree
24 that the Energy Commission has made substantial
25 progress in providing the POU's with clear

1 reporting requirements.

2 However, we reiterate the need to
3 provide additional guidance to the POU's to include
4 detailed information on how they are meeting the
5 law by using energy efficiency as a procurement
6 resource pursuant to AB 2021. As that law states,
7 the POU's are required to report on their
8 investments in energy efficiency.

9 And while they have made great strides
10 to provide information such as expenditures and
11 savings, it is not clear if these expenditures are
12 primarily public benefits charges funds or
13 procurement funds. Unless we have a clear
14 breakdown of the different sources of investment
15 fundings for energy efficiency programs we will
16 continue to be unclear whether the POU's are
17 meeting the requirements of SB 1037 and 2021 to
18 use energy efficiency as a procurement resource.

19 With regard to natural gas we appreciate
20 the efforts of the Commission to diversify the
21 natural gas supply sources by pursuing biomass.
22 However, we also believe that there should be an
23 update on the progress toward examining the
24 feasibility of increasing the natural gas
25 production from biogas. Which was identified as a

1 potential renewable source in the 2007 IEPR report
2 and we would like to see more information on that
3 in this report.

4 We recommend that the IEPR Update report
5 on the progress towards the recommendation that
6 the Commission and the PUC adopt a loading order
7 for natural gas resources similar to the one used
8 and so well-loved by NRDC in the electric sector.

9 With regard to transportation. We
10 commend the Energy Commission efforts to identify
11 sustainability goals for alternative fuel
12 production.

13 However, in addition to addressing the
14 key issue of land use NRDC recommends that the
15 Energy Commission also develop sustainability
16 goals to ensure the alternative fuel production
17 minimizes other unintended consequences, including
18 food price impacts, the effects of increased water
19 and fertilizer use, while also encouraging best
20 practices to ensure that biofuel production is
21 implemented as a sustainable manner -- in as
22 sustainable a manner as possible.

23 We recommend that the Energy Commission
24 at minimum meet or exceed the land use safeguards
25 that will be required under the federal renewable

1 fuel standard.

2 We suggest that the Energy Commission
3 modify the current recommendation to establish a
4 non-petroleum diesel fuel standard that is more
5 consistent with the level of minimum non-petroleum
6 content identified in the low carbon fuel standard
7 expected to be implemented in 2009. And we
8 support the efforts to regularly update the full
9 fuel cycle analysis. And we encourage the staff
10 to coordinate with the EPA to ensure consistency
11 with the federal methodology currently under
12 development under the renewable fuel standard.

13 With regard to land use. We support the
14 efforts to require local governments to create
15 climate action plans. However, since land use is
16 most often a regional issue, NRDC recommends that
17 rather than addressing individual local land use
18 in its GHG reduction plan the Energy Commission
19 should urge localities to pledge to follow the
20 sustainability community strategy due to be
21 developed under the recently passed SB 375. As
22 you may well be aware, this strategy which
23 establishes regional frameworks to minimize
24 greenhouse gas emissions from land use will
25 currently be optional under the bill.

1 While we support efforts to increase
2 energy elements in local government plans we
3 understand the capacity constraints of many local
4 governments. And as noted in the transmission
5 section, we recommend that the Energy Commission
6 also offer technical assistance to enable local
7 governments to comply with this requirement.

8 And my last comment here will be on
9 water energy use. We appreciate the assessment of
10 progress towards reaching the once-through cooling
11 recommendations and urge the Commission to also
12 include a progress on additional water
13 recommendations in previous IEPRs.

14 In particular we urge the Commission to
15 include progress on the Energy Commission's
16 efforts to fulfill the requirements of AB 662,
17 Ruskin, and AB 1560, Huffman, by initiating a
18 standard-setting proceeding and to define a water
19 energy research development and demonstration
20 strategic plan and road map as noted in the 2007
21 IEPR.

22 I appreciate you bearing with me while I
23 got through those comments.

24 PRESIDING MEMBER BYRON: And I suspect
25 that's not all of them.

1 MR. LONG: That's all of them for today.

2 PRESIDING MEMBER BYRON: All right. You
3 know, it's fair to say NRDC provides very
4 thoughtful input. I don't even think we would
5 need any more legislation if we were to make sure
6 we followed all of NRDC's recommendations.
7 There's a lot in there. I picked up on a couple
8 I'd like to ask you about.

9 MR. LONG: Sure.

10 PRESIDING MEMBER BYRON: And perhaps my
11 fellow Commissioners would as well.

12 You made a statement, Mr. Long, about
13 the public goods charge is insufficient to meet
14 the high energy efficiency goals that we have put
15 forward, and I agree. There is an enormous amount
16 of money that is spent on energy efficiency and
17 clearly a big emphasis for NRDC.

18 I was wondering -- And so I am now
19 jumping a little bit to transmission and your
20 endorsement with regard to transmission. In fact
21 I should point out we are very thankful to have
22 Johanna Wald co-chairing the environmental working
23 group on the RETI process. Her involvement has
24 been extremely helpful. And I think that is the
25 key to the RETI process is the involvement in the

1 environmental community.

2 MR. LONG: I'll certainly pass that
3 along to her.

4 PRESIDING MEMBER BYRON: Please do. So
5 bringing those two together we stuck a
6 recommendation in here about -- I'm sorry, I need
7 to say one more precursor before asking this. You
8 know, this industry spends a paltry amount on
9 research and development. In fact someone told me
10 that the electric power industry is ranked right
11 behind the pet food industry in terms of
12 percentage of sales that we spend on research.
13 And we are not going to get there with this low
14 level of spending.

15 You are well aware of some recent
16 legislation that did not make it through the
17 Governor's Office to fund a climate research
18 institute at the Public Utilities Commission. And
19 in fact some of those funds were going to be taken
20 out of the Public Interest Energy Research Program
21 here at the Energy Commission. It's like moving
22 the chairs around on the deck of some famous ship.

23 We should be spending a lot more on
24 research. So we put a recommendation in here that
25 transmission research is really going to be

1 necessary in a significant way to look at how we
2 are going to address hitting these renewable
3 targets. Are you going to provide us any comments
4 or support with regard to that recommendation?

5 MR. LONG: At this time I'll refrain
6 from making comments in support of that but I'll
7 certainly take that back to Johanna who has been
8 our lead at NRDC on these issues, as you well
9 know, and see that she -- make sure she addresses
10 that issue in our final written comments.

11 PRESIDING MEMBER BYRON: We would
12 appreciate it because we can't do all these things
13 unless we have got the necessary research and
14 support, I believe, in order to -- and technology
15 in order to do them. To state it simply, you just
16 can't set the goal and say, get there.

17 So thanks for your very thoughtful
18 comments. I think NRDC gives us a lot of good
19 stuff. In fact I note you are becoming as big as
20 government. How many people are there now at the
21 NRDC? Can you tell us?

22 MR. LONG: Over 400 nationally. I hope
23 you don't say that in too many more forums because
24 I am just a one-year fellow here so I'm hoping
25 that I can get another position created for me

1 next year.

2 (Laughter)

3 PRESIDING MEMBER BYRON: Any questions
4 for Mr. Long?

5 ASSOCIATE MEMBER PFANNENSTIEL: Just
6 one. I was sort of struck by your recommendation
7 that we ask the publicly-owned utilities to divide
8 their funding, their energy efficiency funding
9 between procurement funding and public goods
10 charge funding as the investor-owned utilities do.
11 But I wasn't quite sure why. What is the point of
12 that?

13 MR. LONG: Because we would like to be
14 very clear that the public utilities are making
15 progress towards making energy efficiency their
16 top priority procurement resource and we would
17 like to see that there are procurement funds going
18 in that direction. We believe that there are
19 sufficient energy efficiency resources available.
20 And that the public goods charge alone won't cover
21 all those resources and we want to make sure that
22 we see --

23 ASSOCIATE MEMBER PFANNENSTIEL: That
24 there is some amount without knowing how much --

25 MR. LONG: That we can see some amount

1 from the procurement resource that it is, in fact,
2 meeting the 2021 goals of being the chief
3 procurement resource.

4 ASSOCIATE MEMBER PFANNENSTIEL: Thank
5 you.

6 MR. LONG: Thank you very much. I look
7 forward to the rest of the comments.

8 PRESIDING MEMBER BYRON: Thank you.

9 MR. LONG: I think someone left their
10 comments here.

11 PRESIDING MEMBER BYRON: All right. The
12 next speaker I have to provide public comment is
13 Mr. Don Rodes, SolarAire.

14 MR. RODES: Commissioner Byron and the
15 other Commissioners, good morning. My name is Don
16 Rodes. I am the founder and chief executive
17 officer of SolarAire. We are a developer of solar
18 thermal air conditioning systems for commercial
19 buildings. SolarAire and its affiliated company,
20 Bergquam Energy Systems, are responsible for four
21 projects demonstrating solar thermal air
22 conditioning here in California. Several of these
23 have been in continuous operation for over 20
24 years.

25 My testimony I hope addresses overcoming

1 some of the barriers to the increased development
2 of renewable energy sources, namely the lack of
3 distribution infrastructure, the variable and
4 intermittent nature of such resources, and the
5 costs of same.

6 Cooling, heating and hot water account
7 for the majority of energy used in buildings. And
8 while the Commission recognizes that solar water
9 heating can reduce the demand for electricity and
10 natural gas, we believe that it is overlooking the
11 potential for solar thermal to mitigate as well
12 the huge electricity demands for air conditioning.
13 Particularly in the hot afternoons of the summer
14 months in most regions of the state.

15 Solar thermal cooling uses hot water
16 from approximately 180 to 200 degrees fahrenheit
17 to drive either an absorption or an absorption
18 chiller, which produces chilled water for the air
19 conditioning system.

20 Solar thermal cooling and heating
21 systems are a distributed energy source. The cost
22 of operation can meet or beat the cost the
23 building owner would pay the utilities. The
24 technology is robust and proven. It is deployable
25 immediately. It is scalable to service most

1 commercial buildings and thus capable of
2 significantly addressing greenhouse gas emissions.

3 Solar thermal HVAC has several unique
4 advantages over other solar technologies. The
5 energy output from a solar array can be
6 economically stored as hot water. This allows the
7 system to continue to operate despite intermittent
8 cloud cover.

9 Secondly, the output of a solar thermal
10 system is elegantly in phase with the demand for
11 cooling. It reaches its peak capacity in mid-
12 afternoon. And that capacity actually increases
13 as the temperature of the hot water in the storage
14 tank increases. In some instances up to 40
15 percent.

16 And lastly, because of the storage
17 capability, these chillers can operate up into the
18 early evening, thus truly shaving off the peak
19 electricity load for the building.

20 Solar thermal air conditioning is not
21 expensive. Our analysis shows that systems
22 providing cooling, heating and hot water for
23 buildings ranging from 1,000 to 50,000 square feet
24 can achieve levelized costs of approximately 17
25 cents per kilowatt hour for displacing air

1 conditioning load at prices of 90 cents to around
2 \$1 per therm for supplying domestic hot water and
3 heating.

4 While awareness of the potential for
5 solar thermal heating and cooling in this country
6 is significantly lacking, this is not true in
7 Europe. The European Union is aggressively
8 investigating the viability of solar thermal
9 cooling. There are over 100 installations in
10 place today, even though all but the most southern
11 EU countries can really benefit from this
12 technology.

13 Unfortunately today, performance data on
14 the systems that we have installed in California,
15 and I am speaking of SolarAire and Bergquam Energy
16 Systems, has not been rigorously collected and
17 therefore some questions remain about the
18 viability of this technology. What types of
19 building end-uses and which climate zones using
20 what specific technologies are the most
21 appropriate.

22 So in light of these questions, and the
23 fact that newer and smaller chillers are now
24 available making residential application possible,
25 I wish to propose that the Commission fund a small

1 number of demonstration projects.

2 Now this could be done under the
3 auspices of the California Energy Industries
4 Association and the Commission as well as the
5 appropriate utilities. It could use local solar
6 thermal contractors and suppliers wherever
7 possible. And we could fully monitor their
8 performance and cost of operation.

9 The cost of such a program, I believe,
10 given the potential benefits of solar thermal
11 cooling for the state of California, would be
12 inconsequential. Thank you for your time.

13 PRESIDING MEMBER BYRON: Absolutely.
14 Let me ask. Mr. Gravely, I think you are the
15 right person to ask. Are you aware of this, of
16 this technology?

17 MR. GRAVELY: Yes sir. I was able to --

18 PRESIDING MEMBER BYRON: Because it
19 seems like every time you pass me in the hall you
20 bring up some other technology I should be aware
21 of.

22 (Laughter)

23 MR. GRAVELY: We actually, as you
24 noticed in the report, we did talk -- And this
25 came from the renewables side, from Gerry's side

1 also, that we also see an opportunity in the
2 distributed assets. Being able to count these.
3 These currently wouldn't count under the RPS goal
4 and things like that so we do see it -- We do see
5 the opportunity both in the side that we have as
6 well as the renewable side.

7 We are looking at demonstration projects
8 and doing things like that. So we have seen this
9 opportunity and we are pursuing it in that
10 direction. And the reason it is in the IEPR
11 recommendation is that we do see this as an
12 opportunity that we think is worth pursuing and we
13 think there will be more opportunity.

14 PRESIDING MEMBER BYRON: Mr. Braun, did
15 you want to add anything else?

16 MR. BRAUN: I do want to mention that
17 there is a specific recommendation in the report
18 to develop a targeted program for emerging
19 renewable heating and cooling technologies.
20 Assessing how to strengthen the market for
21 commercially mature technologies. So I think we
22 are in agreement. We will be giving considerable
23 thought to this going forward.

24 I should also point out that we
25 reoriented our renewable energy R&D programs to

1 try to take what I would call a full menu approach
2 with emphasis on, of course, the technologies that
3 feed into the big grid but also technologies that
4 can be integrated in buildings. And then the
5 technologies that are on an intermediate scale
6 that could be deployed by communities with the
7 support of the public in the community.

8 So we are trying to take a different
9 approach where we emphasize the kind of issues
10 that you have raised. The integration issues as
11 opposed to just simply trying to improve the core
12 technologies.

13 PRESIDING MEMBER BYRON: Mr. Rodes,
14 thank you. It is always great to have some
15 technology-based comments at these workshops as
16 well. Thank you for coming.

17 MR. RODES: Thank you.

18 PRESIDING MEMBER BYRON: And if you want
19 to go a step further and provide some comments in
20 writing that would be very helpful as well.

21 MR. RODES: Will do. All right, thanks
22 very much.

23 PRESIDING MEMBER BYRON: Thank you. I
24 have one more card for individuals that are
25 present. Fong Wan from PG&E requested to speak

1 towards the end of the public comments. Mr. Wan,
2 I have some additional phone ones but you are
3 welcome to go now or later, your choice. You are
4 going now.

5 MR. WAN: I would appreciate that.

6 PRESIDING MEMBER BYRON: And we are
7 pleased that you are here today. It is nice to
8 have a senior vice president from PG&E present and
9 listening to all these comments. We appreciate it
10 very much.

11 MR. WAN: Thank you very much for coming
12 here today too, for being able to come here. The
13 first topic I would like to cover is renewable
14 procurement. We do see some of the same
15 significant barriers that the CEC sees, including
16 transmission, integration of renewables, contract
17 delays, permitting and environmental concerns.
18 And we would very much like to work with the rest
19 of the stakeholders, including this Commission on
20 the RETI process, the integration studies, working
21 with the ISO to address the queues, exploring
22 energy storage technologies. One of my personal
23 interests is compressed air storage. So we are
24 very happy to work with all of these -- on all
25 these fronts.

1 There is one mention about the need for
2 the PUC to take control of the renewable energy
3 procurement. We believe the PUC has an active and
4 effective oversight for the process and the rules
5 for the PRG independent evaluators are well laid
6 out, as well as the selection of the winning
7 bidders. We don't believe the state should take
8 over the procurement process unless we want
9 something similar to the DWR experience that we
10 have seen in the past.

11 As we mentioned in the past, PG&E has
12 been very active in the contracting process. We
13 signed over 40 contracts, over 3500 megawatts. In
14 fact, we have moved for a new approach in the 2009
15 RFO, renewable RFO process.

16 We would like to pilot a process in
17 which any contracts, any of the sellers, if they
18 are willing not to change any of the language that
19 is pre-approved by the PUC, and as long as the
20 pricing is below MPR or at MPR, these contracts
21 will be pre-approved. That is our effort to
22 expedite, to expedite the process. And there is
23 no limitation in terms of the number of megawatts.
24 We do ask the pilot project to be limited at about
25 800 gigawatt hours, which is about one percent of

1 our energy. So it is a sizable program.

2 PRESIDING MEMBER BYRON: And you are
3 speaking softly. Was it 800 gigawatt hours? Was
4 that what you said?

5 MR. WAN: Yes it is. Sorry about that.
6 So we hope that this program could bring cost-
7 effective, renewable projects as well as viable
8 projects into the process. That is our objective
9 on renewable procurement.

10 We also saw in Chapter 3 that there's a
11 desire not only for IOU renewable procurement to
12 be put under the, to be moved over to the PUC but
13 the overall procurement process. It is not very
14 clear to us how that, how that would be done and
15 we would like to have a little more understanding.
16 Our thought is that the PUC's oversight is
17 effective and it is well established.

18 In terms of the small renewable projects
19 I would like to touch on a few things. We do see
20 distributed renewable resources as part of the
21 solution. We are not sure we see the impacts or
22 the benefits of integration of small renewables.
23 Because after all small renewables are not
24 dispatchable and it depends on the situation. It
25 may or may not require upgrades to the

1 distribution system.

2 There were a few areas I was not clear
3 on. Commissioner Pfannenstiel had mentioned that
4 the feed-in tariff would not require any
5 contracts. I just wanted to understand a little
6 more about if that really means the utilities
7 would not be required to sign contracts.

8 And the second topic I heard was the
9 cost-based approach, depending on technology. We
10 would like to be cautious on that approach. And
11 that's because we don't believe we should be
12 achieving renewables at any cost. As well as, as
13 we talked about in the past, our goal is to reduce
14 GHG. And from a societal perspective a cost-based
15 feed-in tariff may not achieve the best approach
16 in reducing GHG. We believe AB 32 does have and
17 encourages a cost-effectiveness test. So we would
18 like to make sure that a cost-based approach is
19 consistent with that concept.

20 The last part I wanted to mention is
21 energy efficiency forecasting and CEC projections.
22 This is a very important area for the utilities.
23 We encourage the CEC to continue to work on that;
24 we are committed to help. And it is critical in
25 our long-term resource planning process.

1 One other additional topic. There were
2 some questions directed at Edison earlier
3 regarding gas costs. I just wanted to make sure
4 that everyone understands, PG&E is extremely
5 concerned with the overall affordability of energy
6 for our customers. That includes the electricity
7 and natural gas costs.

8 I was the policy witness in front of the
9 PUC on gas hedging and we would like to see more
10 moderation and more hedging of gas prices. We
11 believe we have entered into an era where our
12 customers truly have some concerns in terms of
13 whether they can afford energy costs. So our
14 concern is not only about renewable costs but it's
15 also gas costs. I just wanted to make sure we
16 passed that along.

17 That is all I have to cover.

18 PRESIDING MEMBER BYRON: I wrote as
19 quickly as I could, Fong, so give me just a moment
20 here.

21 MR. WAN: I'd be willing to reiterate
22 some of the points if that's beneficial.

23 (Laughter)

24 PRESIDING MEMBER BYRON: I think there
25 might be a little bit of misunderstanding with

1 regard to the recommendation on procurement that I
2 would like to try and clarify. I don't have it in
3 front of me and I am not going to take the time to
4 go look for it.

5 But we are not looking for the state to
6 take over procurement, per se. I think the PUC
7 has modified the procurement process probably six
8 or eight times over the last eight years through
9 various changes. And I forget the name of their
10 process with rulemakings. And the tweaks, if you
11 will allow me that, have had some positive effect.
12 They have all been an effort to correct what was
13 intended originally as a short-term process, these
14 procurement review groups. And I'll use strong
15 words when I say you can't put lipstick on a pig.

16 (Laughter)

17 PRESIDING MEMBER BYRON: The problem is
18 that needs to be corrected. So what we are
19 attempting to do here -- And this is not the first
20 time, as you know, that a recommendation like this
21 has shown up in the IEPR. We are trying to fix
22 that procurement process. So it is not, per se,
23 that the government needs to take over. I think
24 the PUC needs to exercise its full responsibility.

25 And what we are really concerned about

1 is going forward. Some of the investor-owned
2 utilities' stated policy to get back into the
3 generation business. And the way that that is
4 being done, inside and outside this procurement
5 process, raises serious concerns about the
6 competitiveness of the market, the transparency of
7 it.

8 I think PG&E's recent application before
9 the PUC outside the procurement process to develop
10 a large power plant really chills the forward
11 market for procurement. So I know you and I have
12 discussed these things. I look forward to more
13 discussions.

14 But what we are trying to do is
15 essentially get the PUC to fully discharge their
16 responsibility. That doesn't mean that the IOUs
17 don't have a great deal of input to the
18 procurement process but the selection needs to be
19 done in a more transparent way that does not
20 involve the biggest power marketer in the state,
21 and that's now become the investor-owned utilities
22 again. They are making their own procurement
23 decisions.

24 And sometimes, as the example I pointed
25 out, going around that procurement process. So I

1 don't think the procurement process is working
2 very well right now and we are interested in
3 working with the Public Utilities Commission, who
4 I think is intent upon getting this right as well,
5 to try and fix that.

6 MR. WAN: Well, I understand that. I
7 also want to say that we respect the views of this
8 Commission and we understand where you are coming
9 from. But we also respectfully disagree with that
10 we have circumvented the process. And I point to
11 the proposed decision issued by the CEC -- the
12 CPUC, excuse me. And a major concern that the PUC
13 had was that there was not enough of a record to
14 establish, there was not enough time for an RFO.

15 If we go back to the December 2007
16 CPUC's decision and we can sort through that at
17 some time. I think there was provisions in
18 there, say for failed projects, if the resources
19 are needed. The utilities do have the opportunity
20 to submit such a project as the Tesla project.
21 And we believe that the Tesla project was cost
22 competitive in terms of all the alternatives. And
23 I have said in front of the PUC that we would be
24 willing to submit all the information from the
25 current RFO to demonstrate that and we will be

1 submitting that in the process.

2 With all that being said, we also
3 respect the decision by the PUC and we have
4 canceled the equipment order on Tesla. At this
5 point in time we are not moving forward with
6 Tesla. So that's where we rest.

7 PRESIDING MEMBER BYRON: And of course
8 this Commission licensed or permitted the Tesla
9 power plant a number of years ago. We tend to
10 like to see the power plants that we permit get
11 built. And so we are certainly, we are certainly
12 not against the additional construction of
13 generation assets. Despite the fact that this
14 Commission also ruled against Eastshore yesterday.
15 But we are concerned about the way these projects
16 are procured.

17 And as we have discussed, there's other
18 issues that are not being addressed in the
19 procurement process such as the environmental
20 consideration. Some of these projects -- I should
21 refrain from saying again, may not be -- I won't
22 say it again. But may not be the best choices.
23 And we are seeing significant contract failures on
24 some of the procurement for renewables as well.
25 We are quite concerned about this and I suspect

1 you are as well.

2 MR. WAN: Absolutely.

3 PRESIDING MEMBER BYRON: And I also
4 suspect that our intention is absolutely the same.
5 We are trying to get this procurement process
6 right, we are trying to get it transparent for
7 customers so they believe that you are indeed
8 acting in their best interest and not shareholder
9 interest, and we are trying to get it right so
10 that these projects get built rather than get
11 permitted and not built.

12 MR. WAN: Well I would like to point out
13 one thing, Commissioner Byron. That the customer
14 advocacy groups are not the ones asking for more
15 transparency. They believe there is an adequate
16 amount of legitimacy in the process.

17 PRESIDING MEMBER BYRON: I'll accept
18 that there is one customer advocacy group that is
19 not advocating.

20 MR. WAN: That's correct. As well as
21 certain staff of the Commission, as you know.
22 Energy Division as well as the DRA. I don't see
23 them saying there needs to be transparency in the
24 process. That the best and the most cost-
25 effective projects are not being selected. So I

1 do see the people who are representing the
2 customers' best interests not voicing these
3 opinions. What I do hear is, in general, the
4 generators saying that and it is a very
5 interesting situation. The winners are not saying
6 that, it tends to be the losers in the process who
7 are saying that. So that's what I typically see.

8 PRESIDING MEMBER BYRON: Well, I think
9 we probably should bring this conversation to a
10 close.

11 MR. WAN: Okay, thank you.

12 PRESIDING MEMBER BYRON: Because it
13 could go on forever. But we did hold a good
14 workshop on this, Mr. Wan. And your company was
15 represented here as well as others and I think we
16 learned a great deal more about the procurement
17 process.

18 And of course having read the recent RFO
19 in its entirety, there are provisions in there
20 that even prevent winners, as we know,, from
21 discussing, from discussing their involvement in
22 the procurement process. And it prevents losers
23 from discussing it as well because they all have
24 to sign confidentiality agreements. In fact I
25 remember reading a letter that you wrote to one of

1 the winners of your procurement process just a
2 couple of weeks ago that told him to keep his
3 mouth shut.

4 MR. WAN: Well, I did send a letter. It
5 was a please shut up-type of letter, I agree with
6 that. As to whether they were a winner or loser,
7 I think this is a really important time in our RFO
8 process. We have not short-listed any parties.
9 In fact I received numerous calls due to the
10 Mirant CEO's disclosure at the Merrill Lynch
11 conference in New York that they thought they had
12 the inside track to win.

13 The other sellers were all saying to us,
14 if you have already predetermined a winner please
15 don't let us waste any money, don't let us waste
16 any of our time, because we wouldn't like to
17 pursue the project. So they said, you need to
18 make a public statement that this is not true.
19 They are not predetermined a winner. They have no
20 justification in saying so. In fact, they have
21 violated the confidentiality agreement.

22 Yes, the letter was a little harsh, I
23 agree with that. We really wanted everyone not to
24 jump the gun and try to fend off others while
25 others are investing money. Developing projects,

1 whether they are renewables or conventional, as
2 you know very well, cost a lot of money. And we
3 don't want to have a self-fulfilling prophecy in
4 which Mirant could become the winner.

5 With all that being said, Mirant's
6 project is a good project, as with many of them.
7 So we have not at all put them in a box. They
8 will be considered at this point as long as they
9 don't discourage the other bidders. That's where
10 we are really coming from.

11 PRESIDING MEMBER BYRON: Mr. Wan, thank
12 you very much. I refer to a report that came out
13 in July that was, I believe, funded by the
14 Department of Energy that the National Association
15 of Regulatory Commissioners put out on
16 procurement.

17 It looked at how procurement is done
18 throughout the United States by various utilities
19 and public utilities commissions. I found it to
20 be very enlightening. There are some very good
21 principles in there. This Commission is not
22 making this stuff up. We plan to work with the
23 Public Utilities Commission and see if we can
24 apply some of those key principles to correcting
25 the procurement process.

1 The example that you just brought up I
2 think helps prove that we are still not quite
3 there yet. As you know there were similar
4 objections by some of these same folks around the
5 Tesla project and they objected strongly at the
6 PUC.

7 I hope you will accept that we are just
8 trying to, we are just trying to get it right and
9 make sure that we can fulfill all these other
10 policy objectives that we are trying to accomplish
11 around resource adequacy, around RPS, around
12 distributed generation. And I think it all comes
13 back to this procurement issue.

14 MR. WAN: Commissioner Byron, I truly
15 believe that we share the same interests, which is
16 to really serve the California customers the best.
17 That's in terms of the most reliable energy, the
18 most cost-effective energy, as well as
19 environmentally responsible energy. And I really
20 do believe that.

21 PRESIDING MEMBER BYRON: Listen, I thank
22 you very much for being here. Madame Chairman.

23 ASSOCIATE MEMBER PFANNENSTIEL: Thanks.
24 Something your dialogue just triggered. It really
25 is the question of, and I actually asked this of

1 Mr. Silsbee, of corporate policy on electricity
2 procurement as opposed to self-owned generation.
3 Is there a PG&E, either utility or corporate
4 policy on what percent of generation the utility
5 should own?

6 MR. WAN: I've had this question before.

7 ASSOCIATE MEMBER PFANNENSTIEL: I didn't
8 mean it to be a trick question. If no, there is
9 no policy, is fine.

10 MR. WAN: I think there's a strategy, I
11 am not sure that there's a policy. I'm not trying
12 to be cute with the answer.

13 ASSOCIATE MEMBER PFANNENSTIEL: Okay, go
14 ahead.

15 PRESIDING MEMBER BYRON: Well, policy he
16 could answer, strategy he might not be free to
17 answer.

18 MR. WAN: No, no, no, no. I'm saying in
19 terms of the strategy, we really believe what we
20 have learned from the energy prices. That some
21 portion of our generation should be coming from
22 utility-owned generation. And I think we had this
23 discussion as to what should that target be. I
24 believe our strategy is in new generation we would
25 like to have perhaps up to half of the generation.

1 But that has to meet the cost-effectiveness test
2 in the best interest of the customers.

3 ASSOCIATE MEMBER PFANNENSTIEL: So help
4 me understand then. Do you have in mind that
5 about half would be utility-owned?

6 MR. WAN: New generation.

7 ASSOCIATE MEMBER PFANNENSTIEL: Of new
8 generation, sorry. New, procured generation would
9 need to be your own or independent. So you issue
10 an RFO. Where does the utility generation
11 potential fit in each RFO?

12 MR. WAN: The PUC was very clear on this
13 issue, which was they should all be put together.
14 They should all be evaluated together with the
15 same criteria, same scoring system, and may the
16 best winner sort out. So the PUC did not adopt
17 our recommendation to have two separate buckets.
18 That was our recommendation.

19 ASSOCIATE MEMBER PFANNENSTIEL: So there
20 is presumably, there is oversight to assure that
21 nobody puts a thumb on the scale on either side on
22 any project, whether it is utility-owned or
23 anybody else. But do you then see where we as
24 other public policy concerned people, because we
25 don't have, because that information is all held

1 confidential, and whether it is renewable
2 procurement or non-renewable procurement, we have
3 no way of evaluating anything other than the
4 results.

5 MR. WAN: I do see the concern since you
6 don't have the information. I just want to be
7 clear on the confidentiality provision. It is my
8 understanding, and I may not have 100 percent
9 accuracy on this recollection, that the PUC's
10 rules on confidentiality expire at some point in
11 time. So all of our signed contracts, all of the
12 information will eventually be made public. My
13 understanding is that it is three years from
14 commercial operation date. I understand that is
15 not in real-time.

16 ASSOCIATE MEMBER PFANNENSTIEL: Right.

17 MR. WAN: But there is judgment day when
18 the information does get disclosed. And the
19 reason we ask for a time lag in the disclosure is
20 that we don't want other market participants to be
21 able to see exactly where they should be pricing
22 the renewables, where they are pricing the
23 conventional, what's our buying practice. We
24 believe that X amount of period of time, if that
25 goes by, there is no longer a concern for the

1 real-time decision-making. So I think I
2 understand your concern for the real-time aspect.

3 ASSOCIATE MEMBER PFANNENSTIEL: We have
4 had the discussion before. Thank you very much.

5 PRESIDING MEMBER BYRON: Mr. Wan, I was
6 just -- One other thing triggered in my mind. It
7 is not necessarily related to the IEPR but this
8 came up in committee meetings the last couple of
9 days. As part of our '09 IEPR we will be looking
10 at 33 percent renewable integration. Or instead
11 of focusing on the number, as I like to put it,
12 moving towards a renewable future.

13 We are going to need a lot of
14 information in order to do this analysis well. We
15 will be coming at you and other investor-owned and
16 publicly-owned utilities in the next couple of
17 weeks, I think in the next month, with forms and
18 instructions for the information that we will
19 need, that we will be required to have in order to
20 do this kind of analysis. We are spending a lot
21 of time at the Commission here working on that and
22 trying to minimize the impact for all the
23 information.

24 There will be concerns about
25 confidentiality. We'd like to make sure we

1 address those concerns up front. And we will be
2 doing some meetings with POUs and IOUs in order to
3 work through that in hopes that we can avoid the
4 prolonged litigation that we went through, I
5 understand, in previous IEPR cycles to request the
6 information. So I am pleading with you to help us
7 keep this out of that kind of confrontation.

8 MR. WAN: Sure.

9 PRESIDING MEMBER BYRON: This Commission
10 does respect its confidentiality agreements. And
11 we would like to work out ways that we can roll
12 information up or aggregate it, such that we have
13 the information we need. We can record it and we
14 can get the kind of analysis done that we need to
15 demonstrate and show that we can move towards
16 higher renewable integration.

17 Before you respond I would just like to
18 ask if Mr. Jaske or Ms. Bender or anyone would
19 like to respond. Did I say that halfway right?
20 Mr. Jaske may correct me here.

21 DR. JASKE: No, I think you put forward
22 the goal quite accurately.

23 PRESIDING MEMBER BYRON: That's it?

24 (Laughter)

25 ASSOCIATE MEMBER PFANNENSTIEL: Take it,

1 Jeff.

2 PRESIDING MEMBER BYRON: Okay, I take
3 that, I take that. Mr. Wan.

4 MR. WAN: We'll be happy to work with
5 you, Commissioner Byron, and we have full faith in
6 this Commission that it would keep the information
7 confidential. We'd ask that any commercially
8 sensitive information not be shared broadly with
9 the public.

10 PRESIDING MEMBER BYRON: Okay. Thank
11 you very much.

12 MR. WAN: Thank you.

13 PRESIDING MEMBER BYRON: Thank you for
14 coming and listening to all the input.

15 MR. WAN: Thank you.

16 PRESIDING MEMBER BYRON: Unless there
17 are any other public comments here in the
18 audience, and there certainly can be. I have
19 three commentators that wish to speak that are on
20 the phone. And in the order that I received them
21 the first one is Clinton Cole. And I believe the
22 organization is called the CURRENT Group.

23 MR. COLE: Yes, this is Clinton Cole
24 from CURRENT Group. I would just like to take a
25 minute to give a quick comment regarding Smart

1 Grid. And I will try to answer any questions you
2 have but there's a good chance that I will have to
3 take them back to people who are able to answer
4 them more effectively than I can.

5 But I just wanted to say that I work for
6 CURRENT Group, which provides Smart Grid equipment
7 and services. We currently support some Smart
8 Grid deployments in Dallas, Texas and in Boulder,
9 Colorado. We participated in CEC proceedings and
10 CPUC energy efficiency proceedings.

11 CURRENT recommends that the
12 modernization of California's distribution grid
13 with Smart Grid technologies be included in the
14 2008 IEPR Update. Smart Grid significantly
15 increases reliability and efficiency throughout
16 the distribution grid through various means,
17 including real-time system optimization and
18 reduction of grid line losses, all of which can
19 result in a reduction in electrical costs and a
20 reduction in CO2 emissions.

21 Further, Smart Grid supports the full
22 integration of renewable energy and distributed
23 energy sources among millions of user locations.
24 As such, Smart Grid implementation is an essential
25 strategy in meeting California's near-term and

1 long-term renewable energy and greenhouse gas
2 emissions reduction goals and we think it should
3 be characterized as such within the 2008 IEPR
4 Update. That's about all I have. If you have any
5 questions I can try to answer them.

6 PRESIDING MEMBER BYRON: Are there any
7 questions from -- Mr. Gravely.

8 MR. GRAVELY: Yes, Mike Gravely from the
9 R&D division of the CEC.

10 We actually addressed in one of our
11 workshops the Smart Grid technologies and have
12 addressed some of those in this effort. I think
13 you will find we have made a conscious effort.
14 Because of the complexity and the integration that
15 we would prefer to address this as part of the
16 2009 IEPR and we envision having several staff
17 hearings and potentially other hearings and quite
18 a bit of effort.

19 So we do agree that this is one of the
20 areas we want to pursue. We think -- We have some
21 addressed in the 2008 IEPR and we definitely
22 expect to see technical workshops as part of the
23 2009 IEPR. And I think from where we are with
24 2008, we got in as much as we could. We think
25 information now would not be fully vetted so we'd

1 like to, you know, take the time to discuss this
2 in a public forum. We envision Smart Grid being
3 one of the topics we are proposing for 2009.

4 MR. COLE: Okay. We appreciate you
5 including it in the -- I just got to look at the
6 Draft 2008 IEPR Update and we appreciate the
7 mention of Smart Grid in there. And we will
8 definitely be looking forward to participating in
9 those workshops and getting it into the 2009 IEPR.

10 PRESIDING MEMBER BYRON: Thanks a lot.
11 Mr. Cole, thank you for being on for your
12 comments.

13 MR. COLE: Thank you.

14 PRESIDING MEMBER BYRON: I am going to
15 move on. Next on the phone I have Tam Hunter.

16 MS. PARROW: Actually he just
17 disconnected.

18 PRESIDING MEMBER BYRON: Ms. Turnbull,
19 Jane Turnbull from the League of Women Voters.

20 MS. TURNBULL: Commissioner Byron, I am
21 here but I have no comments this morning.

22 PRESIDING MEMBER BYRON: I am extremely
23 disappointed.

24 (Laughter)

25 MS. TURNBULL: I am too but we plan to

1 submit some written comments before this is over.

2 PRESIDING MEMBER BYRON: Ms. Turnbull,
3 we always value your input and I thank you for
4 being on the phone today.

5 ASSOCIATE MEMBER PFANNENSTIEL: Thanks
6 for listening, Jane.

7 PRESIDING MEMBER BYRON: I have a card
8 from Sanford Miller representing himself.

9 MR. MILLER: Good morning,
10 Commissioners. My name is Sanford Miller. I am
11 representing myself. And there were a number of
12 other people who are signatories to this letter
13 that I gave each of you a copy on September 15.
14 And the topic is peak oil.

15 Approximately a little over 50 years ago
16 an oil geologist by the name of Hubbert, King
17 Hubbert, basically made a prediction that the
18 United States was going to peak in its oil
19 production in the year 1970. He made that
20 prediction in 1950 -- '56, I'm sorry. His
21 prediction actually was correct. In 1970 the
22 world peaked -- I'm sorry, the US peaked in
23 production.

24 He used basically a fairly logical
25 equation. Basically which took estimated oil

1 discoveries. And from that he calculated
2 production from that. And he was able to get a
3 peak output.

4 Now since then that same theory has been
5 applied for world oil production by Mr. Hubbert
6 and a number of other researchers. A lot of them
7 have come up with the conclusion that the world is
8 near or closely to its world peak output. And it
9 is based on the same basic calculations.

10 The reason that myself and these other
11 people on the signatories to this letter to you
12 believe this is important is there are few
13 alternatives to oil in the world here. The world
14 oil production has been bumping along at 85
15 million barrels a day since about 2005. It hasn't
16 really increased that much. We have China and
17 India which have been expanding their demand at a
18 very fast rate.

19 So we feel this is important for the
20 IEPR and for -- not only for the 2008 IEPR to
21 recognize that this may be an issue that needs to
22 be looked at more closely. And certainly with the
23 2009 IEPR that it needs to be looked at.

24 Just one last thing. In 2006 the
25 General Accounting Office did a report on peak oil

1 at the request of one of the committees in
2 Congress and they came up with the conclusion that
3 peak oil was a very real possibility and that the
4 United States was totally unprepared for the
5 possibility that oil would be peaking at some time
6 in the near future. And they didn't offer an
7 estimate of whether or not that peak would be in
8 2006 or ten or 15 years later on.

9 The federal government has certainly
10 recognized that. At least the GAO has. And so we
11 believe that this is an important topic that needs
12 to be addressed sometime soon by the Energy
13 Commission in its IEPR.

14 PRESIDING MEMBER BYRON: Mr. Miller,
15 thank you. I did, of course, receive the letter
16 and I have actually discussed it at some length
17 with Commissioner Boyd, who will be my Associate
18 Member on the '09 IEPR, and as you know chairs the
19 Transportation Fuels Committee here and has for
20 many years.

21 I am very interested in this subject.
22 I have read a number of books on it myself. And
23 in fact during the peak oil conference that took
24 place here in Sacramento, I believe it was what,
25 three weeks ago?

1 MR. MILLER: Right.

2 PRESIDING MEMBER BYRON: I did meet with
3 some folks that were here, Richard Heinberg, I
4 believe, and some others. And they left me more
5 books to read. There are some connotations
6 associated with the notion of peak oil that, let's
7 say, are problematic to some extent.

8 This Commission, my assessment of what
9 this Commission has done over previous years with
10 regard to positioning itself to work on
11 alternative transportation fuels and really
12 promote the need to wean ourselves from the 96
13 percent dependence upon a single transportation
14 fuel positions us really well. The low carbon
15 fuel standard. There's other things that this
16 state is doing in the absence of federal
17 direction, I think, that is very good.

18 Nevertheless I am very interested in
19 putting the context of all of that -- I'm sorry,
20 putting all of that more in the context of the
21 geopolitical implications of our dependence upon
22 oil. So we will be addressing it to some extent
23 in the IEPR. Again, because we are only looking
24 at it from a state perspective there is little
25 that we can do at those national and worldwide

1 levels that really this has significant
2 consequences for.

3 So I appreciate your letter. Is there
4 something else you wanted to add?

5 MR. MILLER: No, that's it. Thank you
6 for considering it.

7 PRESIDING MEMBER BYRON: Absolutely.
8 Thank you. I do not have any more blue cards.
9 But I do always ask at the end if there is anyone
10 else that feels that they would like to speak.
11 Representing an organization or themselves.

12 My panel, who has been very patient
13 sitting here so that we could answer any technical
14 questions that came up. Is there anything else we
15 need to discuss?

16 I think Chairman Pfannenstiel has some
17 closing comments and this would be the time.

18 ASSOCIATE MEMBER PFANNENSTIEL: Thank
19 you. First of all, I want to thank everybody who
20 was here today. As always it is both helpful and
21 encouraging to get people's thoughts and
22 observations on the work that we have done.

23 This draft report has a lot of very
24 important invocations in it, not the least of
25 which is the demand forecast. The demand forecast

1 in California, the Energy Commission's demand
2 forecast is used for a number of purposes. So we
3 need to make sure that it is right and that it is
4 something that everybody buys into. And having
5 not heard otherwise today I am assuming everybody
6 here at least buys into the demand forecast as we
7 put it forward. And if you don't make sure you
8 let us know that. Because otherwise you are going
9 to be living with it.

10 I think other than that my other
11 observation is who wasn't here today. I am
12 disappointed we did not hear from the Public
13 Utilities Commission. I am disappointed we didn't
14 hear from any of the publicly-owned utilities. We
15 consider ourselves partners with both of them as
16 groups in our endeavor and I think our work is
17 made much better by their participation.

18 And I understand that there are
19 opportunities to provide written comment and we
20 appreciate those comments. But the ability to
21 interact here is also very important to us. So
22 with that, thank you again for being here.

23 PRESIDING MEMBER BYRON: Thank you,
24 those are excellent observations. I certainly
25 benefit by having the Chairman's experience on the

1 2008 IEPR Committee. Unfortunately I will be
2 losing that at the end of the year.

3 I believe, Ms. Korosec, we have a couple
4 of dates that we should share with participants.
5 That would be when we would like to ask that we
6 receive any written comments and the other one is
7 when is the final workshop date for the IEPR.

8 MS. KOROSEC: The written comments are
9 due on October 16 and the Energy Commission's
10 Business Meeting where we will consider adopting
11 the report will be on November 19. We will be
12 releasing the report on November 3 in preparation
13 for that adoption.

14 PRESIDING MEMBER BYRON: And I love
15 asking you this in public. Are we on schedule.

16 MS. KOROSEC: Absolutely.

17 PRESIDING MEMBER BYRON: Well, thank you
18 all very much for coming today. The input is
19 extremely valuable. We are adjourned.

20 (Whereupon, at 11:22 a.m., the Committee
21 Hearing was adjourned.)

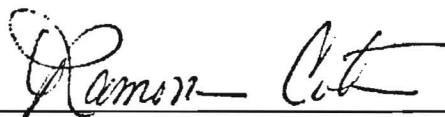
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CERTIFICATE OF REPORTER

I, RAMONA COTA, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Committee Hearing; 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 15th day of October, 2008.

A handwritten signature in cursive script, appearing to read "Ramona Cota", is written over a horizontal line.

RAMONA COTA