#### COMMITTEE HEARING

#### BEFORE THE

# CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:

Preparation of the 2008 Integrated Energy Policy Report Update and the ) 08-IEP-1 2009 Integrated Energy Policy Report )

) Docket No.

CALIFORNIA ENERGY COMMISSION

HEARING ROOM A

1516 NINTH STREET

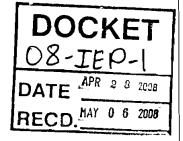
SACRAMENTO, CALIFORNIA

MONDAY, APRIL 28, 2008

10:35 A.M.

ORIGINAL

Reported by: Peter Petty Contract No. 150-07-001



### COMMISSIONERS PRESENT

Jeffrey D. Byron, Presiding Member

Jackalyne Pfannenstiel, Associate Member

Karen Douglas

#### ADVISORS PRESENT

Laurie tenHope

Timothy Tutt

#### STAFF PRESENT

Suzanne Korosec, Assistant Director of Policy Development, IEPR

Harriet Kallemeyn, Secretariat

#### ALSO PRESENT

John A. Bohn, Commissioner Stephen St. Marie, Chief of Staff California Public Utilities Commission

Manuel Alvarez Jaqueline Jones Southern California Edison Company

Rachel E. McMahon Center for Energy Efficiency and Renewable Technologies

Steven Kelly Independent Energy Producers Association

Norman Plotkin Plotkin & Zins Associates Alliance for Retail Energy Markets

Kathy Treleven
Pacific Gas and Electric Company

Jane Turnbull League of Women Voters of California

### ALSO PRESENT

Laura Ettenson (via teleconference) Natural Resources Defense Council

Robert E. Burt Bobburt Insulation Contractors Association

Charles Toca (via teleconference) US&R Powergrid Partners

Tam Hunt (via teleconference) Community Environmental Council

Nora Sheriff (via teleconference) Cogeneration Association of California Energy Producers and Users Coalition

Mohan Niroula (via teleconference) California Department of Water Resources

Joe Sparano Western States Petroleum Association

# INDEX

<u>Pa</u>	ge
Proceedings	1
Introductions	1
Opening Remarks	1
Presiding Member Byron, CEC	1
Associate Member Pfannenstiel, CEC	3
Commissioner Bohn, CPUC	4
Commissioner Douglas, CEC	6
Background/Overview	6
Overview of Process and Schedule 2008/2009 IEPRs	8
2008 IEPR Topics	10
Right Questions? Other Questions in Renewables Development	14
Questions/Comments	14
Southern California Edison Company	15
Center for Energy Efficiency and Renewable Technologies	21
Independent Energy Producers Association	24
Alliance for Retail Energy Markets	3 0
Pacific Gas and Electric Company	36
League of Women Voters	38
US&R Powergrid Partners	55
CEC Demand Forecast Energy Efficiency	40
Questions/Comments	42
Southern California Edison Company	43

# INDEX

	<u>Page</u>
2008 IEPR Topics - continued	
CEC Demand Forecast Energy Efficiency - continued	
Questions/Comments - continued	
Pacific Gas and Electric Company	44
Natural Resources Defense Council	46
Insulation Contractors Association	47
Common Portfolio Methodology for Long-Term Procurement	5 9
Questions/Comments	61
Cogeneration Association of California; Energy Producers and Users Coalition	61
Southern California Edison Company	65
Summaries, Work in Other Venues	68
2009 IEPR Summary of Statutory Requirements	70
Overall Comments/Questions	72
Western States Petroleum Association	72
Alliance for Retail Energy Markets	81
Pacific Gas and Electric Company	84
Southern California Edison Company	85
League of Women Voters of California	87
Community Environmental Council	89
Natural Resources Defense Council	92
US&R Powergrid Partners	96

vi

## INDEX

	<u>Page</u>
Next Steps	97
Closing Remarks	97
Commissioner Bohn, CPUC	97
Presiding Member Byron, CEC	98
Adjournment	99
Certificate of Reporter	100

### PROCEEDINGS

10:35 a.m.

PRESIDING MEMBER BYRON: Good morning.

Welcome to a scoping hearing for the Integrated

Energy Policy Report. I'm Commissioner Jeff

Byron, the Presiding Member of the Integrated

Energy Policy Report Committee, or as we refer to

it, the IEPR Committee.

Allow me to introduce others that have joined me here at the dais. To my left is the Chairman of our Commission and the Associate Member on the IEPR Committee, Chairman Pfannenstiel. To my right is Commissioner Douglas. And back on my left side, again joining us from the Public Utilities Commission, Commissioner Bohn. Thank you for being here.

We also have some staff with us. Steve St. Marie from the PUC is here. My Advisor,
Laurie ten Hope and Commissioner Pfannenstiel's
Advisor, Tim Tutt. I think that's everyone.

I'd just like to say a few remarks, and then ask my fellow Committee Members if they would like to add any. I first feel very strongly about giving credit to those who come before me.

I believe Commissioner Boyd on the 03

IEPR, Geesman on the 05 and Chairman Pfannenstiel on the 07. I've come to realize the importance of the Integrated Energy Policy Report; in fact, the only advice that I received from former Chairperson Desmond when he left the Commission and I joined, was read the IEPR.

This has become an extremely important energy policy document for California. It's the source for much of the energy legislation that ends up being passed in this state. The Executive Branch also realize on publicly vetted and objective recommendations that are contained in the IEPR. And the Legislature continues to add more responsibilities to the IEPR, it seems, every cycle.

So I certainly like to give my fellow Commissioners my commitment to maintaining, or making every effort to maintain the high standard that they've applied to this Committee.

It's extremely important that we get public input to this process, and I'd like to thank you for being here this morning. We will hold many workshops over the next few years. And I'm committed to evaluating and addressing all the information we receive at those workshops and from

those of you that participate in writing.

We also now have permanent staff that have been assigned to the IEPR. And I'm pleased to have Suzanne Korosec as our new IEPR Program Manager, or actually I believe the official title is Assistant Director of Policy Development.

Today we're going to overview the topics for the 08 IEPR update. And before we get started I'd like to thank very much our friend and colleague from -- how did you refer to yourself, Commissioner, the interloper from down south -- from San Francisco, the Public Utilities Commission.

And please allow me to refer to any of my fellow Commissioners, if they'd like to also make some introductory remarks. Chairman.

CHAIRPERSON PFANNENSTIEL: I'd just like to say that we're appreciative of the public support and participation in the IEPR process. My line in past IEPRs is that virtually every living Californian has a chance to participate in the IEPR, and many of them take advantage of it. We have a large list of public participation for the last IEPR.

And the content, what ultimately results

really reflects the fact that we get a lot of input. And so we try to consider the views, the opinions, the analysis, the issues that are raised in front of us.

R

With that, we'll look in a minute on the issues that we intend to focus on this year. And this is supposed to be, of course, the off-year, the streamlined year, and it never becomes quite as narrow as we might think it should be. But, with that, bear with us and we're really looking forward to your input. Commissioner Bohn.

COMMISSIONER BOHN: Yes, thank you.

It's a pleasure to be here. I was kidding when I said I was an interloper. The CEC and Chairman Pfannenstiel and Commissioner Byron are very gracious in extending their hospitality for the PUC to come up here.

Two observations I would like to make.

The first is that this is a very very difficult time in our economy, in our global system. There are a lot of things going wrong and there are a lot of issues that the discussions in the IEPR and the discussion about going forward and load growth and all of the kinds of things that combine the discussions between the PUC and the CEC are going

to have to be made in a very very difficult context.

This is as tough a financial situation as I have seen in 40-odd years of being in the finance business. There are a lot of these discontinuities that we're going to have to deal with.

It's really important, therefore, and certainly on behalf of the PUC, it's really very important that we cooperate in trying to get the numbers right, the assumptions right, integrate and be open with one another about the assumptions and the policies and the modeling that we do.

Because we're going to have to integrate a series of things if we have any hope of getting toward the objectives that we have set and the CEC has set, and the Governor's Office has set.

So, I'm looking forward to this again this year. But it's going to be very tricky. And that means it's going to depend a lot on input from outside and some pretty vigorous discussion.

I welcome the opportunity and thank you.

PRESIDING MEMBER BYRON: We're very pleased to have you here, Commissioner, thank you for coming.

Commissioner Douglas.

COMMISSIONER DOUGLAS: I will just say very briefly that despite the fact that this is an IEPR off-year, so to speak, it's a tremendous opportunity to address some issues, some energy policy issues that the state's dealing with on a real-time basis.

So I think we should really go forward and dig in on some of these critical issues. And just be aware that the results of this process are extremely relevant and likely to be picked up and run with in many different ways.

PRESIDING MEMBER BYRON: Thank you. So, let me dispense with all of our comments. Ms.

Korosec, we're going to turn it over to you and ask if you would take us through this agenda. I also understand we may have some commenters on the phone as we go through this, as well. Okay, thank you.

MS. KOROSEC: All right. As

Commissioner Byron said, I'm Suzanne Korosec.

I'll --

CHAIRPERSON PFANNENSTIEL: Suzanne, check your mike.

MS. KOROSEC: It's on here. Okay.

All right, a few quick housekeeping items. The restrooms are outside the double doors and to your left. There's a snack room at the top of the stairs on the second floor under the awning. And if there's an emergency follow the staff as we run from the building and congregate at the park kitty-corner until we get the all-clear sign.

For those listening in on the phone who would like to make comments, the call-in number is 888-552-9191; passcode is IEPR; and the call leader is Suzanne Korosec.

For those of you in the room who'd like to speak, we'd like you to fill out the blue cards -- they're out on the table in the foyer -- with your name and affiliation and the topic that you wish to comment on. You can hand those to me and I'll make sure the Committee gets them when it's time for the public comment period.

It would also be helpful when you get up to speak if you would -- when you come up to speak, it would be helpful if you could give the court reporter your business card so that we can make sure that the name is spelled correctly in the transcript.

I'll start out by giving a brief overview of the IEPR process and schedule for both the 2008 and the 2009 IEPR.

And then I'll begin the discussion of the topics on the 08 IEPR by giving a brief context of each topic followed by time for public comments.

For the 2009 report I'll similarly provide a summary of the statutory requirements of the report; and then we'll move on to the public comment period.

So just a quick overview. The Energy Commission's required by Senate Bill 1389 to prepare an Integrated Energy Policy Report every two years in odd-numbered years with requirement for a report in the off-years that covers any issues that may have arisen since the publication of the main IEPR.

The IEPR contains an overview of major energy trends, issues facing California; this includes energy supply, demand, pricing, reliability, energy efficiency, along with impacts on public health and safety, on the state's resources, on the economy and on the environment.

In preparing the report the Energy

Commission is required to consult with a number of other agencies. Those that are identified in the statute include the Public Utilities Commission, the Division of Ratepayer Advocates, the Air Resources Board, the Independent System Operator, Department of Water Resources, Department of Transportation and the Department of Motor Vehicles.

The IEPR is really intended to form the foundation for California's energy policies, so the legislation does require other agencies to use the analyses contained in the IEPR when carrying out their energy-related duties and responsibilities.

The IEPR is developed through a public process, workshops and hearings where the public and stakeholders can present their comments and concerns. Those then become part of the record and the IEPR Committee uses those in making its final recommendations in the report.

Because the Energy Commission needs to collect a great deal of data in coming up with its analyses and recommendations, on April 16th the Commission adopted an order instituting informational proceeding which allows us to begin

collection of that data, and also delegates authority for developing the report to the IEPR Committee.

So we'll move on to the schedule. The Committee intends to develop the 08 and 09 reports concurrently. The Committee anticipates releasing a scoping order for the 08 update in mid-May; followed by workshops on specific topics in June and July. Hope to have a draft ready in September with a hearing in late September. And adoption by the full Commission in November of 08.

For the 09 IEPR the Committee plans to hold a second scoping hearing devoted solely to the 09 report in June of this year. With staff workshops to be held in the first half of 2009, with a draft of the report in September of 09. And adoption in November of 09.

So I'll go ahead and move on to the specific topics for the 08 update. The first topic is identifying what's needed for California's electricity system to support a 33 percent level of renewables by 2020.

Second topic is making the amount of energy efficiency in the Commission's demand forecast more explicit.

Third, the report's going to describe progress made towards incorporating portfolio analysis into long-term procurement planning.

Fourth, we'll be discussing the joint PUC/Energy Commission recommendations to the ARB that are expected in August of this year on allocation and auctioning of allowances. That decision will likely also identify any additional analysis or outstanding questions that may need to be addressed either in the 08 or the 09 IEPR.

Then we'll be providing a summary of the findings and recommendations from the Energy Commission's assessment of nuclear power plant viability as required by Assembly Bill 1632.

And finally we'll be summarizing the CEC's evaluation of the PUC's self-generation incentive program, which will be looking at the costs and benefits of providing ratepayer subsidies to renewable and ultraclean fossil distributed generation, which was required by Assembly Bill 2778.

As you can see, the first three topics really are going to comprise the bulk of the analysis that will be done for the IEPR. The second three topics are more reporting on analysis

and efforts that are going on in other venues.

So, let's move on to the first topic for the 08 IEPR update. It's 33 percent renewable by 2020. California's RPS currently requires us to have 20 percent of retail sales come from renewable resources by 2010.

The Governor and other energy agencies have identified a 33 percent goal by 2020, which we're all familiar with. And we believe that meeting that 33 percent goal is really the key strategy in meeting our AB-32 GHG reduction goals.

Right now we're at about 11 percent renewable based on actual deliveries of energy, so we do have a bit of a ways to go.

A number of parties have raised concerns about the feasibility of a 33 percent level. Some of the concerns have focused on transmission constraints to access renewable resources. Others on the potential impacts on the operation of the system from integrating large amounts of variable resources like wind. And others have focused on the need for price certainty for developers so that they can get the financing they need to develop new projects.

In the 2007 IEPR we began a discussion

of the feasibility of 33 percent; that will continue in the 80. And it's likely to also show up in the 09, since this is a rather large topic.

What we really want to do going forward is define what California's system is going to need to look like. Once we know what the destination is, then we can start looking at what are the barriers to getting there, and what can we do to address those barriers.

The attachment to the hearing notice identified some studies that have been done or that are in the process of being done that have looked at this effort. What we need to do is summarize the findings from these studies, and also identify where there are gaps in our knowledge where we may need additional studies.

We'd also like parties to tell us if there are other studies out there that we may not be aware of that can help inform this effort.

The attachment to the hearing notice also provided a list of questions that the IEPR Committee believes the 2008 update should be addressing.

Briefly, these address how do we bring renewables more fully into electricity

procurement. What are the impacts of contract delays for RPS contracts, or cancellations on meeting our renewable goals.

What are the potential rate impacts, either negative or positive, of having more renewables in the systems. As well as what are the impacts on natural gas supplies and on prices.

Where do we need transmission expansion or upgrades. How do we integrate large amounts of renewables into the system while maintaining reliability.

And finally, how do we address environmental concerns with developing large-scale renewable plants, such as the solar-thermal plants that are being proposed in the southern California desert.

So, the first question is, are these the right questions. Second, what other questions do we need to answer to better understand where we want to be in developing renewables in California.

So, I will go ahead and open this up for public comment. I don't have any blue cards, but I'm assuming people can just come up, and, anyone has any comments on this first topic?

MR. ALVAREZ: Manuel Alvarez, Southern

California Edison. I hope the format works in the way we structured our presentation. We'll give it a try.

First of all I'd like to introduce to you Jaqueline Jones who is sitting on my left here. She's going to be our Project Manager. And similar to the Energy Commission, we're kind of reorganizing our IEPR responsibilities and our activities. And we do take serious the coordination between the IEPR and the long-term planning process. And we see that as a major effort for us.

Briefly, we wanted to bring up the 33 percent, so I'll let Jaqueline kind of highlight that for you in terms of some of the issues we have. Jaqueline.

MS. JONES: Good morning, Commissioners. I appreciate the opportunity to be here. And in echoing some of your sentiments, we at Edison do also believe that this is a very important proceeding and we're really glad to have the opportunity to participate.

With respect to achieving 33 percent renewables, Edison just has a few comments. We do, in fact, believe it's a major issue that needs

to be discussed. But, with respect to the RPS requirements, which are currently a legislative requirement, as well as covered by a Senate Bill, we believe that it should be applied to all load-serving entities, not just the utilities, you know, evenly across the board.

We believe that because transmission is one of the constraining factors in how much renewable energy can be incorporated in the system, in looking at when the 33 percent can be achieved, that that should be one of the starting places to see how much transmission we need, and when it can physically be built in planning when the goal should be achieved.

We understand, you know, that it needs to be done as fast as possible, but there are some physical constraints that are limiting how fast it can be done.

The environmental impact of those systems is a very large issue. And in planning the transmission, that permitting process for transmission, as well as for the projects, themselves, is a factor in when they can be completed.

Also, it would be helpful if renewable

energy credits could be unbundled. And the instate delivery requirements that are currently included in the legislation, if they could be relaxed that could accelerate achievement of the goal.

We also think that if you could tie the annual procurement targets that each utility has to the transmission projects and their availability it would help support the appropriate setting of goals for all the utilities.

Additionally, as was mentioned by
Suzanne, the impact of large amounts of
intermittent resources is not completely
understood. There's a lot of operability
concerns, especially with the intermittent
resources being wind predominately, but also the
inefficient use of other resources to accommodate
for the intermittency of wind and other
intermittent resources like solar.

There are several studies that are going on, but specific local impacts in areas where there's large renewable delivery like 4500 megawatts of wind coming out Tehachapi. Are there going to be system impacts in Tehachapi and where it's connected that will impact that area and

impact the overall system that are not accounted for in the studies that are currently going on?

We do support programs that identify the cost and technical requirements, stability and operational impacts of adding those higher volumes of renewables. Cal-ISO, as an example, has the IRRP program going on. And Edison is also requesting funding to study the renewable integration and advancement project. And we hope you'll support us in that.

PRESIDING MEMBER BYRON: Chairman Pfannenstiel.

ASSOCIATE MEMBER PFANNENSTIEL: Ms.

Jones, I'm really struck by the question of being able to integrate the intermittent resources.

That's what we have heard for years as being a major constraint.

And yet Edison -- nobody, I guess, has really done the study or the studies, and you're just now seeking funding from the PUC? Is that what you're referring to? You have to be able to do studies?

MS. JONES: Additional studies from the ones that are being done by other entities like Cal-ISO.

ASSOCIATE MEMBER PFANNENSTIEL: And what 1 do you think the timing of that is going to be? 2 MS. JONES: It's expected to be a two-3 year study from the time of allocation of funds. 4 ASSOCIATE MEMBER PFANNENSTIEL: 5 that's putting us sometime a ways into the future 6 7 before we even get the answer. Have you looked 8 at, or as far as the study are you intending to look at what's been done elsewhere? I'm thinking 9 primarily in Europe where they've had -- they have 10 moved to integrate significant quantities of 11 intermittent resources? 12 13 MS. JONES: Most certainly. ASSOCIATE MEMBER PFANNENSTIEL: You have 14 looked at that, or you're going to look at that? 15 MS. JONES: We have looked at that. 16 ASSOCIATE MEMBER PFANNENSTIEL: And has 17 18 that given you any guidance for what you might be able to do? 19 It's given us guidance for 20 MS. JONES: 21 the scope of the study, yes. ASSOCIATE MEMBER PFANNENSTIEL: 22 Thank you. 23 PRESIDING MEMBER BYRON: Commissioner 24 25 Bohn.

MR. ALVAREZ: Also, if I may,

Commissioner. The initial work on the integration was undertaken here at the Commission when they did the first PIER work. And I think at that time, I think there was a lot of hope that that would set the foundation by which we would get involved in this issue.

And as we discovered during that process, it's a lot more complicated in terms of that initial study, and where the ISO kind of information and operation parameters the ISO needs to have, as well as the utilities, themselves.

ASSOCIATE MEMBER PFANNENSTIEL: I know, but we keep hearing this pushback, and yet we're looking for the understanding of how can we get past that. Are there ways? Is it a mater of backup generation? Are there ways that we can do it?

We're looking really to the utilities to help us understand that.

COMMISSIONER BOHN: Let me, if I can interject just for a moment, I want to give you and members of the audience some political cover.

I have some serious reservations about whether 33 percent is do-able. I have some very

serious reservations about the cost to our economy and the cost to the ratepayers to do this.

I would hope that as we go forward in these discussions you will raise those issues honestly. And I've always had the experience that if we're honest with ourselves we tend to make better decisions. And I would just invite, in case anybody is reluctant, I would invite, and please blame me if there's a problem, I would invite serious comment about the issues of cost impact, how it is distributed.

And to the extent that the research and the contributions produce both ideas that will help us get to 33 percent and concerns that we don't now know about, that they will be brought out, as well, I think we'll get a better, more realistic approach to our task, if you all feel free to do that.

MR. ALVAREZ: Thank you.

PRESIDING MEMBER BYRON: Ms. Korosec.

MS. KOROSEC: And there are other parties up at the table who wish to speak.

MS. McMAHON: Good morning. Rachel
McMahon with the Center for Energy Efficiency and
Renewable Technologies. Of course, our comments

focus primarily on the 33 percent renewables portfolio standard.

I'd first like to commend and thank the Commission for approaching this question in the scoping document as what do we need to do in order to achieve a 33 percent. Not what is everything we need to know before we try.

Now, there are certainly integration issues and cost issues that are definitely important to look at. And will be essential in this process. And we look forward to being actively engaged.

One, in particular, with regard to integration, that is touched upon somewhat in the scoping memo, but we'd like to offer this forward, is to re-examine procurement practices as well as resource adequacy. To focus on building our energy needs around energy and associated greenhouse gas emissions, et cetera, rather than solely on capacity.

And this is an important issue for integrating more renewables. And it's also directly connected to a number of power plants that are proposed throughout the state that could potentially impinge our ability to meet our

target.

And on the point of rate impacts, I agree it's very important to look at this, but I would also encourage the Energy Commission to look at the rate impacts of achieving a 33 percent RPS, as well as the risk of not achieving it. What does that mean for fossil fuel price risk? What does that mean for greenhouse gas price risk.

Thank you.

PRESIDING MEMBER BYRON: Excuse me, did
I understand you, Ms. McMahon, to say that the
portfolio power plants that are under
consideration right now could inhibit our ability
to meet our RPS standards?

MS. McMAHON: Potentially. Assuming that they all go forward. I think that something that would be good in this process, I would recommend to look at all of those proposals and how they impact our ability to achieve our 33 percent renewable goal. As well as renewable goals and energy goals out to 2050.

PRESIDING MEMBER BYRON: Thank you.

MS. KOROSEC: Go ahead, Steven.

MR. KELLY: Thank you. Thank you,

25 | Commissioners. This is Steven Kelly with the

Independent Energy Producers Association. And I just wanted to respond to some of the matters that are laid out for your attention in this process over the next year, year and a half.

First I just want to make the observation that renewables are a product unto themselves. And that we are now working in an environment of trying to pull investment dollars into California for renewables, where there's competition for those dollars not only outside of California in other regions, but globally.

We are now looking at a product to provide fuel diversity, but also a mitigation for greenhouse gases. It is having the effect of driving up the cost of renewables.

So the thing that I would like to see this Commission look at as we move forward in this IEPR is the extent to which the existing RPS structure which ties renewables to the cost of a gas-based unit is relevant anymore.

Recognizing that we've got legislation there may be alternative ways that we can actually move on renewable procurement that takes into account my perception that the existing RPS is almost a barrier to renewable development rather

than a catalyst.

We have now gotten ourselves in a box where we are comparing new renewables, or even existing renewables that are re-upping in a market, against a gas-based product where we're comparing apples and oranges.

It's highly unlikely, in my view, that we're going to realize significant amounts of new renewables while we continue to be tied to a gasbased product. And I understand the legislation under the RPS, 1078, requires that. But I'm thinking we need to start rethinking that box and see if we can get outside of that box to other means.

Secondly, related to this issue of the integration of renewables. We've been studying across this country the integration of renewables for a number of years. This is nothing new. And everybody pretty much recognizes that the integration of a high amount of intermittent resources does create some resource issues from an operational perspective.

But all the studies that I've seen on this, and ExCel did a very large study last year, year and a half, for the midwest, says that

there's not really any problem for renewable penetration until you get up to the 25 percent range.

We're moving backward as far as I can tell. I'm looking at the graph that says we've got 11 percent renewables. I thought we had 12 last year. So I don't know why -- I think the language about the concern over the integration of renewables is being used out of place. We're not anywhere close to that amount of renewables in California today to warrant that being an impediment to moving forward.

If we could double the amount of renewables today we would be at 25 percent; then we might have some of those problems. I don't think we have them now.

We support Edison's integration study on this. I think that is a very valuable tool. But as the Commissioner noted earlier, waiting two years for those solutions when every product that I've ever seen, every work study that I've ever reviewed in this matter says that the amount of renewables that California has today, and is likely to have in the next ten years, is almost inconsequential from an operational perspective in

this regard.

So I would like to see us move beyond the rhetoric of worrying about the integration and move on to the rhetoric of actually developing renewables and getting them in place.

That bring me to a third point, this issue of transmission. I recognize, as do many people in the state, that transmission is needed to bring on new renewables. But we haven't hardly brought on any renewables with the existing infrastructure today.

It's not clear to me why there haven't been more renewables with the existing transmission infrastructure. And I'm curious as to whether there were significant amounts of renewables that are existing today that don't require new transmission, that were not selected over the last four or five years in the RPS situation, that might have been a little bit more expensive. But could have come online by today.

We've asked the Public Utilities

Commission in filings in January timeframe this

year that maybe it's time, after five years, to

look at this program and how it's been

implemented; conduct an audit and find out whether

we missed some renewables that were instate today, or could be made operational without the investment of new transmission that we bypassed.

And is there a way that we can actually accelerate that development while we move aggressively to build the new transmission that is going to be needed to integrate some of the very large resource pockets in California in IID's service territory, in the Mojave and in Tehachapi.

But I think there could well be some renewables that are out there that we're not picking up today that we could use for not only RPS compliance, but for greenhouse gas mitigation, that we ought to be considering. They might not have been selected in the RPS because they were more costly than some of the stuff that was selected. But nothing's getting built. And meanwhile we're waiting for new transmission.

So, should we go back and revisit whether or not that stuff, in hindsight, might have been more cost effective than not. I think an audit would be helpful in that regard. And I urge this body to be looking at those kinds of issues.

Thank you.

ASSOCIATE MEMBER PFANNENSTIEL: Mr.

Kelly, back to your first point about decoupling the cost or the price that we pay from gas-fired generation. So, what I guess you're saying is move away from an MPR, move away from a market price referent.

Then how else would you suggest that the price be determined? Just open in the procurement process with all other forms of generation? How else do you set the price? Or maybe you're saying the whole price should be set in the market and regulators should have no say over it?

MR. KELLY: Well, I certainly think regulators should review the price that is being paid. That's their role.

But let me put it in this context. We are currently operating what are called all-source RFO solicitations. And in those all-source solicitations the Commission -- the Public Utilities Commission has acknowledged that renewables could, if they wish, bid into that.

But essentially what the utilities have been doing in that forum is going out for products that they want. And usually it is a dispatchable, load-following product, or it's a peaking product

or something like that.

I'm arguing now that maybe we should look at treating renewables as a product, and use the all-source solicitation for the utilities to go out for renewables in that world. Not linked to the MPR. Not linked to the other things that have been constraints in the RPS world. And just look for what is the least cost product competitively that can be procured for a renewable product. Either generally, or solar, or solar PV, whatever you want.

Announce it. Give people opportunities to plan to develop projects, and let them bid. At least at that point we'll know exactly what it is going to cost. And then you can evaluate how much of it you want.

PRESIDING MEMBER BYRON: Good input, thank you. Please introduce yourself.

MR. PLOTKIN: Thank you. Norman Plotkin representing the Alliance for Retail Energy Markets, a coalition of energy service providers serving roughly 10 percent of the load.

The problem for energy service providers who are LSEs subject to the renewables portfolio standard of 33 percent is the same as the problem

for 20 percent. We have a closed retail marketplace. And it's extremely difficult to operate with the purchase of, you know, set percentage of renewables when we're not sure about the load fluctuation. And no opportunity to go out and serve more load at this point in time.

But we agree with Edison -- wanted to leave that hanging for a second, because it's rare that I get to say that, on unbundling of RECs and loosening the instate requirements, and otherwise defining some of the renewables that are in the marketplace today that don't necessarily meet the eligibility for RPS today that many of our customers choose.

And speaking of choice, we have with the public consciousness raised over climate change and greenhouse gas reductions, we have an historic opportunity to empower individuals who are welcoming the opportunity to do so. And that is to go out and purchase renewable power.

The renewable portfolio standard is invisible to Californians. They have no clue about the renewable power that's purchased on their behalf. They really don't.

Now, the utilities are beginning to

offer some offerings that are tailored to customers, but it's a push instead of a pull. And we really think that we're missing the opportunity wherein we can empower individuals to make choices about renewable power through their energy purchases, through a competitive supplier.

We saw GreenMountain was very successful in the early days of choice in California. There was a customer credit program here sponsored by the Energy Commission that offset some of the higher cost of renewable power. It's a proven track record of people who have a social conscience about renewable power exercising that power through their choice, through competitive market opportunities.

And so I'll leave you with that. We want to meet the 33 -- we want to meet the 20 percent, but it's tough. We want to meet the 33 percent. The clearest path forward for us to meet these renewable requirements is to reopen the retail market and I'm happy to have Commissioner Bohn's ear today.

PRESIDING MEMBER BYRON: Commissioner Bohn.

COMMISSIONER BOHN: Thank you, I was

waiting for that. So your position is renewables at any cost, no matter what the subsidy is, no matter what the taxpayer burden is?

2.2

MR. PLOTKIN: No. No. Our view is that the marketplace will discipline the cost of renewables. And if you start empowering individuals to make these choices instead of command and control, forcing a specific percentage, and people start drawing on it, the market will grow and it will discipline the prices just the same as the brown power.

I mean the market will discipline the prices. Our mere presence disciplines the utility prices and will do the same in the renewable market.

COMMISSIONER BOHN: In the situation that you refer to, at least much of the evidence, and much of, certainly, the discussion that we hear, that I hear, is that there are all kinds of empowerment going on. There are all kinds of people waiting for the advanced meters. There are all kinds of people going out and participating in green credits and all of this kind of stuff.

So it strikes me that the social conscience that you're talking about is alive and

well and doing very well. And, indeed, growing by leaps and bounds.

Much of that social conscience, however, does not -- ends up at the feet of the taxpayer and ratepayer in the form of subsidies. Is it your position that all of those should go away and we just let the chips fall where they may, in terms of price?

MR. PLOTKIN: The subsidies?

COMMISSIONER BOHN: Yes.

MR. PLOTKIN: Well, I mean there's been a wholesale restructuring of the RPS in the last year; the supplemental energy payments have gone away. Now they're ratebasing the cost for the utilities for the renewable power purchases. I think we're moving away from that.

The green E and the certificates that are sold in the marketplace today, that is an example of people taking those choices. But it doesn't count for RPS. That's part of the problem.

So, we want to have the things that are being done now count toward the renewable portfolio standard. And we want to empower individuals at a further rate than is currently

happening.

We acknowledge that it's happening today, and we're in the middle of that marketplace. But we see exponential growth opportunities that will help you achieve the levels of renewables without a command and control approach.

COMMISSIONER BOHN: So your issue is your report card?

MR. PLOTKIN: At the end of the day what the customers buy will be the report card. And if we make it available and have the opportunity to market to them, they will.

PRESIDING MEMBER BYRON: Mr. Plotkin, the social consciousness that you're referring to, of course, I think of in residential customers.

Are you also suggesting that your AREM members will begin to buy renewable power in large portions?

MR. PLOTKIN: Absolutely. I mean we're struggling to make the 20 percent now. We have people asking for it. One of our problems is it doesn't always -- it's not always eligible when we're able to purchase, or the renewable certificates that aren't eligible yet. It's on

the horizon. But certainly we want to see that opportunity enhanced.

PRESIDING MEMBER BYRON: Mr. Tutt.

MR. TUTT: Mr. Plotkin, you said that there are parts of the green E certified products that aren't eligible for the RPS. What specifically are you referring to there? Is it just real energy credits, or is it some particular technology, or what?

MR. PLOTKIN: No. It's my understanding that most of the green E certificates that we sell for our customers aren't eligible for the RPS.

Because it's the renewable attribute that you're purchasing, and because the T-REC program is not up and running, we can't count it.

It's on the horizon and we're looking forward to further expansion. But today it doesn't count, so we don't get credit for it.

PRESIDING MEMBER BYRON: Okay. Please.

MS. TRELEVEN: Good morning,

Commissioners. I'm Kathy Treleven from PG&E. And I appreciate a chance to -- and PG&E appreciates a chance to start working with you on the next year and a half of energy issues.

And I wanted to speak today on

renewables, about how I think that we can continue to move forward while we're studying these important barriers.

We have been very active in three areas that have been identified as important barriers to moving forward in getting more renewables. And I think those barriers are important to address regardless of whether we stay at 20 percent, or move steadily forward.

Both our transmission side of the house and our generation side of the house have been active in the Energy Commission's intermittency studies. And we've been involved with the ISO's studies, watching them closely. And we will be working with them to move forward. Integration questions are important at 20 percent as well as 33 percent.

We agree with the Commission that the transmission expansion is important. And we've been very involved with the ready committee. And all of us have been working hard on the transmission queue issues.

At this point I'd like to just keep my remarks brief. But if you have any questions I'd be glad to address them.

PRESIDING MEMBER BYRON: No, that's 1 2 fine. Thank you very much. Anyone else care to comment on this 3 initial topic here for the 08 IEPR update, system requirements for 33 percent renewable scenario? 5 MS. KOROSEC: Do we have anyone on the 6 phone, Harriet? 7 MS. KALLEMEYN: No. PRESIDING MEMBER BYRON: Ms. Turnbull, 9 good to see you. 10 MS. TURNBULL: Good to be here. I'm 11 Jane Turnbull; I'm here on behalf of the League of 12 Women Voters of California. 13 I think the topics that have been raised 14 this morning are valid. And I think in most cases 15 16 we agree with the initial comments provided by 17 Southern California Edison. PRESIDING MEMBER BYRON: Did you want to 18 pause there for effect, as well? 19 20 (Laughter.) MS. TURNBULL: We are concerned about 21 the long-term costs of renewables. And we are 22 23 concerned about the existing RPS standard and

wonder why there have been such difficulties in

24

25

achieving it.

You know, transmission has been blamed, and probably there are very valid concerns about the transmission siting that is going on in the state.

But also we have heard that there have been problems with the development of the contracts. This has come up again and again, but it has not been a transparent issue. And I think that it would be a good thing to do to look at how the contracts have been developed over the last several years; and define if there have been legitimate problems in the negotiation of those contracts.

PRESIDING MEMBER BYRON: Thank you, Ms.

Turnbull. Yes, I think it's fair to say, given

the comments we've received here this morning, and
things I've been reading in the press recently,
there's a great deal of interest about why we're

not meeting our RPS standard.

Commissioner Bohn, you probably noticed the Governor's gotten kind of concerned about this issue of late as well.

So, if there's no more comments on that -- none on the phone?

MS. KOROSEC: All right, let's move on

to the next topic, which is energy efficiency in the Commission's demand forecast.

In the 2007 IEPR parties raised the issue of needing to better understand how energy efficiency is accounted for in the CEC's demand forecast. And the 2007 IEPR committed to evaluating this in the 2008 update.

The intent of the evaluation is not so much that the CEC expects all parties to agree with our forecast, but it's more that we have to be very clear about what goes into those forecasts so that parties at least understand them, and so that agencies that are using the forecast are using it consistently.

The IEPR Committee held workshop on March 11th on this topic. And in that workshop parties stressed the need for coordination between agencies who are using the forecast. The Air Resources Board uses it to come up with their business-as-usual GHG emissions which will ultimately tell us how much reduction that we need to meet our AB-32 goals.

The investor-owned utilities use it in long-term procurement. And the publicly owned utilities are using it in coming up with their

goals for achieving all cost effective energy efficiency.

In the workshop parties also repeated some concerns about the need for consistency in the assumptions about how much of future or uncommitted energy efficiency is embedded in the forecast.

Natural Resources Defense Council gave the example of the E3 methodology being used in the greenhouse gas modeling work which assumes that the forecast includes 100 percent of uncommitted energy efficiency versus the Energy Commission's analysis of achieving cost effective energy efficiency potential, which assumes that none of the uncommitted energy efficiency is included in the forecast.

We really believe that the Energy

Commission should provide a clear explanation of
how efficiency is incorporated into the forecast.

Parties need to understand how utility programs,
standards, codes, all are embedded in the models
that are used to develop the forecasts.

And we also need to understand what other effects, like price response or market effects, or trends in the market are either

included or not included in those models.

We need to understand whether there's a large percentage of efficiency that's -- or potential that's embedded in the forecasts. And, if so, what impact that's going to have on decisions to go forward to try to achieve additional potential.

The attachment to the hearing notice for today identified some questions that the IEPR Committee believes should guide the discussion of this topic. They're listed here:

How do we make embedded energy
efficiency more explicit? What new forecasting
tools could we use to look at longer term
efficiency strategies like zero emission building
goals towards our longer term GHG reduction goals?
And what kind of collaboration do we need between
the utilities, the PUC, the Energy Commission and
other parties to really refine our methods of
forecasting energy demand?

Again, what the Committee is seeking is a sense of are these the right questions? What other questions do we need to add? And what concerns do parties have on this topic?

So, with that I'll open it up to

comment.

MS. JONES: Jaqueline Jones, again, for Southern California Edison. Just a couple of quick comments.

We want to recognize the importance of the issue in recognizing the amount of energy efficiency that's in the forecast, because since the forecast is used for so many things, as Ms. Korosec was speaking, there is an element of procurement risk. So if there's not enough procurement, or there's over-procurement, it's detrimental to the ratepayers.

From our perspective the main issue is attribution between codes and standards and utility programs. And one of our recommendations in order to identify that is to investigate the potential of coordinating EE forecasting models with demand forecasting models.

There are models that are in use today actually in the EE OIR through the PUC that are used for estimating different levels of EE potential. And we feel if those models are somehow coordinated with the CEC's current demand forecasting model we should be able to make better assumptions for the different levels, even though

one is measure-based and one is end-use based. We believe that there could be some coordination.

It's going to be a difficult process in order to do a calibration between the two sets, but we believe that that's the best opportunity for being able to fully understand what's correctly incorporated.

Thank you.

PRESIDING MEMBER BYRON: Thank you.

ASSOCIATE MEMBER PFANNENSTIEL: John.

PRESIDING MEMBER BYRON: I'm sorry,

Commissioner, did you have a comment?

COMMISSIONER BOHN: I'll wait till we're through.

PRESIDING MEMBER BYRON: Okay.

MS. TRELEVEN: Kathy Treleven, PG&E. We very much appreciate the hard work that the staff has done over the past eight, nine months to try to understand why our forecast with energy efficiency accounted for -- run higher than their forecasts with energy efficiency, somewhat accounted for.

And it's a very very important issue to resolve. And we remain ready to work on it. And we're sort of hoping that we could get a better

understanding at this workshop of the next steps.

There was an in-depth workshop, very interesting, back in March. We were kind of thinking the next step might be another report from the CEC Staff, and further workshops. And we remain ready to join in at whatever the next step is.

Thank you.

ASSOCIATE MEMBER PFANNENSTIEL: Kathy, what do you think about Edison's proposal that to use the PUC models to calibrate against our models, that somehow that will give us the answer?

MS. TRELEVEN: You know, I'm not expert enough to understand it. I can bring back an answer from our demand folks.. It does seem to me that there was an apples-and-oranges or an apples-and-apple cider kind of comparison problem where different kinds of models were trying to do the same thing.

ASSOCIATE MEMBER PFANNENSTIEL: Okay.

PRESIDING MEMBER BYRON: Thank you, Ms.

Treleven. I understand we have Tim Vonder from

San Diego Gas and Electric on the phone. Tim, do

you care to comment on this topic?

(Pause.)

PRESIDING MEMBER BYRON: Seems like
we're slow to respond on these. I also understand
that we may need to go back and pick up some
comments here from others that were unable to get
through on the first topic. But we'll stay where
we are right now on this topic.

Я

MS. ETTENSON: Hi, this is Laura

Ettenson from NRDC on the phone. Is this a good
time for me to comment?

PRESIDING MEMBER BYRON: Okay, Ms.

Ettenson, good to have you. And were you going to go ahead with the energy efficiency or do you want to go back to the 33 percent renewable portfolio standard issue?

MS. ETTENSON: No, my comments are specific to the energy efficiency, this current topic.

PRESIDING MEMBER BYRON: Good, thank you. Go right ahead.

MS. ETTENSON: Okay, thank you for the opportunity to comment. I'm sorry I can't be there today in person.

NRDC thanks the Commission for your hard work and focus on delineating the embedded energy efficiency in the demand forecast. And we

generally support the Commission's questions that will be addressed in the IEPR update.

Я

But we'd also urge the Commission to include an examination of the embedded natural gas efficiency in the demand forecast. I think that (inaudible) needs to be addressed.

In addition we commend the Commission for identifying the need for increased collaboration among the involved agencies, and suggest that the Commission explore the best means to collaborate now in advance of the IEPR update so that there can be a coordinated effort to address the questions that have been posed.

And I thank you for your time, and I look forward to commenting on the 2009 IEPR that will be later.

PRESIDING MEMBER BYRON: Thank you, Ms. Ettenson. Yes, sir.

MR. BURT: I'm Bob Burt, Insulation Contractors Association. I want to make two general remarks before I start my detail.

One is that it's obvious, I think, to everybody that to the extent that energy efficiency succeeds, the total energy demand goes down; and therefore the 33 is easier to achieve.

The other point I would make is that most energy efficiency is locatable by its specific grid point. And therefore, it would seem that if an effort is made to map the energy efficiency that we get, it would help this job of trying to tie the energy efficiency forecast to the demand forecast.

The other primary reason for my coming up here is welcoming your point that we need to look at what is needed, new attention. And I have two points here.

energy efficiency in the walls of the many homes that were built in California before 1970 roughly, when they almost all had empty walls. The reason most of those walls still stay empty, in spite of the considerable potential for use in both heating and air conditioning demand is that when the holes are made in those walls to pump in the insulation, no matter how carefully repaired the holes are, it ends up with an ugly-looking wall unless you repaint it. So the cost of repainting has had to be added to the cost of doing the job.

I would propose that the increased cost in fuel and the increased cost of meeting peak

demand might make it feasible to redo the energy efficiency calculations on that particular and see if we could add a allowance for painting the wall that is insulated.

I say add an allowance for two reasons. Number one, it's the wall that needs repainting, not the whole house. And number two, unfortunately we've found out with the ZIP that there's a very -- we don't want to pay for painting contracts. We found out with the ZIP there's a very large population in California that would love to defraud an energy efficiency program. So let's just figure out an allowance and give it to them. I think there would be a tremendous potential there.

The other potential I see is that all through California hundreds and hundreds of point heat sources that could support a small cogeneration. Those are used by renters, rental agencies and rental owners to provide central heat and central water.

It's an unfortunate fact -- I have spent a fair amount of my life with close associations with real estate people -- it's an unfortunate fact that their attitude toward expending money is

very simple. If it maintains or, better yet, increases rents, let's do it. Grudgingly or willingly, depending on the personality.

But if it doesn't do either of those things, it's too expensive. It cannot be done ever. So if you're going to see any utilization of the potential of these many heat sources that have low cogeneration potential, it's going to need upfront public money.

Now, the contracts could be written in such a way that they tie in the property to repaying the public for that upfront money by recapturing most of the savings. And I think that that's about the only way it will happen.

And if it's done, of course, the large amount of money involved would almost certainly require a bond issue. And that would help the cost because the interest rate on California bond issues is considerably less than the normal interest rate used in calculating the cost/benefit on an energy efficiency program.

So my two suggestions are to, number one, take advantage of all those empty walls out there. When a house is built in California, unless there's an accident it lasts 100 years.

And to take advantage of all those, fairly, not a large number of point heat sources, exhaust that could be turned into low cogeneration.

And I have two more general remarks.

One is that I observe that the number of open contracts in the U.S. oil futures market is approximately triple what it was five years ago. That tells me that there's a large number of people in there that are fundamentally speculators. And we can easily guess the source, the hedge funds and so forth.

And I suspect that about the only supply/demand thing that's important in the size of that market is looking for counter-parties willing to buy the other side of the contract.

So I think we're going to have some considerable effort to expand that amount of speculation in the market, considering how often it's predicted that we're going far higher. And this leads me to look at natural gas.

Today the price of natural gas is a spectacular energy bargain compared to oil. Especially when you recognize that oil does not immediately turn into usable energy. You have to spend additional money and use what our present

extremely limited facilities to turn oil into usable energy.

So I think we should look forward to seeing some of that speculative money going over into the natural gas futures market. And therefore, I don't think we can expect the current extreme bargain price of natural gas to continue. That's strictly a guess on my part, but I think it has a logical basis.

With that, I close and ask if you have any questions.

PRESIDING MEMBER BYRON: Thanks, Burt. Commissioner.

COMMISSIONER BOHN: Thank you. I want to go back to the presentation of Southern Cal Edison. And I will pause for effect.

I agree with almost all of that, which, when you go back home, please tell them I said that because it doesn't happen very often.

I'm really very pleased that the CPUC and the CEC are working together on this energy efficiency and to refine the current forecasting. It is really important that this be done transparently.

As a relative newcomer in this area I

find it inconceivable that we can't agree on the process by which we make some of these really important forecasts.

I'm hoping that we will get both -we'll get two load forecasts. We'll get a
mitigated forecast, that is what we get from
utility savings, and then one which we don't.

But it's very important that the elements of both the assumptions and the algorithms and all that stuff are known to both sides. This is one of those times when we really can't afford, as a state, to get ourselves all hung up in silos and things. And certainly from the PUC's point of view, I hope it doesn't become a PUC model versus a CEC model. I hope we can just get rid of all that stuff and get down and figure out, and make transparent for people to comment on, what it is that we're trying to do here.

And get down to the integration of the energy efficiency thing. These are tricky; it's tricky math and it's tricky science. But the CEC has done a remarkable job over the years in a lot of these projections and things. And I'm hoping that we can contribute with a model, and the staff

can sit down together and kind of beat these things around, we'll get a combined result that's really meaningful.

So certainly from the PUC's point of view we're happy to do that. And if there are any issues that come up, I will be happy to do what I can to make sure they go away.

PRESIDING MEMBER BYRON: Good. Thank you for your commitment to that.

Any other comments on the efficiency savings implicit in the CEC demand forecast?

Harriet, do we have any more on the phone?

MS. KALLEMEYN: No.

PRESIDING MEMBER BYRON: None. Okay. We'll just pause for effect.

Any other commenters in the audience?

MS. KOROSEC: Do we need to pick up

somebody on the phone from the first topic?

PRESIDING MEMBER BYRON: Yeah, let's offer that. I understand that there may have been some interest on the part of commenters that couldn't get through on the first topic. So, let's go back and pick up any comments at this time. We'll also be opening up at the end for general comments. But if you'd like to comment on

the 33 percent renewable scenario, the system requirements for 33 percent renewables, this would be a good time.

MR. TOCA: Can you hear me?

PRESIDING MEMBER BYRON: Go ahead.

MR. TOCA: This is Charles Toca; I'm with US&R Powergrid Partners. And I wanted to comment on the original comments; I couldn't get through on the phone, but I apologize for being out of order here.

Looking at the remarks regarding promising technologies -- and operational changes, I wanted to bring up the whole issue of energy storage again.

I think energy storage is an important issue, especially with the advanced energy storage technologies we have available. They can be distributed around the grid, and of course, there's a lot of comment about the usefulness they have for wind energy and integration of wind into the grid.

I heard the original comments -- show that we can have the 25 percent participation by wind without really -- the grid. I think the other side of that coin is at a certain cost,

there's a cost to integrating that kind of wind energy -- putting lots of backup generation to support that.

Storage can be a part of that whole issue. And storage, especially -- storage technology can be placed at the source of the wind energy; it can also be placed and distributed throughout the grid to encourage that and to support that.

With regard to the studies that were requested, I have never seen a study where the cost of wind plus storage was compared against some of the other renewables that are promoted, such as solar.

My understanding is that the cost of the storage (inaudible). And I'd be interested to see what the cost comparisons would be between energy storage technologies and wind versus solar.

The advantage of storage, of course, is one can take wind energy dispatchable. Not only is it going to shift the production from the evening when we're looking at a problem of overgeneration, to the day. Technology make it dispatchable, where solar could not be -- at this point.

So we'd encourage you taking a look at that and taking a look at fostering that as an alternative.

I know one issue again has been that the cost of -- energy storage and technology. I think the answer to that is to value the different benefits that -- to the grid, and being able to take advantage of those different benefits.

For example, my company's looking at putting advanced energy storage solutions (inaudible) system at the site of an energy customer. This would be something in distributed energy resource. The customer will be able to benefit with reliability, regional reliability for their services; they don't suffer from any rolling blackout issues. And they also benefit from (inaudible) system.

So there's a value in that. There's a value to the local utility because now that customer can (inaudible) demand response, who could not before. Five megawatts (inaudible) different purposes.

It also improves the distribution circuit. We take out the cause of disturbances on the grid (inaudible) improve the circuit overall.

Also improves the (inaudible).

And, of course, the other issue is the services being provided to Cal-ISO. Next year Cal-ISO will allow demand response -- demand, due to the load sources, provide ancillary services and with a large megawatt system like that, provide emergency regulation and demand, some energy services between Cal-ISO.

So, this is taking advantage of what's early available for a site of an energy storage device. If we have valued storage devices like this in addition to renewable sources, then these services can be made (inaudible) available for those kinds of issues.

So, I would encourage again just that we look at energy storage as a technology to foster and encourage, and probably run a few more studies on how we could do that. I think we've got a lot of studies out there right now that show it makes sense. And perhaps we should just take a look at how we can optimize that and actually make it work.

PRESIDING MEMBER BYRON: Mr. Toca, thank you. I assure you energy storage is something that's under consideration with regard to RPS

integration issues. And I thank you for your comments.

Is there anyone else on the phone that wishes to comment in hindsight on the 33 percent renewable issue?

(Pause.)

MS. KOROSEC: They're telling me that they have a party by the name of Tam Hunt on the line but I'm not able to --

PRESIDING MEMBER BYRON: Is there a Tam
Hunt that wishes to comment?

MR. HUNT: I'm going to hold my comments until the end if you don't mind.

PRESIDING MEMBER BYRON: Great. That's fine. Then we'll go ahead and continue with development of common portfolio methodology for long-term procurement.

MS. KOROSEC: All right. The third topic in the 08 update was identified in the 2007 IEPR. Recommended that utility long-term procurement plans use common assumptions as much as practical; extend over a 20- to 30-year period of analysis; discount future fuel costs at the same discount rate that's used in standard-setting activity unless those costs are shown to be

shareholder liabilities; and to evaluate potential cost to consumers in procurement, including environmental impacts.

The intent of the IEPR recommendations was really to insure that this portfolio method of evaluating long-term procurement is being taken seriously. And that does seem to appear to be happening.

This issue is within the scope of phase one of the PUC's OIR on long-term procurement.

And the PUC Staff and CEC Staff are working collaboratively in that phase of the proceeding with the decision, I believe, expected from the PUC in December of this year.

Because of the schedule of the PUC's OIR it's not clear how much of the status or progress we'll be able to report on this issue in the 2008 IEPR, but in the meantime the IEPR Committee has identified a few questions that they feel should be addressed in the 08 report.

First, how do we incorporate
environmental impacts into long-term procurement?
Second, should utilities be using a 20-year or
longer analysis period? And what are the
consequences of using a social discount rate?

The developments in the current PUC proceeding are likely to affect the scope of the 09 IEPR on electricity procurement practices, so phase one is likely to identify the need for additional investigation. And we believe the 2009 IEPR is probably the logical forum for that proceeding.

So I'd like to go ahead and open this up for comments from anyone.

PRESIDING MEMBER BYRON: How about if we lead with someone other than Southern California Edison this time?

(Laughter.)

PRESIDING MEMBER BYRON: I know we have some commenters on the phone.

(Pause.)

PRESIDING MEMBER BYRON: We heard a voice. Please introduce yourself.

MS. SHERIFF: Yes, this is Nora Sheriff of the Cogeneration Association of California, and the Energy and Producers Users Coalition. Thank you for the opportunity to speak, and also to participate by phone.

We have an additional request for inclusion in the 2008 IEPR update, in the 2008

Energy Action Plan, two updates.

The Energy Commission and the Public Utilities Commission set the joint goal of developing a CHP policy. But this year despite the joint 2008 goal for a combined heat and power policy, combined heat and power is missing from the proposed scope of the 2008 IEPR update.

I'm looking at past IEPRs. The Energy
Commission's work is largely done in terms of a
separate combined heat and power policy. Last May
I came before you and urged Energy Commission
action to encourage CHP and make your 2020 vision
for CHP a reality.

And the Energy Commission responded and included the following 2007 IEPR CHP recommendations: The elimination of non bypassable charges and departing load charges for CHIP. Consideration of an annual utility procurement CHP target, or treating CHP as energy efficiency and helping the investor-owned utilities meet their energy efficiency targets. And also recognizing the greenhouse gas emission reductions benefit of CHP.

The 2008 IEPR update should explicitly reference and create a policy recommendation for

CHP from the 2007 IEPR. The Energy Commission needs to express continued support for the CHP policy recommendations, and for all CHP, including large CHP facilities.

Commissioner Byron described the IEPR as an extremely important energy policy statement for California, and it is. And the IEPR gains importance each year.

If CHP is not addressed in the 2008

TEPR, silence may not be uniformly interpreted as continued Energy Commission support. About 90 percent of the existing 9000-plus CHP megawatts in California are from large-scale CHP projects.

Without the state's strong policy framework in the 1980s in implementing PURPA and the Warren Alquist Act, these facilities likely would not have been built. Policy matters, and the IEPR policy matters.

Industrial sites are now looking at special CHP facilities in California. So, our clients, we know of several large CHP sites now under consideration. And each one, if built, would be greater than 20 megawatts.

Explicit and strong Energy Commission support and policy recommendations for all CHP

would help insure that these and other new and repower projects can be built.

So, in the 2008 IEPR update we ask that you reiterate or incorporate by reference the 2007 IEPR CHP policy recommendations.

Thank you for considering this; and we will also be providing written comments on Wednesday. Thank you.

PRESIDING MEMBER BYRON: Thank you, Ms. Sheriff. As you can imagine, the scope of these Integrated Energy Policy Reports continue to expand. They never seem to decrease in size. I can assure you that we'll consider your comment, but in -- also assure you that whether or not these 07 IEPR recommendations are repeated and continue to work on in this Committee, they are in progress in the Electricity and Natural Gas Committees, and at the PUC.

And we will continue to work on those 07 IEPR recommendations, regardless of whether or not they make it into the scope of the 08.

MS. KOROSEC: Is there anyone else in the room who wanted to comment on this topic? All right, if not, we'll move on.

Oh, I'm sorry, go ahead.

MS. JONES: Really quick comments.

PRESIDING MEMBER BYRON: I think there are others, Ms. Korosec, so we'll have to make sure we give everybody enough time to respond.

MS. KOROSEC: Okay.

PRESIDING MEMBER BYRON: Please.

MS. JONES: Jaqueline Jones again from Edison. Just, like I say, a couple of quick comments. We are very supportive of the coordination efforts between the PUC and the CEC on this subject matter.

And in response to a couple of the questions that were asked, Edison thinks that it's appropriate to have a 20-year length of valuation using the last five years -- well, as opposed to having an analysis values for every single year, to have them in five-year increments for the last ten years of the 20. Just because it's so far out and it's very speculative, we think that it's more appropriate to do it in that manner.

Also, we believe that we should have targets or goals for the analysis. And have the methods for reaching those goals left open. It would be more suitable to have, say, a GHG target and allow the utility or whoever's doing the

analysis the opportunity to select the appropriate technologies for generation, as opposed to having a 33 percent renewable target.

And that's it, thank you.

PRESIDING MEMBER BYRON: Thank you. Commissioner Bohn.

COMMISSIONER BOHN: Is there uniform agreement as to the calculation of the term social discount? Is there a number that everybody understands the pieces of and how they all go together and are agreed upon?

PRESIDING MEMBER BYRON: I do not know the answer to that.

ASSOCIATE MEMBER PFANNENSTIEL: So I think it's part --

COMMISSIONER BOHN: It strikes me as a relatively important issue if we don't know what the social discount number is.

MR. ALVAREZ: Commissioner, Manuel
Alvarez, Southern California Edison. I'm not sure
I can answer it definitively, either, but my sense
is that there probably isn't a uniform agreement
on what the discount rate should be either social
or private.

It does involve matters of term and ten-

year, and there are, in fact, some issues of philosophy in that particular number that need to be discussed.

It is a subject that comes up. It'll probably be a subject that we'll have to deal with during the course of a 2008 process. And we'll be prepared to discuss it, and what we think that appropriate number should be.

But, from a decisionmaking perspective, at least from my vantage point, if you understand the ramifications of one particular discount rate over another, and understand what those implications are, I think from a decisionmaking perspective that's the information you'd need. It's not particularly the importance of the number, itself.

PRESIDING MEMBER BYRON: Thank you, Mr. Alvarez. Are there any more commenters in the audience or on the phone for this topic?

MS. KOROSEC: There's another gentleman on the phone line (inaudible).

PRESIDING MEMBER BYRON: I understand there's someone on the phone. Would you go ahead and please identify yourself.

(Pause.)

PRESIDING MEMBER BYRON: I have an 1 earlier card here from Mr. Mohan or Ms. Mohan 2 Niroula. 3 MR. NIROULA: Hello. 5 PRESIDING MEMBER BYRON: Yes. MR. NIROULA: I don't have comments here 6 for this item. 7 PRESIDING MEMBER BYRON: Okay, thank 8 9 you. 10 MS. KOROSEC: All right, shall we go ahead and move on then? 11 PRESIDING MEMBER BYRON: One moment, 12 13 Let me just confer with my fellow Commissioners here. 14 (Pause.) 15 PRESIDING MEMBER BYRON: Just 16 rearranging our schedules here. Let's -- if it's 17 okay with everyone I think what we're going to do 18 is continue on, because we feel we may be close. 19 And so, Ms. Korosec, go ahead and take us to the 20 21 next topic. MS. KOROSEC: All right. Our next topic 22 is the last three topics within the 2008 update, 23 which were basically summaries of work that's 24

being done in other venues. A summary of the

25

August joint CPUC/Energy Commission recommendations to the ARB on the auctioning or allocation of allowances. And the discussion of any outstanding questions or additional analysis that may be needed as a result of that effort.

A summary of the Energy Commission's findings and recommendations regarding nuclear power plant vulnerability required by AB-1632.

And a summary of our evaluation of the PUC's self-generation incentive program which is required by Assembly Bill 2778.

Obviously the AB-32 work is of major interest to us this year, so we feel that the 08 update is an appropriate place to report on that. And the other two items are required to be included in the 08 report by legislation.

There's not much more to say about these. As I said, the work is being undertaken in other venues; they have other schedules that will be published concurrently with what's going on with the IEPR on our website.

So, is there anyone who has any comments on any of these topics?

All right, I wouldn't imagine there was going to be much comment on these. So, if there

aren't any other comments, let's go ahead and move on to the 2009 IEPR.

Senate Bill 1389 identifies a long list of topics to be included in the IEPR. These were identified in the attachment to today's hearing notice. I won't go over these in any detail, but they generally fall into some broad categories.

For the electricity and natural gas sectors we'll be looking at supply, demand, infrastructure including the transmission system, which also includes our Strategic Investment Plan. We'll look at impacts on public health and safety, on the economy and on the environment.

This will also likely include a discussion of the effects of load management efforts, as well as a continuation of the scenario and portfolio analysis efforts that were begun in the 2007 IEPR.

The transportation sector, we'll be looking also again at supply and demand. Looking at forecasts of wholesale and retail prices, infrastructure needs, alternative transportation scenarios and how to improve efficiency, reduce petroleum dependence, and to improve environmental performance in the transportation sector.

We'll also look at environmental performance in the generating sector for new and existing facilities and impacts on those and on system reliability; policy efforts to address impacts of once-through cooling in those facilities.

Finally, we'll be looking at public interest strategies. This includes energy efficiency, progress towards our renewable goals, further examination of this feasibility of 33 percent by 2020 issue. And then also research and development efforts.

As I said a little earlier, the Committee is going to be holding a second scoping hearing in early June on the 09 IEPR. But in the meantime we just wanted to get input from the parties if you feel that there are additional areas of focus, or areas within the ones that I've identified that you feel deserve some special attention.

So, with that, we'll move on to comments from people. I have one card from --

PRESIDING MEMBER BYRON: Okay, I do have some comment cards from some on the phone, and one present. I think these are more in the category

1 now of general comments.

Mr. Sparano, would this be a good time for you?

MR. SPARANO: Yes, sir. Good morning, Commissioners. I have about 30 seconds for that to be accurate. Thank you for allowing me to speak. My name is Joe Sparano, for the record, President of the Western States Petroleum Association.

I have a few overall comments, a few questions that WSPA wold like to see addressed, and some recommendations. And I'll try to be quick with them.

I believe, in looking through the materials, that the CEC's major responsibilities still include insuring that California's portfolio of energy supply options provide adequate, reliable and affordable energy supplies to consumers and households and businesses when and where they are needed. I think it's important that that principle be maintained and held dear as far as the 2008 and '9 IEPR efforts are concerned.

The 2008 IEPR, from what I could read, does not include transportation fuels issues.

Even though the description in the CEC materials

states -- I'll try to read it accurately: The
2008 IEPR update will focus on the subject of
specific energy issues that the Committee has
identified as needing immediate attention; and
will be developed in a shorter timeframe than the
2009 IEPR."

No argument with the statement.

However, a few questions. Is the Commission satisfied there are no issues related to transportation fuel supplies that require immediate attention?

I don't mean to exclude the PUC Commissioner and I apologize for that. But most of our comments are focused on the transportation sector at this point, so I'll be emphasizing that area.

What about supplies produced in California that are lagging demand, such that we are net importers as of 2005 of at least gasoline and probably jet fuel? Jet fuel hasn't received a whole lot of attention, but I think California's been a net importer for a long time. So we have those facts at work.

How California policies allow meeting increased future transportation fuels requirements

in both California and neighboring states that are supplied by California refineries? What about needing to increase, as stated in the 2007 IEPR, or even trying to maintain imports and through-put in an infrastructure that the Energy Commission has described as at or near capacity and needing expansion? How and when will the IEPR address those issues?

I think those are the types of issues that, certainly from our perspective, require immediate attention.

A recommendation. The 2008 and '9 IEPRs need to focus more attention on all transportation fuels supply adequacy, including the manufacturing capabilities for all petroleum-based fuels, and any and all nonpetroleum-based alternative and renewable fuels, and on meeting infrastructure requirements for all fuels.

I typically stand before you and we talk about petroleum-based fuel infrastructure. But I think it will come as no surprise to anyone who's been at these IEPRs for awhile that we're going to have the same type of infrastructure issues with alternative and renewable fuels. And some of them may actually be even more complicated and more

difficult for us collectively to address because none of the facilities exist.

13.

It took the industry I represent 100

years to put the infrastructure in place

nationwide and in California. And now we're

confronted with the good possibility that we'll

have other fuels that burn cleaner and that

perhaps we can produce smarter. They're all going

to need infrastructure. I think that is a really

important issue that probably can't wait.

A question on another issue. Is it possible to have California energy policy that insures adequate fuel supplies while emphasizing, and this is to a greater and greater degree each time an IEPR is produced, policy initiatives focusing on reducing carbon dioxide emissions.

Our industry not only doesn't have any argument with that, we have taken a leadership position in working with the Air Resources Board in trying to insure that AB-32 and the low carbon fuel standard are implemented successfully. I can give you examples of that, but I won't unless someone is interested.

The question at hand is are the two initiatives compatible. I think that's a serious

question that begs an answer that maybe wasn't quite such a question three years ago when the 2005 IEPR was developed. But it certainly expanded in terms of interest in the last IEPR.

Another recommendation. WSPA believes that the Energy Commission needs to seek oversight of California ports policies. Right now, as referenced in the 2007 IEPR, the Energy Commission has asked for the right, through legislation, to appeal policy decisions. We think it needs to be a whole lot stronger than that. The ports are our pinchpoint. They are for petroleum fuels; they may likely be for many of the alternative and renewable fuels that come into California's energy supply portfolio.

ASSOCIATE MEMBER PFANNENSTIEL: Excuse me, Joe.

MR. SPARANO: Yes.

ASSOCIATE MEMBER PFANNENSTIEL: Are you suggesting legislation to give us some kind of regulatory authority over the ports?

MR. SPARANO: That's on page 30 of your executive summary. It asks for legislative --

ASSOCIATE MEMBER PFANNENSTIEL: Yeah, legislation for --

MR. SPARANO: It asks for legislative -ASSOCIATE MEMBER PFANNENSTIEL: But not
general authority. I thought that that was rather
targeted.

1

2

3

4

5

6

7

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. SPARANO: I was just trying to repeat accurately what's in the executive summary and in the IEPR. But, by whatever means, Commissioner. I don't -- it isn't for me to say the means. I'm very concerned that the Energy Commission, as we spoke in 2006 or '7, and the Port of Los Angeles, I think you two Commissioners, you and Commissioner Byron, Commissioner Boyd and Commissioner Geesman, at the time, were all present. And for one of the great times in my experience we all agreed completely on an issue. And that was that the Energy Commission needed to be more involved on a state level.

And unfortunately, that translated into having the right to appeal. And I think from the standpoint of what is going on in the ports, the state may need a stronger position. That's all I was trying to reflect.

ASSOCIATE MEMBER PFANNENSTIEL: I see, thank you.

MR. SPARANO: If you'll excuse me just a

second.

(Pause.)

MR. SPARANO: I realize that's somewhat unorthodox, but I'd rather speak than be completely dry and not speak. So, forgive me for that interruption.

The other issue I wanted to talk about that concerns me is the Energy Commission, in particular, continues to focus on reducing petroleum dependence. And doing so in quantitative terms that from our calculations will mean 15 to 40 percent of the existing supply of gasoline per CEC objective, and diesel and jet fuel, will go away by 2020. Fifteen to 40 percent, depending on where demand goes. And where some of the climate change initiatives end up; 1493 particularly, and AB-32 and the low carbon fuel standard, the results of all those.

We're greatly concerned that there is a mandate to produce alternative and renewable fuels; many of them are not yet ready for primetime. I don't know how long it will take, but certainly there are many issues, as was well described -- god bless you -- again -- as was well described in the 2007 IEPR. There are many issues

that have to be addressed and overcome for many of those fuels to come to market in mass market quantities.

R

And that means they have to be scientifically sound. Some of that is unproven. They have to be technologically feasible. There has to be a process that works on a commercial basis. And that is cost effective for consumers.

Many of those questions are unanswered.

And once again, I know I sound like a broken record. This is a major issue, and I think the Energy Commission needs to reconsider its emphasis on getting rid of what the state says are the cleanest burning gasoline and diesel fuels you can buy anywhere on the planet. Every ounce, every day meets specification, is your specification in the State of California.

And so I think there's kind of a disconnect there that ought to be address.

That extends to ultra low sulfur diesel. Ultra low sulfur diesel is a new product with 15 parts per million. It is currently excluded as something we can use to help meet the low carbon fuel standards, and that it is now part of the standard, and there are reductions required in

carbon intensity for diesel.

R

We think that the Energy Commission might take a look at that and perhaps come up with a different view than the Air Resources Board currently has.

Finally, the permit system. Another of my favorites. We still have, in California, a complicated, confusing, duplicative and often very very difficult permit system that project proponents have to wade through just to get a project built.

That means someone who wants to add refining capacity; it will mean someone who wants to build a biofuels unit somewhere; it will mean someone who wants to construct windmills or add solar panels. Everyone is subject to this system.

And we think that the Energy Commission ought to, once again, because you have in the past, weigh in on this issue and try to insure that it doesn't complicate and make more difficult our collective desire and ability to bring more energy supplies to market.

I thank you for allowing me this time to make these comments. And would be happy to answer your questions.

PRESIDING MEMBER BYRON: Mr. Sparano, thank you for your comments. I think a similar response with regard to combined heat and power topics brought up earlier, clearly these transportation fuel issues are extremely important. We're going to continue to work on them.

They will be an integral part of the 09
IEPR cycle. But trying to limit scope for the interim work so that we don't overpower what really is the emphasis of the IEPR, and that's the two-year cycle. We will take your comments under advisement, but in all likelihood we will try and continue to limit scope for this interim update so that we can focus on these important issues as part of the normal IEPR cycle.

Notwithstanding those recommendations in the 07 IEPR do stand, and are important, and we are working on them.

Thank you.

Let's see, Mr. Plotkin, I have a card from you. Did you care to add some additional comments?

MR. PLOTKIN: I would, thank you very much. Norman Plotkin representing the Alliance

for Retail Energy Markets. And I will call an audible, however. Given your response to some of the other commenters vis-a-vis the update this year, and I will just then point my comments toward the 2009 IEPR.

And along the same lines of the testimony that I gave before with respect to the renewable portfolio standard, 10 percent of the load in California roughly is served in a competitive marketplace. And we have before the Public Utilities Commission, 07-05-025 is the order instituting rulemaking on reopening the retail marketplace.

And so it has a major impact. As loadserving entities, we're subject to the renewable
portfolio standard, resource adequacy
requirements. And so it's very important that as
this proceeding moves forward and we contemplate
the reopening of the market and empowering
individuals to take their energy choices in their
own hands, with respect to their overall energy
needs, as well as renewable needs, I think it's
very important that the 2009 IEPR look into,
understand and comment on what's going on at the
Public Utilities Commission with respect to the

retail market.

Because it's going to have a significant impact on planning, procurement and the energy marketplace. We value your input. It may be a little dangerous, we may not like what you have to say sometimes, but we think it needs to be said. And we think it needs to be included.

So I'll just leave you with that, with urging you; and I'll follow up with some written comments urging you to please take into consideration, recognizing the Public Utilities Commission OIR on reopening the retail market, and having a look and a discussion in the 2009 IEPR regarding that matter.

Thank you.

PRESIDING MEMBER BYRON: Thank you. Mr. Plotkin, we've not met. Have you had an opportunity to participate in previous IEPR cycles?

MR. PLOTKIN: I have, and I've filed comments, to no avail. We were successful in the Energy Action Plan. So we're hopeful to build on that success. And I've been remiss in not getting in to see you, and will do so.

PRESIDING MEMBER BYRON: Well, I

encourage your participation. I don't want you to be afraid of the outcome here. We want you to participate so you'll have some input to it.

MR. PLOTKIN: Thank you.

PRESIDING MEMBER BYRON: Thank you.

Please, go right ahead; I'm sorry. I'm sorry. Please introduce yourself.

MS. TRELEVEN: Thank you, Commissioner. I'm Kathy Treleven, again, from PG&E. And in surveying PG&E about the 2009 scope, we didn't come up with any large issues that needed to be added to that broad survey.

But I did find a few folks interested in expanding the inquiries on the load forecasting.

I just wanted to pass those on in the spirit of a workshop as additional ideas.

We know that the CEC has been involved in investigating the impacts on load of climate change through the PIER project. And we've done some investigating, ourselves. And would like to see some reflection on the possible variations associated. Especially with peak demand of the load forecast, as we move out into the next decade or two.

And kind of similarly another inquiry

folks suggested is a broader look at the possible impacts of electrification choices. Within our own basecase we assume a certain amount of plug-in hybrids and a certain amount of electrification of ports.

But there are scenarios in which, pushed or pulled, we may find that there is more electrification. And we'd appreciate a survey or help appreciate participating with you in a survey of where that might take us.

Thank you.

PRESIDING MEMBER BYRON: Thank you.

MR. ALVAREZ: Manuel Alvarez, Southern California Edison. There's a couple of items that I want to bring to your attention. But yet I believe they can be handled within the context of the scoping order that's presented. But I do want to bring them up to you.

The first issue deals with the effects of the aging distribution system in California. I believe you can handle that under your electricity assessment components. But I want to flag that for you.

The second item I want to bring up that I believe I can handle under the transmission

corridor planning exercise, but I think it has broader implications. That's land use planning.

I think that issue needs to be on our agenda for 2009. A number of occasions for local governments and their relationship to transmission projects, power facility projects in general need to be here at the table to discuss those issues with you.

Thank you.

ASSOCIATE MEMBER PFANNENSTIEL: Manuel, let me just clarify. When you talk about land use planning are you talking about it specifically in the context of transmission siting, power facility siting? Or is it more general question of land use energy that we have been investigating for the past couple cycles?

MR. ALVAREZ: I think it's the broader definition, but specifically we're also interested in the facilities, themselves, since that'll be primarily our implications there. But the broader land use question is the more general topic.

ASSOCIATE MEMBER PFANNENSTIEL: Thank you.

PRESIDING MEMBER BYRON: Please, Ms. Turnbull.

MS. TURNBULL: This is Jane Turnbull from League of Women Voters. It's a remarkable day. I get to follow Mr. Alvarez and largely reiterate exactly what he had to say. Because one of the League's positions was that one of the strongest parts of the last IEPR was the section on land use planning.

And the level of initiative that the Energy Commission has taken in this area is commendable and really vital in terms of the long-term concerns of the state.

We just see an ongoing relevance for the relationship between land planning and use and energy supplies. Part of it is related to the actual changing nature of the energy business.

There will be increased involvement on the part of the people of the state in their energy decisions.

real. The smart grid is something that's coming.

And it's an exciting event to anticipate.

Distributed generation is really almost in its infancy, but the potential is great. And we don't know what plug-in hybrids are going to do.

Demand response is something that is

All of these things are going to have major impacts. Also the ongoing interrelationship

between energy use and greenhouse gas implications, and land planning and greenhouse gas implications is something that is now being understood, but certainly there's a way to go.

Little by little there is some sense of blueprint planning going on in the urban areas around the state, but this is really in infancy; and it really needs to be encouraged because if we're going to have optimal use of our resources, we have to understand what the implications of the decisions that we're making now are going to have in the long term. And these do impact on our energy future, but in terms of the state's overall health and economy.

PRESIDING MEMBER BYRON: Thank you, Ms. Turnbull. Thank you for being here today, also.

MS. KOROSEC: Are there any comments on the phone?

PRESIDING MEMBER BYRON: Let's open it up to the phone if there's anyone that would wish to provide general comments.

OPERATOR: Okay, would you like me to just open their line.

PRESIDING MEMBER BYRON: Please, yeah.

Please identify yourself.

MR. HUNT: Hi, this is Tam Hunt with the Community environmental Council. A few general comments on the 08 update. I applaud the Commission for its continuing robust IEPR process. And I understand you have time commitments and time constraints as to the scope of your update and the 09 process.

I would, though, agree strongly with WSPA, which doesn't happen very often, that the transmission sectors should be in the 08 update.

A little different focus than WSPA highlighted in particular.

In particular the 09 -- pardon me, the 07 IEPR, -- some supply issues with oil. It is not framed in the way it needs to be framed. The issue of peak oil is becoming more prominent. And in our regional plan, the Santa Barbara region highlight typically the -- between the crises of climate change and peak oil. I think it's very important to get the peak oil issue to the level of the IEPR process because it is a very serious issue.

If you're not familiar with this issue, simply peak oil refers to the maximum of oil production on a global basis, at which point

production declines.

A secondary issue, I mean more -- is the issue of peak exports. And we have, of course, Russia in the news recently announced it's probably past peak. Saudi Arabia announced they are not going to expand production capacity past a million barrels per day when we were expecting 15 million barrels per day.

Mexico, of course, is declining very quickly in production, 12.5 percent decline, last quarter alone of 2007.

It's a very serious issue, and I think the 08 update should, in fact, include this issue and really focus on what happens to our economy if oil keeps on going up. You know, 120 a barrel you see today, higher than \$4 a gallon of gas you see today, higher than 4.50 a gallon of diesel we see today.

And really focus on the issue of planning for the more dramatic scenarios, and urge what the government's -- really serious about these issues, because it's really still fairly low on the radar.

I have more comments on the '09 process, so I'll hold this till later.

PRESIDING MEMBER BYRON: Well, now is later. So, Mr. Hunt, if you have any additional comments, go right ahead.

MR. HUNT: In that case, then, in terms of the 09 process, we have raised in the past the issue of lifecycle analysis for electricity and natural gas. And as you know, AB-1007 requires lifecycle analysis, or what they call a full fuel cycle analysis for transportation fuels. We fully support that. It makes no sense from our point of view to require that analysis on transportation fuels but not for electricity and natural gas.

We'd urge the Commission to include that in the 09 IEPR process.

On LNG, this is an ongoing debate. If you're not aware, LNG prices have skyrocketed -- fossil fuels globally. And LNG imports, the U.S. has declined precipitously because Europe and Asia are paying a lot higher prices than the U.S. is.

So the Commission's long-term support for LNG is running up against the problem of global pricing. When you include also the factor that LNG has much higher associated greenhouse gas emissions because of its lifecycle, that makes, I think, a re-evaluation of LNG, and support by the

Commission for LNG timely at this point in the 09 IEPR.

Thank you.

PRESIDING MEMBER BYRON: Thank you, Mr. Hunt.

MS. ETTENSON: Hi, this is Laura Ettenson from the Natural Resources Defense Council, again.

PRESIDING MEMBER BYRON: Go ahead.

MS. ETTENSON: Thank you. Well, I have a few more topics that I would like to include in the scoping of the 2009 IEPR, beginning with the -- utilities, we first want to thank the Commission for your hard work on the first-ever AB-2021 report that was released in December of last year.

Moving forward we urge the Commission to include AB-2021 in the IEPR update if possible, or in the 2009 IEPR, to continue the momentum that we started towards achieving the aggressive goals set by the POUs.

In particular, we recommend that the Commission outline key guidance points for the POUs to focus on setting rigorous targets pursuant to AB-2021; submitting thorough and complete

status reports pursuant to SB-1037; and establishing robust independent measurement and verification protocols.

With respect to natural gas, NRDC thanks the Commission for including recommendations in the 2007 IEPR in support of natural gas energy efficiency and also advancing renewable resources for natural gas.

Again, looking forward to the 2009 IEPR, we recommend that the Commission include an expanded discussion of this, and further recommendations of how to achieve these goals.

With respect to the water/energy nexus,
NRDC commends the Commission for including an
acknowledgement of the water/energy connection in
the 2007 IEPR. And we recommend that the
Commission elaborate on this discussion to include
specific recommendations for how to encourage
water efficiency as it pertains to capturing
energy efficiency.

And then, as you know, AB-1560, along with AB-1881 and AB-662, authorize the Commission to set water efficiency standards for buildings, appliances, fixtures and irrigation equipment as a way to save water and energy.

Therefore we urge the Commission to initiate standard setting procedures, and to include in the 2009 IEPR a recommendation that will insure that the state's fully utilizing whatever water/energy efficiency procedures, as well as other water management tools, such as water recycling and low-impact development, green infrastructure, which all can achieve significant energy savings, as well as greenhouse gas emission reduction by reducing the need for imported water supplies.

And lastly, with respect to smart growth, NRDC would like to thank the Commission for their leadership on making the important connection between the land use and global warming, particularly with regard to the connection between land use and climate change.

The CEC's important report, the role of land use in meeting our climate and energy goals, continues to serve as the most complete treatment of the issue in California. And furthermore, the work of the land use subcommittee at the Climate Action Team, under the leadership and guidance of CEC Staff, has been extremely productive and beneficial towards this effort.

In addition to continued analysis of the issues presented in this report, and the -- draft chapters, NRDC recommends that the CEC in the 2009 IEPR first do research and analysis of the relationship between more compact development and energy efficiency, so the compact development can both shorten transmission distances through locating in-fill projects within known service areas and potentially lessen the line loss per household when compared to conventional single family development.

Although this may seem perhaps instinctive, further research is needed to quantify the expense of the correlation for the purposes of land use planning -- production. And also NRDC wants to reiterate that improving the transportation models to reflect the benefits of smart growth is a key piece of the puzzle. And while this is touched on in the role of land use report, it seems to have received less attention in the 2007 IEPR. So we recommend including a discussion of this issue and related documentation in the 2009 IEPR.

Thank you again for considering NRDC's comments. And we look forward to participating in

this process and moving forward.

PRESIDING MEMBER BYRON: Thank you, Ms. Ettenson. That was in fast-forward.

MS. ETTENSON: That's my New York -PRESIDING MEMBER BYRON: Is there anyone
else on the phone that would like to comment.

MR. TOCA: Yes, thank you. This is Charles Toca again with US&R Powergrid Partners.

PRESIDING MEMBER BYRON: Go right ahead.

MR. TOCA: Just putting in one more push, I guess, for gas energy storage. I note that in the IEPR you have a column or section for environmental performance. (inaudible) generation facilities (inaudible) technologies.

I just wanted to point out that a recent study by KEMA indicated that the use of advanced energy storage would reduce the emissions of power plants by 70 percent that are used to provide regulation to the Independent System Operator.

About 350 megawatts that are set aside by the ISO for that purposes. So it's a pretty significant statement.

In addition, by using energy storage, that (inaudible). So I'd encourage you to include energy storage, perhaps in that category.

1	PRESIDING MEMBER BYRON: All right,
2	thank you.
3	MS. KOROSEC: Anyone else on the phone?
4	Anyone in the room?
5	All right, that's a good sign. Just
6	quickly, next steps. Written comments are due
7	April 30th to our dockets office in the process
8	identified in the hearing notice.
9	We'll be issuing a scoping order on the
LO	OAI update based on today's comments and the
L1	written comments in early May.
L2	We'll be holding a scoping hearing for
L3	the 09 IEPR in early June, with a scoping order
L4	for that in 08.
L 5	Once we've nailed down the topics for
L 6	the 08 update, we'll be holding staff workshops in
L 7	June and July of this year.
L 8	And I think if there's no more questions
L 9	or comments, I think that that's it. Thank you
20	very much, everyone.
21	PRESIDING MEMBER BYRON: Commissioners?
22	COMMISSIONER BOHN: Yeah. Suzanne, may
23	I just make
24	MS. KOROSEC: Oh, absolutely.
25	COMMISSIONER BOHN: one comment. And

it's kind of a mutual plea on behalf of both the PUC and the CEC. All this, the AB-32 discussions and the pending federal legislation, all of that stuff, for purposes of the private sector utilities, causes a certain amount of confusion and uncertainty.

So as we go through the process any tools that we develop that will help, or that you might see as we go through the process, I would encourage those to be brought forward. Because to the extent we can reduce uncertainty, permit people to do their business plans, I think it would be helpful.

Thank you.

PRESIDING MEMBER BYRON: Madam Chairman?

ASSOCIATE MEMBER PFANNENSTIEL: Nothing,
thank you.

PRESIDING MEMBER BYRON: Well, in that case, thank you all very much. I understand during my tenure at the Commission I've heard it said, our plate has never been fuller than it is right now.

Thank you all for your comments and input, particularly those who seem to want to add additional portions to our plate here today.

## CERTIFICATE OF REPORTER

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

IN WITNESS WHEREOF, I have hereunto set my hand this 4th day of May, 2008.

