SITING COMMITTEE WORKSHOP

BEFORE THE

CALIFORNIA ENERGY RESOURCES CONSERVATION

AND DEVELOPMENT COMMISSION

In the Matter of:

Order Instituting Proceeding (OII) on Methods for Satisfying California Environmental Quality Act Requirements Relating to Greenhouse Gas Emission Impacts of Power Plants

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PETERS SHORTHAND REPORTING CORPORATION 3336 BRADSHAW ROAD, SUITE 240, SACRAMENTO, CA 95827 / (916)362-2345



COMMISSIONERS PRESENT

Jeffrey Byron, Presiding Member Karen Douglas, Associate Member

ADVISORS PRESENT

Panama Bartholomy

Susan Brown

Laurie Ten Hope

STAFF PRESENT

Eileen Allen

Joe Bubbico

Matthew Layton

Richard Ratliff

Paul Richins

Sabrina Savala

Claudia Uresti

David Vidaver

PUBLIC ADVISER

Nick Bartsch

Elena Miller

ALSO PRESENT

Manuel Alvarez Southern California Edison

Mike Boyd (via telephone) CAlifornians for Renewable Energy (CARE)

Marc Campopiano Latham & Watkins

Rory Cox Pacific Environments Ratepayers for Affordable Clean Energy

Christopher T. Ellison Ellison, Schneider & Harris California Independent Energy Producers Association

Scott Galati Galati|Blek Pacific Gas and Electric Company

Jeffery D. Harris Ellison, Schneider & Harris, LLP

Laura Hunter (via telephone) Environmental Health Coalition

Mark Krausse Pacific Gas and Electric Company

Jane E. Luckhardt Downey Brand MMC, J-Power & Macquarie

Jesse N. Marquez Coalition for a Safe Environment

Bruce McLaughlin Braun Blaising McLaughlin, PC California Municipal Utilities Association

Loulena A. Miles Adams Broadwell Joseph & Cardozo California Unions for Reliable Energy (CURE)

ALSO PRESENT (CONTINUED)

Taylor Miller Sempra Energy

William Rostov Earthjustice

Seema Srinivasan Alcantar & Kahl, LLP Energy Producers and Users Coalition

Rachel Tornek California Climate Change Registry

Lisa Trankley State of California Department of Justice Office of the Attorney General

Mark O. Turner Competitive Power Ventures, Inc.

Lucille Van Ommering California Air Resources Board Office of Climate Change

Matthew Vespa Center for Biological Diversity

William W. Westerfield III Sacramento Municipal Utility District

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PROCEEDINGS

2 9:10 a.m. PRESIDING MEMBER BYRON: Good morning, 3 4 everyone. And I am sorry we are a little bit late 5 getting started this morning. I would like to 6 welcome you all to a Siting Committee Workshop on 7 Greenhouse Gases from Proposed New Power Plants. 8 This is really a continuation of the October 28 workshop that Commissioner Douglas and I 9 10 conducted. And I think what we will do in just a moment is we will go around the room and that way 11 we can all introduce ourselves and provide our 12 13 name for the court reporter. 14 I think you all know we have a very 15 expedited schedule that we are adhering to. I

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16 would like to thank you all for accommodating the 17 date today, the date that we selected a few weeks 18 ago, for this workshop. Staff has put together an 19 excellent agenda. We have got some very good 20 panelists and I really look forward to the 21 information and the exchange today.

As you can tell the format that the staff has chosen for us is one of inclusion. What we are trying to do is accommodate as many of those of you who plan to speak today or feel that

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you will be contributing to the discussion to join
 us at the table.

That doesn't preclude anyone else at 3 all. It is just to try and make that process a 4 5 little more expedited. We welcome others to 6 speak. In fact, Mr. Richins, do we have a 7 microphone for others to step up to? Mr. Richins, 8 do we have a microphone for those that should step up to? So up to the podium. So please, we don't 9 10 mean to exclude anyone in any way. Again, we are 11 just trying to get those that did speak up at our October 28 workshop an opportunity to be a little 12 13 closer to the microphone for this discussion.

14 The purpose of the workshop, as you all 15 know, is to solicit input and discussion on how 16 the Energy Commission's responsibilities under 17 CEQA can be met to assess greenhouse gas impacts 18 of proposed new power plants.

I am going to keep my remarks brief. I
will ask my fellow Commissioner, Karen Douglas, if
she has any remarks, and then we will just do some
introductions and turn it over to Mr. Richins.
Commissioner?

24 ASSOCIATE MEMBER DOUGLAS: I think I am 25 going to set a record for brief introductory

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remarks. Thank you to everyone for being here.
 And thanks especially to everyone who submitted
 written comments, those are very helpful to us.
 And with that, we have got a long agenda so let's
 get started.

PRESIDING MEMBER BYRON: Well let's do 6 7 this. Forgive me, Mr. Richins, I think I mis-8 spoke your name. Where are you? There he is. Let's go ahead to Commissioner Douglas' left and 9 10 proceed around the table. It's not a race. Please give us your name and association for the 11 benefit of the court reporter. 12 13 ADVISOR BARTHOLOMY: Panama Bartholomy, 14 California Energy Commission. 15 MR. RICHINS: Paul Richins, California Energy Commission. 16

SENIOR ADVISOR BROWN: Susan Brown,
 Advisor to Commissioner Boyd.
 MR. MILLER: Taylor Miller, Sempra

20 Energy, SDG&E.
21 MR. KRAUSSE: Mark Krausse, PG&E.
22 MR. GALATI: Scott Galati representing
23 PG&E.

24 MR. ALVAREZ: Manuel Alvarez, Southern
25 California Edison.

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MS. LUCKHARDT: Jane Luckhardt on behalf 1 2 of MMC, J-Power & Macquarie. MR. WESTERFIELD: Bill Westerfield, 3 4 SMUD. 5 MS. MILES: Loulena Miles, CURE. 6 PRESIDING MEMBER BYRON: Ms. Miles, 7 could you speak it into the microphone, please. 8 That way folks on the phone will be able to hear 9 us. 10 MS. MILES: Loulena Miles, California Unions for Reliable Energy. 11 PRESIDING MEMBER BYRON: Welcome. 12 13 MR. VESPA: Matthew Vespa, Center for 14 Biological Diversity. MR. ROSTOV: Will Rostov, Earthjustice. 15 MR. ELLISON: Chris Ellison, Ellison, 16 Schneider and Harris, on behalf of the California 17 18 Independent Energy Producers. PRESIDING MEMBER BYRON: Welcome. 19 20 MR. RATLIFF: Dick Ratliff, counsel for 21 the Energy Commission. 22 MR. LAYTON: My name is Matthew Layton. I am with the air unit. I am going to make a 23 24 presentation on some of the proposals today. 25 MR. VIDAVER: Dave Vidaver, California

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Energy Commission, the electricity analysis
 office.

3 ADVISOR TEN HOPE: Laurie Ten Hope,
4 Advisor to Commissioner Byron.

5 PRESIDING MEMBER BYRON: Thank you all. 6 And as I said, anyone else is welcome to speak. 7 We do have an agenda that we are going to try and 8 follow and I am going to turn it over to 9 Mr. Richins to take us through that.

10 MR. RICHINS: Good morning and thank you 11 very much for attending. There are some handouts 12 on the table as you walked in, including the 13 agenda and some of the PowerPoint presentations, 14 just two of them so far, that we have handouts 15 for.

We set the room up in this manner so we can have informal dialogue and free discussion of ideas and concepts. We want to make sure that everybody has an opportunity to speak and provide their ideas so that the Committee can, you know, receive your comments and the information that you provide.

23 When you do speak please just state your 24 name for the court reporter and also for people 25 that are on the telephone, that would be helpful.

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And if you also have business cards, if you could
 provide that also to the court reporter that would
 also be helpful.

Just little housekeeping things. On the notice that we sent out for this workshop we have comments, written comments due December 12, I believe it is, for any additional comments that you want to make as it relates to this workshop. So those would be due December 12.

10 Let me go quickly over the agenda. We have two panels set up today. We have a panel in 11 the morning that is going to cover CEQA baseline, 12 13 CEQA thresholds of significance and concepts or 14 proposals on evaluating greenhouse gas emissions. 15 Should you do it project-by-project, case-by-case, or should you take a programmatic or a systemwide 16 17 approach?

18 So we have four speakers. Dick Ratliff from the Energy Commission will be speaking, Will 19 20 Rostov from Earthjustice, Chris Ellison from 21 Independent Energy Producers and then Matt Layton/ 22 Dave Vidaver will be talking about some concepts that we wanted to throw out for you to consider. 23 24 And really they are concepts to stimulate the dialogue and the discussion. They are by no means 25

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anything that has been agreed upon or put forth,
 they are just concepts and for illustrative
 purposes only.

And then after the presentations, hold 4 5 your questions on the presentations until all the 6 presenters are through and then we will open it up 7 for discussion and comments in the roundtable. And the roundtable then will follow to the lunch 8 hour. We will take a break at the appropriate 9 10 time for lunch and then after lunch we will probably continue on the same topics for an hour 11 or so. And then we will go to the second panel, 12 which will be on mitigation. 13

14 So if it is determined that greenhouse gases exceed the thresholds of significance then 15 what kinds of mitigation might be appropriate. So 16 that will be the discussion we will have in the 17 18 afternoon. And we have three speakers there: a speaker from ARB, a speaker from the California 19 Climate Action Registry, and then the third 20 21 speaker from the Attorney General's Office. 22 So with that, as an overview, I will turn it over to Dick Ratliff who will make the 23 24 first presentation. 25 MR. RATLIFF: Dick Ratliff, counsel for

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the Energy Commission.

2 I was asked to speak about some of the difficulties of doing a CEQA analysis for 3 4 greenhouse gases for power plants. It gives me an 5 opportunity to talk about the things that I think 6 are most difficult about that kind of an analysis, 7 with the hope that maybe we will discuss some of 8 them and get some ideas of what the answers might be today. 9

Fundamentally we have got, I think, two kinds of proposals for how that analysis ought to be done. There are variations on those proposals but I think there are two distinct paths and those paths diverge greatly.

15 The first proposal I think is a category 16 of proposals that can be described or is described 17 as a zero baseline proposal. The other is, for 18 lack of a better term, called the electrical 19 system approach.

The zero baseline proposal has the advantage of being very direct. It treats power plant as if they are essentially a smokestack. It measures the greenhouse gas emissions that come out of that stack, it determines whether they are significant and it requires that you mitigate it.

Its principal advantage is that of 1 simplicity. Its proponents would, I think, also 2 argue that it is fair and enforceable. It also 3 4 has the additional advantage of not tying the 5 agency up in trying to determine what the baseline 6 would be for this kind of analysis or what 7 thresholds of significance. It doesn't require a 8 threshold of significance, although it may employ 9 a threshold of significance.

10 Others would also point to the advantage 11 that in some ways it resembles what air districts 12 typically do when they deal with criteria air 13 pollutant analysis. They determine what is coming 14 out of the stack and then they require emissions 15 mitigation which is sufficient to offset those 16 added emissions.

But I think it is when we discuss the 17 18 analogy to the air districts that we begin to see the problems that that zero baseline approach 19 20 actually presents to the analyzing agency. The 21 air district approach or the approach to criteria 22 pollutants is probably the most comprehensive approach ever devised by man for addressing a 23 24 cumulative impact. It is both federal, state and 25 regional in its enforcement mechanisms and it is

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multi-sector. It engages everything from transportation to the contents of paints to stationary sources.

4 Secondarily, air districts when they 5 enforce criteria pollutant requirements have a 6 capped and very elaborate emissions inventory that 7 they are dealing with so they know the dimensions 8 of the problem. And they have been given a 9 performance standard by either EPA or CARB which 10 tells them what the goal is.

And since they have a multi-sector 11 approach they have a defined problem and they have 12 13 a defined performance standard. They are able to 14 actually determine what a threshold of 15 significance could be in that context which is a great advantage. In addition to that they have 16 reliable offsets, which have been policed and 17 which have been vetted. 18

And by contrast the Energy Commission in its analyses has none of these things. It has only one portion of one sector, the electricity sector. It is not retroactive in its approach, it only has new power plants. It has no emissions inventory which you can rely on in terms of the global emissions of greenhouse gases. And it has

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no absolutely certain or reliable mitigation bank
 that they can use to provide offsets for
 greenhouse gas emissions. And these are all, I
 think, shortcomings of the approach that is
 sometimes called the zero baseline approach so I
 hope that today we will discuss some of those
 issues.

8 The other approach is the electrical systems approach. The advantage of that approach 9 10 is that it recognizes the complexities of the electricity system. It views the proposed project 11 as one component of what might be described as a 12 13 big machine and that machine is the electric 14 generating system interconnected throughout the 15 western United States. It includes hydro imports from Canada, it includes coal imports of 16 17 electricity from the mountain plants, nuclear 18 plants, renewables and so forth.

And it looks at the role of the power plant in the operating system. The location of that power plant, its function and whether or not it would actually make the problem better or worse, greenhouse gas emissions. In other words, whether its effect on existing conditions, the typical CEQA baseline, is positive or negative.

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I think one of the advantages of that 1 approach is that it allows us to look at the role 2 a particular power plant might play in that 3 4 system. For instance, if you have a solar 5 facility, a solar generating system, but it has 6 emissions because it uses a boiler to get the 7 system up to speed in the mornings, that has 8 greenhouse gas emissions. 9 But I think we can say with some

10 certitude that that doesn't actually -- those emissions don't make the project a significant 11 adverse impact. The overall effect of that 12 13 project is, I think most people would agree, a 14 positive impact because it reduces greenhouse gas 15 emissions for the entire electrical system. And if you want to move down that continuum you might 16 say that peaker power plants in some locations 17 18 which integrate renewables into the system might 19 have a similar positive effect.

20 So in this manner you actually can look 21 at the effects of projects on a project basis and 22 you can make distinctions about the kinds of 23 projects and what their impacts are.

24 But the difficulties I think that the 25 electrical systems approach has are those of --

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1 well, the analytic difficulties of determining
2 what exactly in that big, complicated system, the
3 impact of any individual plant would be. There is
4 a certain imprecision in trying to calculate
5 things, these effects, because the system is so
6 big and so complicated. It changes throughout the
7 day and it changes over time.

8 So when you try to determine what the 9 effect of a new power plant is within the context 10 of that system it is a very elusive task to get 11 any precise measurement of it. You might know 12 that adding a new power plant increases system 13 efficiency as a basic, underlying truth, but you 14 don't know to what extent that actually occurs.

15 Another disadvantage is the conundrum that in the absence of cap and trade, if you build 16 fossil-fired power plants you may end up with a 17 18 system which has, due to load growth, greater greenhouse gas emissions over time than you have 19 20 currently. And this would seem to, or at least is 21 arguably in conflict with the goals of AB 32 that 22 we be reducing greenhouse gas emissions, presumably in the electricity sector as well as 23 other sectors. 24 25 And then finally tied to that

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disadvantage I think you have the disadvantage 1 that this increases the perception, both by the 2 public and other agencies, that this is business 3 4 as usual and that new power plants are not 5 carrying the burden of mitigating their impacts as 6 they should be. These, I think, are the problems 7 that I see at least with the two approaches and I 8 hope we have some discussion of those issues today. 9 10 MR. RICHINS: Okay, why don't we move to Will, Will Rostov from Earthjustice. 11 MR. ROSTOV: Hi, my name is Will Rostov 12 and I am with Earthjustice. We did a letter with 13 14 the Center for Biological Diversity, Communities 15 for a Better Environment and the Community Environmental Council. 16 First I want to thank the Commission for 17 18 allowing me an opportunity to speak early. I'm sure I'll have more comments as the day goes by so 19 20 I won't spend that much time on my introductory 21 comments. And I also appreciate that the 22 Commission picked today as the day for the hearing as opposed to tomorrow, which has a conflict with 23 24 AB 32. 25 So at first I wanted to just step back

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for a second and talk about CEQA from the 10,000 1 2 foot level. I think sometimes CEQA gets lost in 3 -- when you start talking about all the details 4 you get lost about the fundamental purposes of 5 CEQA. And the fundamental purpose of CEQA is 6 public disclosure. It is really informing the 7 public and the decision makers about the 8 environmental effects of the projects that you are siting. 9

10 And when you think about it from that 11 level, what are we trying to achieve by applying greenhouse gases to, a greenhouse gas analysis to 12 13 power plant siting proceedings? What you are 14 trying to achieve is the reduction of greenhouse 15 gases. I think we all can agree that -- well, most of us can agree. Most of the comments agree 16 17 that the introduction of greenhouse gases to the environment is a significant cumulative 18 environmental effect and that we are now living in 19 20 a carbon constrained world.

21 So we have a real opportunity today to 22 really embrace CEQA and use CEQA, the power of 23 CEQA, to inform the public, inform the decision 24 makers about the problems building new fossil-25 fueled power plants will create. The problems of

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increasing greenhouse gases in the world and in this state. So I think it is really important to realize the public disclosure aspect of it.

4 A lot of the proposals from many of the 5 industry groups essentially propose a bunch of 6 exemptions, and those exemptions to CEQA would 7 essentially say, we are not going to analyze the 8 most pressing problem of the day. And I think it is important to realize what we are talking about 9 is, we need to figure out what greenhouse gases 10 11 are going into the environment and how do we address that problem from a siting perspective. 12

One more introductory remark would be, I am here to advocate for the project-by-project basis. And just a fundamental point is that there's suggestion that there should be a programmatic analysis. But right now there is no programmatic document. And without a programmatic document you cannot do a programmatic analysis.

20 So the place we are right now is, in a 21 situation where there are a lot of siting 22 proceedings going on and they are being done on a 23 project-by-project basis. There is no 24 programmatic document. So the only alternative, 25 because you are required under CEQA, the

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California Energy Commission is required under
 CEQA to analyze the greenhouse gases, is to do a
 project-by-project analysis. I just really don't
 see any other way out of the legal requirements of
 CEQA right now.

6 The other preface I make is I think our 7 approach is consistent with the statute. When I 8 looked at many of the industry proposals I just 9 don't see them citing to the statute or really 10 proposing solutions that are consistent with the 11 statute.

So what does the project-by-project 12 13 approach get you? And I think it gets you what 14 CEQA wants you to get. It gets you an analysis of an environmental impact. In this case it would be 15 analysis of the greenhouse gases that are being 16 put out by each project. And that's exactly what 17 18 the CEC does in every project they analyze. They look at every environmental effect and then they 19 20 determine, are they significant.

21 So the first step in the analysis and 22 this grander idea of public disclosure is really, 23 what is this project doing. So the first thing we 24 think is very important is you have got to say 25 what the greenhouse gas emissions are. And since

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the CEC has jurisdiction over power plants of 50 megawatts or greater, it seems like every one of those power plants, fossil-fuel generating power plants, are going to be, CEQA is going to be applicable. So first you do the analysis.

6 Second CEQA requires, once you determine 7 that there is a significant effect, and a 8 significant effect is the emission of greenhouse gases at this point, that the case of global 9 10 warming is real and it is right now. So putting more emissions into the environment is the wrong 11 way to go. It's essentially, it is essentially 12 13 not allowed by CEQA. CEQA requires you to both 14 analyze and identify the significant effects and 15 then to mitigate or present alternatives to modify the significant environmental effects. So what we 16 are advocating is essentially the application of 17 18 CEQA to greenhouse gases.

And if you look at it from a project-byproject basis you can really dig into the mitigations and the alternatives. And I think that is the really important point here is looking at alternatives. You know, alternatives can be efficiency, they can be building.

25 You have to do two things. You have to PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

look at the project need. So say the project need 1 is a peaking power plant. If the project need is 2 a peaking power plant we can say, well, are there 3 4 alternatives. Are there alternatives such as 5 solar energy. Or if the project is proposed as a 6 baseload plant you could also consider, is this 7 baseload plant needed. Is there an alternative. 8 Is there a reasonably feasible alternative.

And when you are doing your alternatives 9 analysis I think it is really important to look at 10 11 where we are in terms of the energy system. Just last week the PUC actually came out with a pretty 12 13 interesting report called the Renewables Portfolio 14 Standard Quarterly Report for October 2008. And 15 on page ten of that report it says something that I found very interesting. And we would have cited 16 to it in our comments but it just came out after 17 18 our comments.

And it essentially states, if the state is required to generate 33 percent of its energy from renewable resources by 2020 then all new procurement of new energy resources between now and 2020 must be entirely renewable energy except some new fossil for peaking capacity and to replace aging fossil plants critical for renewable

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1 integration.

If you look at power plant sitings on a project-by-project basis and you are looking at alternatives, you would need to consider this fact. That if we are going to be trying to achieve our 30 percent renewable standard, you know, is this project going to be defeating our purposes for attaining RPS.

9 So what you get by doing a project-byproject analysis is an ability to like look into 10 local contacts. And also allow the -- this goes 11 back to the public disclosure idea. Allow the 12 13 people in that local community to really realize 14 what they are getting as part of the project. I 15 mean, I have been involved in a couple of power plant siting cases over the years and local 16 communities are often concerned about the siting 17 18 of a power plant and they often want to come up with alternatives. 19

20 And when you are saying, well this power 21 plant will put out a certain amount of greenhouse 22 gases, the local community is going to want to be 23 able to consider the alternatives. So they want 24 to know -- I think they would want to know, do we 25 really need this plant. And if we do need this

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plant, what are the alternatives. Are there 1 2 alternatives for efficiencies, are there alternatives for solar or are there mitigation 3 4 measures.

5 I think I have made my point about this 6 but I wanted to talk about the AB 32 discussion a 7 little too because that seems to be a consistent 8 point through a lot of the letter. And I think really the AB 32 discussion proposed by many of 9 10 the parties really has it backwards. So essentially the idea from many of the power 11 companies is that AB 32 will take care of the 12 13 problem.

14 But in reality what the CEC has is a 15 siting process that is CEQA equivalent and requires the application of CEQA. So really the 16 way this should be thought of is, CEQA applies 17 18 now. You need to -- the California Energy Commission needs to develop a legally compliant 19 20 CEQA and AB 32 is going to be in the future. So 21 compliance with AB 32 needs to be done, needs to 22 be considered after the CEC does a proper CEQA analysis. And I guess I'll illustrate my point. 23 24 So essentially what we have been 25 advocating in our letters is that power plants

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should be mitigated to zero. So if a power plant 1 is mitigated to zero, when in the future, which 2 2012 is the start of the cap and trade system. We 3 4 don't know if that will be delayed by litigation. 5 But whenever in the future the CEC could open up a 6 new proceeding and say, if we adopt, if the CEC 7 adopts our proposal and adopts zero mitigation for 8 new power plants they can propose within the AB 32 system that there isn't any future requirements 9 10 for mitigation.

So you would look at it from, you 11 wouldn't want to have a -- what I am trying to say 12 13 is, we are not saying we are trying to double 14 penalize companies but we are saying you have to 15 do the mitigation as part of the CEQA analysis. And then determine within the new system, the AB 16 32 system, how you would get around double 17 18 counting or double mitigation on certain facilities. 19

20 And there is actually a flip side to 21 this as well. The flip side is, if you do the 22 CEQA mitigation you should not be allowed to get 23 the credit for that in the AB 32 system because 24 the CEQA mitigation is required by law. So if you 25 go into the AB 32 system you can't have a system

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where you did these mitigations and then somehow
 you get credit and pay for your mitigations in AB
 32.

I guess I have one more point about the electrical system approach. I mean, I agree with Mr. Ratliff that there's too many problems with it. One is the problem of determining, essentially, is the project needed. By looking at it from the project basis you can determine if there is a reliability issue.

This electric system approach doesn't 11 address all the issues that you need to address 12 13 when you are siting a power plant. A lot of the 14 issues that are arising now in California have to do with electric reliability. If you look at it 15 from a statewide approach you are not looking at a 16 local or regional issue which has to do with 17 18 reliability.

I want to echo the point that the electric system approach that is being proposed, it really does just seem like business-as-usual. It seems like business-as-usual in the sense that it's -- going back to what I said earlier. It is really not disclosing what we are doing with greenhouse gases. What we are going to be

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producing in the future in terms of our carbon
 footprint.

What we have here is the opportunity to 3 4 really take a project-by-project approach and move 5 towards a low-carbon future. And the way to move 6 towards a low-carbon future is to really be 7 analyzing this on a project-by-project basis. And 8 doing it on a system approach, all you are really going to do is provide a system where you don't 9 10 inform the public of what the greenhouse gas emissions are or inform the public of how you are 11 dealing with the problem. 12

By looking at it on a project-by-project approach the people who are interested in those power plants that are being sited near them will have an understanding of both the environmental facts and also the understanding of, are there alternatives.

And I think that's really important for the Commission as well because the Commission ultimately makes the decisions about the siting of these power plants. And this Commission is going to be faced, I think, with very tough decisions in the future. Are you going to be siting power plants that are contributing to global warming?

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Or are you going to be seriously considering 1 2 alternatives that can mitigate or propose alternatives that will not lock us into a system 3 4 that has too high of carbon into the future? 5 And with that I'll just conclude. I'm 6 sure there will be questions and comments. I'll 7 be happy to respond to them. 8 MR. RICHINS: All right, thank you very much. Now we will hear from Chris and then after 9 that then we will go to Matt Layton. 10 MR. ELLISON: Thank you. I'm Chris 11 Ellison of Ellison, Schneider and Harris. I am 12 13 speaking today on behalf of the California 14 Independent Energy Producers Association. The 15 California Independent Energy Producers Association is a trade association of non-utility 16 power plant developers, both renewable and non-17 18 renewable. They are owners of existing plants as well as developers of new plants. There is quite 19 20 a diverse membership within IEP. 21 As to my personal background I am just 22 going to mention a couple of things for those of you who don't know me, because these past 23 24 experiences inform the comments that I am about to 25 make.

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I have been involved in energy since 1 2 1978. I started here at the California Energy Commission as an attorney/advisor to the Chairman. 3 4 I have been working on these issues since that 5 time. Now in private practice representing 6 entities such as the American Wind Energy 7 Association, the Western Electricity Coordinating 8 Council and a rather diverse client base in addition to IEP. And I am currently involved in a 9 10 number of renewable projects in front of this Commission. 11 First of all let me say on behalf of IEP 12

12 First of all let me say on behall of lef 13 that IEP agrees that climate change is a very 14 serious problem that needs to be addressed. We 15 support this effort on the part of the Commission 16 to address it in the context of CEQA and in the 17 context of power plant siting cases.

We certainly agree that the electric system in California is a contributor to greenhouse gas emissions in the state and that that needs to be looked at. That the electric system needs to do its part to solving the problem that we all face.

IEP also, I think, is quite confident if you look at AB 32 that the electric system in

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1 California is going to be asked to do more than 2 its share, actually, of solving this problem. I 3 think the latest numbers I have seen are something 4 like 40 percent attribution when in fact the 5 actual contribution of the electric system is 6 considerably lower than that.

7 The key points that I want to make on 8 behalf of IEP are really three and I am going to focus on really just one. But the three points 9 10 are, first of all, a plea that we all work 11 together on this problem. This is a problem that faces all of us. And I think a lot of energy 12 13 debates, in my experience, have been infused with 14 a certain level of adversariness that will not 15 stand us in good stead as we try to come to grips with what is a very complicated and important 16 17 problem.

18 Secondly, it is very important I think, not just for IEP or power plant developers but for 19 20 the state as a whole to have a program to address 21 greenhouse gas emissions that is consistent across 22 the entire state and hopefully across the entire world, but at least here we are talking about 23 24 California. To the extent that we have duplication conflict, overlap, we will not have an 25

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effective greenhouse gas program in California. So integration of CEQA and AB 32 and all those 2 things I think is extremely important. 3 It is 4 certainly very important to entities that have to 5 comply with all of those requirements.

6 I am not going to say any more about 7 that today even though that is probably IEP's 8 greatest concern, simply because we are focusing on other issues today. But I do want to emphasize 9 10 that this issue of integrating these programs and being consistent is critical. 11

The last point and the one I am going to 12 focus on for he rest of my comments, though, is 13 14 that to work together to solve this problem, 15 probably the most important thing we need to do is to be accurate, to be truthful. And let me start 16 by saying that I could not agree more with Will 17 18 Rostov's comment that the fundamental purpose of CEQA is to inform the public about environmental 19 20 impacts of proposed projects, including the 21 environmental impacts of proposed power plants 22 here at the Energy Commission.

To the extent that we provide the public 23 24 with information that is wrong, we have fundamentally violated CEQA. And the premise that 25

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I am going to go forward with from this point is to tell you that if you do not look at the impact of new power plants on the system as a whole you are doing precisely that. You are providing the public with information that is wrong about the environmental impacts of power plants.

7 So let me begin with some things that I 8 think are very important facts about the electric 9 system that go directly to this issue about 10 whether you do it project-by-project versus 11 system. And by the way, before I go any further 12 with that let me say that at the end I want to 13 talk a little more about that distinction.

I am not saying in doing a system impact analysis that you don't do it in the context of specific projects. But rather I am saying that in the context of an EIR on specific projects you take into account the effect of that project on the system.

20 So to the extent that people are reading 21 me as saying a systems impact approach means you 22 don't do anything on a project-by-project basis, 23 that is not correct. What I am saying is that if 24 you do a project analysis that assumes that the 25 project is simply incremental to the emissions of

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the rest of the system you are making a factual assumption that is demonstrably wrong and misinforming the public. And that you need to account somehow for what the impact of the new project is on the system as a whole.

6 So let me go back to these basic facts. 7 And I submit that anybody who looks hard at these 8 facts will find that they are all indisputably true. First, the issue we are talking about here, 9 10 greenhouse gas emissions, is a cumulative impact. I don't think anybody is alleging that any single 11 power plant in California by itself has a 12 significant impact on global climate. This is a 13 14 cumulative impacts issue.

15 Secondly, unlike criteria pollutants under the Clean Air Act, greenhouse gas impacts 16 are not local. We are not concerned here about 17 18 the immediate impact on the public health of the emission of CO2, for example. What we are 19 20 concerned about is the essentially worldwide 21 impact, not even statewide let alone local, of the 22 emissions of greenhouse gases. And so the 23 emission of a greenhouse gas in one part of the 24 state is equivalent to the emission of greenhouse 25 gas somewhere else in the state, which is not

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always true for other pollutants under the Clean
 Air Act.

Thirdly, greenhouse gas impacts occur 3 4 from power plant operation. They do not occur 5 from power plant construction. Now there are, of 6 course, some minor impacts of construction 7 equipment but I am going to ignore those. The 8 major impacts we are talking about are from the 9 operation of power plants. To the extent power 10 plants do not operate or operate more or less, their greenhouse gas emissions are fundamentally 11 affected by that. And so you need to focus on the 12 13 way the system operates.

14 Next, the electric grid throughout the 15 western United States and the two provinces of Canada and part of Mexico operates as a single 16 machine, as Mr. Ratliff put it. It is literally a 17 18 single machine. It is synchronized electricity. It is operated by system operators that coordinate 19 20 their operation because they are, in effect, 21 running one machine that operates in real time. 22 That is the reason why a tree limb in Idaho can 23 put the lights out in Los Angeles.

Next, you cannot store electricity in
large quantities. And this is a fundamental

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difference between looking at the impacts of
 electricity production compared to many other
 environmental impacts, for example housing
 developments or refineries or even natural gas.
 Electricity is unique in that way. It is
 dispatched in real time to meet current, real time
 demand because you cannot store it effectively.

8 Next, the construction of power plants in California fundamentally does not change the 9 demand for electricity. The way we price our 10 electricity in California currently, maybe some 11 day in the future this will be different, but 12 13 right now demand is -- whatever the system demands 14 is essentially unaffected by the construction of a 15 new power plant.

Next, utilities have an obligation to 16 meet that demand. Under the law they will 17 dispatch power plants to meet whatever that demand 18 19 is to the extent they are able. There are unique 20 circumstances in which we turn the lights off but 21 that is not the policy of the state of California. 22 The policy of the state of California is to meet the demand, whatever it is. 23

24 So what does this mean? It means that 25 the system is literally dispatched in real time to

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meet whatever the consumers demand in terms of 1 2 electricity. And that that real time dispatch is 3 what governs the operation of power plants, which 4 in turn governs the system emissions and the 5 greenhouse gas effect of the electric system.

6 The other thing that is generally true 7 is that plants that are on the margin, in other 8 words, the ones that are dispatched last, are typically the least efficient, oldest and most 9 polluting plants in California. And that is a 10 generalization, it is not always true, but it is 11 12 typically true.

And the last fact I would put forward is 13 14 that California despite 30-plus years of what I 15 consider to be quite progressive California Energy Commission policy and a rather rigorous siting 16 17 process, continues to rely quite heavily at the 18 margin on power plants that are as much as half a 19 century old.

20 So what do all these facts mean when you 21 put them together? What they mean is that unlike 22 many other industries, in fact I would say unlike virtually every other industry -- And this is 23 24 particularly important when you get into the legal 25 analysis and you are looking at cases that talk

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about this situation with respect to other 1 2 industries. But with respect to the electric 3 industry it is not speculation that a new power 4 plant will displace the operation of other power 5 plants.

6 In fact, it is a certainty that it will 7 displace the operation of other power plants. 8 Wherever the demand is at a given moment, that demand will be met pursuant to the obligation to 9 10 serve. And if the new power plant is not constructed, something else will be dispatched in 11 its place to meet that demand. And if the new 12 13 power plant is constructed, whatever would have 14 been dispatched will not be dispatched.

15 That net impact is the environmental impact the public needs to know about. And to the 16 extent that you ignore that fact, that fundamental 17 fact about the electric system, and you instead 18 19 assume that that new power plant's emissions are 20 incremental as if they somehow increase the demand 21 and that they are incremental to the net effect of 22 the system, you are misinforming the public and you are creating bad policy. And you are not only 23 24 creating bad policy but you are creating 25 fundamentally unintended consequences.

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And I have seen this in my career many 1 2 times. I have seen people who are good faith, sincere advocates for environmental protection 3 4 opposing power plants when in fact they are 5 becoming unwitting advocates for the increased 6 operation of power plants that have a much greater 7 effect on the environment than the plant they are 8 opposing. I have seen this throughout my career. 9 The other thing I have seen throughout 10 my career is that in many cases -- One of the 11 roles that I play as a private sector attorney is to advise prospective power plant developers on 12 13 their prospects in the permitting process of 14 California. 15 And one of the things that the public typically does not see, and even many advocates in 16 this process do not see, and frankly even the 17 18 Energy Commission doesn't see, are the power plants that don't get proposed. Or the power 19 20 plants that never make it off the drawing boards. 21 Or the power plants that people decide can't get 22 financing because they are not going to get through the permitting process. Those casualties, 23 24 those power plants are real, I see them in my 25 practice frequently.

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To the extent you set a policy that 1 2 creates barriers for new power plants that are, that make them uneconomic or make them too costly 3 4 to build or make them too time consuming to build, 5 you will not necessarily see what the consequence 6 of that is in a palpable way because it will occur 7 behind the scenes. It will be the dog that didn't 8 bark, if you would.

9 So having said that, having said all 10 those things. I think it is critical to CEQA to 11 truly inform the public about what the impacts of 12 a new power plant are. That you do some 13 reasonable assessment of what its system impact 14 is. Of how the system will operate differently if 15 this plant is built than if it is not.

I am not going to take a whole lot of 16 time because we are going to discuss this but this 17 18 is a solvable problem. We did it. The Energy Commission in its IEPR has the staff and the 19 20 expertise to identify what the likely marginal 21 plants would be that would be displaced by new 22 power plants likely to come through the permit process in the next IEPR cycle. 23

24That information could be used in25specific siting cases to assess the net impact of

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1 a new power plant proposal where you would 2 identify what the greenhouse gas emissions from 3 the proposed project are and then you would use 4 the IEPR information to net that against what the 5 likely marginal impact of them introducing a new 6 power plant would be and you could get some 7 reasonable assessment.

8 Now is that assessment going to be perfectly accurate? Of course not, nothing is 9 10 perfectly accurate. But it will be more accurate, 11 substantially more accurate than if you simply pretend that the system doesn't change and that 12 13 you are just adding a new power plant and, in 14 effect, increasing demand where you are not doing 15 that. That is not only inaccurate, it can be inaccurate to the extent of actually reversing, 16 being inaccurate in terms of sign, if you will. 17

18 In fact, I think this is not only 19 possible, I think it is likely. It is very 20 common, I think, that you will have new power 21 plants that have certain greenhouse gas emissions. 22 Let's say -- I won't use particular units but let's say you have got five X greenhouse gas 23 24 emissions from a new power plant but it is displacing ten. That power plant is in fact 25

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1 reducing greenhouse gas emissions.

2 And if your information to the public is 3 that is increasing greenhouse gas emissions you 4 are not only numerically wrong, you are sending a 5 message to the public that is wrong fundamentally. 6 You are saying something is contributing to the 7 problem when it is, in fact, helping to solve the 8 problem. That is as wrong as you can be. 9 So with that let me say that I think the complexities can be addressed. We did something 10 much more difficult, frankly, conceptually under 11 PURPA when we set avoided cost pricing. That was 12 13 a similar kind of marginal cost analysis. But it 14 was a marginal cost analysis and it was an 15 analysis of plants that didn't yet exist. They were the plants that would be purchased if you 16 didn't purchase from the plant whose contract was 17 18 being debated. In this case we are talking about identifying the marginal plants that are real 19 plants that are operating on the system and that 20 21 can be identified much more easily.

22 So with that let me thank you for this 23 opportunity. I look forward to the remainder of 24 the discussion. And I really do hope that we can 25 work on this problem together.

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MR. RICHINS: Thank you very much. Matt
 Layton now.

MR. LAYTON: Good morning, my name is 3 4 Matt Layton. I am here to just float four 5 proposals on conceptual approaches to evaluating 6 greenhouse gases from power plants. Again, these 7 ideas are interim. We are not proposing a process 8 that might be in place for a long period of time. These are just for the interim to cover between 9 10 now and when the AB 32 does become in effect. However, I think there is a lot of uncertainty 11 about when AB 32 might come into effect. 12

We would like you to consider these four proposals, identifying the key issues that you think are outstanding. And again, provide comments for the record. I think the Commissioners are looking for as much input as possible on these issues.

Some caveats. Obviously these are a range of options. We haven't captured everything that might be out there. We are concerned that we are missing some points so we would like to hear from you on that.

And we do use mitigation, fees and offsets interchangeably. We understand that there

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1 may be other concepts. I think Will referred to
2 alternatives such as solar. That might be
3 something -- It is not mentioned explicitly here,
4 however, we just use the term mitigation. But
5 there's a range of options underneath that that we
6 are interested in hearing about.

7 Again, these are not comprehensive,
8 exclusive. These are just some ideas for you to
9 shoot at.

10 We have put numbers in these proposals. We derived these numbers based on looking at the 11 system today, how the power plants are -- what 12 13 power plants are out there, what are being 14 proposed, what technologies are available. We put 15 the numbers in there for you to look at. These are not final numbers, they have some issues with 16 17 them. Obviously I think it is important that we 18 recognize and you recognize that some of these 19 numbers that we propose as some of these 20 thresholds will significantly disadvantage certain 21 technologies, certain power plants, or 22 significantly advantage others. They are just a 23 starting point.

24 My discussion here is limited to these 25 proposals. There is a discussion this afternoon

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that is going to talk about other issues about 1 mitigation. How to set the value for that 2 mitigation, the fee, the price. Some of the 3 4 methods that might go into a CEQA approach. Some 5 of the finer details are not being discussed here. 6 We are just trying to float some ideas. So how 7 you would net out, that obviously would be left 8 for a more detailed discussion.

9 And again, construction emissions, we 10 are not going to discuss that today.

We too are very concerned about what 11 other agencies are doing, other states, in the way 12 13 of greenhouse gas emissions. We would like to 14 make sure that any proposal that the Commission 15 comes up with does work with other agencies, other entities, other states, and actually accomplishes 16 17 what all of us are trying to do. So that 18 particular issue I think is key. That needs to be discussed today and throughout this whole process. 19 20 Dick Ratliff talked about the first 21 threshold, which may be to the far left, the

22 simplest, zero threshold. If you emit you are a 23 stack. You count the greenhouse gas emissions 24 from your stack and mitigation is required for any 25 of those emissions over that zero threshold. Very

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simple to apply. However, it only applies to any
 new sources that are being permitted by the Energy
 Commission, it would not go back and apply to
 others.

5 So Dick had suggested that some of the 6 -- what we are proposing is somewhat similar to 7 the air regulations that are out there but it 8 really doesn't apply to all power plants. We are even limited more so. He said that we are limited 9 10 to power plants but we are actually limited to only new power plants. I don't think we have the 11 ability to go back and enforce this on old power 12 13 plants or existing power plants. So our scope is 14 even narrower than say the districts or the state 15 agency on air quality.

A second proposal might be the system 16 threshold. There's a lot of discussion about the 17 18 system. If a power plant met a certain threshold. 19 In this case we chose what the system heat rate 20 was in 2004 for the California system. This 21 particular number happens to be derived from the 22 AB 32 -- excuse me, the ARB, Air Resources Board 23 inventory and our estimate of the gigawatt hours 24 that year. If a power plant say beat this particular threshold it would not require 25

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mitigation. If it did not beat or meet this threshold it would have to supply mitigation for 2 those emissions over or all emissions, that would 3 4 be open to debate. It's a starting point.

5 Another proposal would be -- similar to 6 Proposals 1 and 2 where you have a zero threshold 7 or a system threshold. But a particular power 8 plant if it is built in a reliability area might be given some latitude or it might be deemed 9 10 needed. And I use that term very loosely. And therefore would be subject to different thresholds 11 or a range of thresholds. 12

And Dave Vidaver and I worked a little 13 14 bit on this and he is here to talk about, if you 15 have questions about local reliability he can answer those questions. But again, this is just a 16 17 combination of these concepts. Perhaps this might be more appropriate than say Concept 1 and 2. It 18 might achieve some of the goals that we need for 19 20 system reliability but at the same time addressing 21 the greenhouse gas emissions from the power plant.

22 The last concept would be the best 23 available control technology. We do use a lot of 24 air quality terms, air regulatory terms in the 25 context of talking about greenhouse gases. We do

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so very loosely. I think there is a difference
 between air regulations and what we are proposing
 here. But this was to try to suggest that certain
 technologies or certain classes of equipment would
 be considered providing net benefit for greenhouse
 gases to the California system or to the WECC-wide
 system.

8 There has been some talk about peakers 9 being needed. Peakers may be needed to allow 10 renewables to come on-line so perhaps there would 11 be a threshold for peakers. Or very efficient, 12 highly-utilized combined cycles might be granted, 13 might be deemed to provide a net benefit.

14 Similarly, cogeneration or solar thermal 15 that have some fossil fuel input might also be 16 assumed to provide some benefit to the system and 17 therefore would not have to provide mitigation for 18 their emissions. And power plants that did not 19 meet this would be required to provide mitigation.

20 We do realize that, again, certain 21 classes or technologies or even specific 22 manufacturers may be disadvantaged by picking a 23 very firm number as a threshold.

Anyway, those are just four proposals and we are available to discuss these. Anything

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else?

2 MR. RICHINS: Okay, thank you, Matt. 3 What I would like to do now is I have 4 three blue cards but I think I am going to hold 5 the blue cards for a little bit and start kind of 6 the roundtable discussion and dialogue.

7 And so this is a time for anyone to ask 8 clarifying questions of any of the speakers, to 9 put forth ideas and concepts of their own, and 10 just start kind of a dialogue back and forth 11 trying to understand other people's positions, where there might be movement in people's 12 13 positions, floating new ideas and so forth. And I 14 know we all have a lot of questions that relate to 15 this issue and so I am just going to turn it open to the people around the table. 16

Also if there is someone in the audience not at the table and you have a quick point that you want to make or whatever, you can raise your hand and we will recognize you. You can come up to the podium here and speak. But would someone like to begin the dialogue?

23 MR. MARQUEZ: Should the blue cards go 24 to the table or do the blue cards go to the 25 podium?

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MR. RICHINS: I have the blue cards. 1 2 I'll call the names of the people on the blue cards a little bit later. 3 4 MR. MARQUEZ: I know, but do they go to 5 the table or do they go to the podium? 6 MR. RICHINS: Oh, to the podium, yes. 7 MR. GALATI: Appreciate it. Scott 8 Galati for PG&E. We very much agree with many of the comments that Mr. Ellison made but we also 9 10 wanted to make a distinction too. I think that 11 there has been some confusion as to project-byproject versus a programmatic or a systemwide 12 13 approach. 14 We have never advocated nor do we 15 advocate that you are relieved of your obligation in each individual siting case for creating a 16 17 record and an evaluation and public disclosure of 18 greenhouse gas emissions and how you are treating 19 them. So we never believed that a systemwide 20 approach or a programmatic approach would displace 21 that. 22 What we are really advocating is you

need that systemwide and programmatic approach to inform those project-by-project analyses. And that what we think is unwieldy is to provide, try

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to do a systemwide approach in an individual siting case and have evidentiary hearings and many 2 days of litigation about how the system operates 3 4 in every project.

5 So what we are advocating is that you 6 take a process, whether it be the IEPR or 7 something new, develop an analysis of the 8 systemwide effects, come up with some guidance on how the system operates, that will inform your 9 10 project-by-project, case-by-case basis as they come before you. Applicants will know what to 11 present as evidence, whether we are consistent and 12 13 whether we can tier off of.

14 So what we propose is something to do in 15 the meantime while you are developing that programmatic and that was our best management 16 17 practices and performance standards. We believe 18 that those, both of those comply with CEQA. And we believe that -- One thing that we would like to 19 20 develop further, and as you saw from our comments 21 we had a joint IOU letter. And we have been 22 working also together, although we haven't been able to come up with one yet, is a joint outline 23 24 of what such a programmatic study would look like. 25 But it clearly is systemwide.

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So I think that -- I don't think that 1 2 there's maybe as, from my perspective, as much difference between what Mr. Rostov is advocating 3 4 and what Mr. Ellison is advocating on the process. 5 I understand there's differences on what the 6 threshold should be. But I just wanted to make it 7 absolutely clear. We weren't advocating that you 8 did not need to look at greenhouse gas emissions on a project basis. 9 10 ASSOCIATE MEMBER DOUGLAS: This actually brings up a question I had for Mr. Rostov. You 11 made the point that the Energy Commission should 12 13 not right now rely on a non-existent, programmatic 14 document in our siting cases and I don't think we 15 would try to do that. But that doesn't answer the question 16 17 that Mr. Galati put to us which is, obviously 18 there's an interim in which we do not have a 19 programmatic document so we may very well be 20 litigating some of these issues on a case-by-case 21 basis right now. We may not, we may litigate a 22 more limited set of issues on a case-by-case basis right now. 23 24 But that still raises the question of next steps for the Energy Commission and whether 25

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we should expeditiously seek to develop a 1 programmatic document. And if so, what are the 2 questions that that document should address that 3 4 would be helpful and help us understand better as 5 we continue to do the case-by-case analysis in 6 individual siting cases because that is obviously 7 how we are organized right now, how we approach 8 all of our siting.

9 MR. ROSTOV: Thank you for the question 10 and I appreciated Mr. Galati's comments. We are 11 not opposed to doing a programmatic analysis in 12 the future. But the programmatic analysis would 13 really have to look at how you are getting to a 14 low-carbon future. How you are providing the 15 energy and getting to the low-carbon future.

Actually we had a long discussion in the car about this, me and Mr. Vespa. I firmly believe that he is going to provide a better answer than I will so I am going to defer to him.

20 MR. VESPA: Well we'll see. But this 21 goes to the sort of -- We have a -- The objective 22 here for CEQA purposes, what we are trying to 23 accomplish with the significant threshold is 24 avoiding dangerous climate change, and that's 25 something ARB recognized in its proposed

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1 threshold. So we want to frame the issue 2 properly.

3 And I haven't quite seen that yet in the 4 CEC documentation but we want to kind of keep our 5 eye on the ball when we're thinking about how we 6 evaluate these issues, and that is, very 7 significant reductions by 2050. And I think the 8 road map to a low-carbon future should sort of look at that, look at the energy sector, and think 9 10 about where we are going from our energy sector needs to that low-carbon future. 11

And, you know, Chris raised this issue 12 13 of displacement and I think that's very valid. I 14 guess from the environmental perspective the 15 concern is, okay, maybe you are displacing something, maybe temporarily, but that capacity 16 still exists. Do our energy needs go up does that 17 18 capacity come back on-line. I think climate change is going to exacerbate our energy needs 19 20 even more.

21 So where is California going in terms of 22 its energy demand? How is that demand being met 23 by efficiencies first, then renewables and then 24 fossil fuels. That loading order. And, you know, 25 where are we really going. And I think the

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problem with some of these sitings is, you are not 1 2 answering those questions, you are just adding new capacity. Adding new capacity. Not necessarily 3 4 taking old capacity off-line but just saying, 5 well, we won't be using it right now because we 6 are going on-line first, without really showing, 7 you know, whether that is going to be off-line 8 forever or whether it is just temporary. And I think that really would be useful. 9

10 And I don't think AB 32 gets to those issues, it is more of a market-based cap-and-trade 11 approach that is multi-sector. I don't think it 12 13 is something we can exclusively rely on to deal 14 with our energy future. And I think -- You know, 15 there's all this talk about renewables and energy measures but I haven't seen any analysis of how 16 that is getting at our demand. And where is that 17 18 incremental demand to be met and what is our bridge to the future. 19

I think it is important to remember that, you know, power plants built today will probably be on-line in 2050. And so if you are making long-term carbon commitments when we are on a trajectory to a low-carbon future I would sort of like to see how, if we all do have to make

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1 those commitments, how we also are kind of getting
2 lowering. And I think that would be very helpful
3 to have.

4 ASSOCIATE MEMBER DOUGLAS: I think these 5 are really good points. I think I would agree 6 with the overriding point that the Energy 7 Commission is the energy policy agency for 8 California. So it is policy that we develop in our IEPR and in other documents where we are 9 10 trying to look at how the system will evolve over 11 time, how we want it to change over time and so That won't be answered if we don't step up 12 on. 13 and look at that question. We are the ones really 14 to do that.

15 I had a very related question to what you said, actually, for Mr. Ellison. I think you 16 made very good points about the system and how it 17 18 works. I think there is certainly a lot of logic 19 to what you put forward. One question that I find 20 that continues to bother me though is just the 21 implication that any power plant that makes the 22 system marginally more effective is therefore not 23 a significant impact.

And if we were to take the analogy to, say, China. And I'll just throw a somewhat sort

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of ridiculous, potentially ridiculous counter fact 1 out here. But let's say that we were sitting in 2 China right and trying to make the argument that 3 4 every coal plant that we build, because we are 5 building newer, more efficient coal plants, is 6 therefore making our system more efficient. 7 Therefore, the more we build and the faster we 8 build them the cleaner our system is getting, the more the dirtier, old coal we are displacing. 9 We 10 are not creating demand for these coal plants, we 11 are merely satisfying it. Therefore, there is no significant impact. 12 13 I think there comes a point at which

14 that argument becomes hard to sustain, even though 15 I think when you apply it to California there are 16 very significant differences from the China 17 example. It's just something that would be 18 helpful for us to get your perspective on.

MR. ELLISON: Thank you, Commissioner
Douglas, for that question, because I wanted to
talk about this issue.

22 What this issue gets at is the 23 relationship of supply and demand for electricity 24 and the impact that new supply might have on 25 demand. And as I said in my opening remarks, in

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California the introduction of new power plants 1 2 does not fundamentally change the demand for electricity. It has to do with the way we price 3 4 it, it has to do with a lot of other things. 5 Your China analogy has implicitly buried 6 in it the idea that if you build enough of these 7 coal plants you are, in fact, somehow increasing 8 the demand. Or alternatively, that if you didn't build them maybe you wouldn't meet that demand. 9 10 Neither of those are true in California. 11 In California our policy right now is we meet the demand, whatever it is, and that demand is 12 13 fundamentally unrelated to how many power plants 14 we build. If we don't build a new power plant in 15 California the demand is met somewhere else. Outof-state coal is a likely possibility for doing 16 17 that. But a couple of other points that I want 18 to make are, the loading order and the idea of the 19 20 Energy Commission doing this kind of plan for a 21 low-carbon future is, I think, a good idea. I 22 think that is something that the Energy Commission should do. That's exactly one of the reasons I 23 24 think the Energy Commission was created. 25 IEP has been a strong supporter of the

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loading order. It has been a strong supporter of 1 energy conservation. Incidently, one of the 2 things that makes energy conservation so effective 3 4 in the electric sector compared to other markets 5 is precisely this relationship, this real time 6 dispatch. If you conserve a kilowatt hour of 7 electricity you instantly reduce the operation of 8 a power plant somewhere. That is not true for oil, that is not true for natural gas. Eventually 9 10 it works its way through the system in those other markets. Eventually there is some balance of 11 supply and demand. But for electricity it is 12 certain and it is immediate. 13

And so that is one of the reasons that energy conservation, if you are going to analyze alternatives, one of the reasons energy conservation is so effective is because you know that it is going to have that immediate and certain impact. But that is also true for end reduction of new power plants.

And again at the risk of being redundant -- And by the way, I agree with everything Scott Galati said. At the risk of being redundant, consistent with Mr. Rostov's theme that CEQA is essentially about informing the public of what the

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1 real impacts are.

2 Energy is complicated. There are a lot of things about energy that are counter intuitive. 3 4 There are a lot of assumptions that the public 5 makes about energy that are just wrong. And if we 6 are going to make progress on this issue and if we 7 are going to solve this problem we have to do it 8 in a manner that is based upon the real facts of the system. 9

10 You can't fool Mother Nature. If you 11 pretend that you have done something good when in fact the real facts are that you haven't, you 12 13 haven't. And getting that information out to the 14 public about the way the system actually operates 15 and what the impacts of real power plants are is, I think, a goal that we all should share. And I 16 think the Energy Commission is uniquely in a 17 18 position, with its expertise and its staff, to 19 perform this function.

The last thing I want to say is on this issue of displacing power plants but maybe the power plants are retired and someday come back. Again that's an issue of meeting the demand. But the fundamental question in a particular siting case -- Let me separate this out. The idea of

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having a long-term plan for achieving a low-carbon 1 future is a good idea. And that is where I think 2 you can address some of these issues. But any 3 4 particular siting case the fundamental CEQA 5 question is, what is the environmental impact of 6 siting versus not siting this power plant or 7 siting this versus some other alternative. 8 And if you fail to account for the system impacts in doing that kind of analysis you 9 10 come up with an answer that is not only wrong but will have unintended consequences that could, in 11 fact, be the exact opposite of what you are trying 12 13 to achieve. 14 MR. RICHINS: Yes, Taylor. 15 MR. MILLER: I'd just like to make a couple of points. This is Taylor Miller with 16 SDG&E/Sempra. The first is we, of course, as a 17 18 group agree that there needs to be an analysis of GHG in the environmental documentation and in the 19 proceedings. There is no exemption that anyone is 20 21 proposing here. So to frame the issue in those 22 terms is simply a red herring, in our view. Secondly, one thing that hasn't been 23 24 mentioned, well I guess a little bit but not directly, is the efficiency programs that are 25

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already ongoing and will be increased under the 1 scoping plan as proposed by the ARB that are also 2 a system issue. In addition to the displacement 3 4 that has to be considered, if one is looking at 5 what is the context of the new power plant and how 6 it balances how the overall system is behaving, 7 the fact that we have multi billion dollar 8 literally efficiency programs going on in California that have been guite effective, has to 9 10 be considered.

If you look at AB 32 and the projections 11 at the PUC and the modeling as well, about half of 12 the reduction by 2020 is coming from efficiency. 13 14 And those are not inexpensive programs. For SDG&E just for 2008 we are budgeting \$100 million for 15 efficiency programs. Actually more than that for 16 about five different programs. And that's for a 17 18 system that is maybe 25, 30 percent greater than So that is a significant expenditure per 19 SMUD. year for just that system. And with PG&E and SCE 20 21 you can only imagine it's quite a bit more than 22 that.

23 So I think that that is another reason 24 why the system approach is relevant to this. If 25 you are trying to -- In looking at for just a

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1 moment at the legal side of this, the task that 2 the Commission has is, first of all it is not 3 whether to do an analysis, that's a given. So we 4 are not talking about fair argument issues here at 5 all. We are talking about the ultimate conclusion 6 of significance at the end of the process.

7 And in that case we are looking at 8 whether a particular project is cumulatively considerable. So considerable by itself 9 10 contemplates something more than zero. A zero 11 threshold is something not legally mandated. And furthermore, in making that determination of 12 13 whether a project is cumulatively considerable is 14 absolutely appropriate, in fact required to look at the overall contents. And so I think the 15 system is certainly relevant. 16

And my point here, I guess, is just that 17 18 in addition to the displacement that is quite real, and I would certainly agree with Chris' 19 20 points, there is also the efficiency effects that 21 are going on. And those are all ratepayers costs 22 so we also need to be mindful that if there is some additional mitigation required in this 23 24 interim period, we are laying it on top of expenditures that are already being billed for 25

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efficiency and for RPS compliance with the 20 percent requirement. And of course now we know we are quite probably going to have a 33 percent requirement and that again is going to certainly reduce system impacts.

6 Finally, I think it is important to keep 7 in mind that the impacts of GHG are not local, are 8 not immediate. The goal in 2050 is to have a limited concentration in the atmosphere, which is 9 essentially equivalent to a certain inventory in 10 11 the atmosphere at that time. How one gets to that cap of inventory, there's a million ways to get 12 13 there. Whether you reduce this year or you reduce 14 next year, as long as you get there and keep that 15 concentration at whatever it is, 450 parts, 500 parts of CO2. That's the goal. 16

So we are not threatening a neighborhood with immediate impacts of air emissions that need to be mitigated at the same time frame necessarily. I think that's a point that sometimes gets lost in the discussion. Oh, one last point and then I'll give up the floor here is that the point on alternatives

analysis, as we both know having been through somecases, there's a very rigorous alternatives

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analysis that is already included in the process that includes technology evaluation. So I don't think that anyone is arguing against that, that's already part of the system, that's already part of the CEQA analysis.

6 So that's my comments, thank you. 7 MS. LUCKHARDT: I guess if I could just 8 add something. I think that -- First of all I agree with the comments of Mr. Ellison, 9 10 Mr. Miller, Mr. Galati, but also just kind of 11 moving off and listening to some of the concerns that have been expressed by Mr. Vespa and 12 13 Mr. Rostov.

14 You know, a lot of the issues in the 15 greater concern for reducing greenhouse gas really cannot be addressed in an individual siting case. 16 17 And when we do the alternatives analysis that 18 Mr. Miller referenced we rely heavily upon the efforts of this Commission in the IEPR and in the 19 other processes that set forth the loading order 20 21 and the energy efficiency goals.

And so in order to address the broader issues that are the concerns that have been raised by Center for Biological Diversity and Earthjustice here and in other filings we need the

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broader system approach to focus on. We are not 1 going to get the energy efficiency goals we need 2 out of a power plant siting case. You have got to 3 4 get that from a broader approach. You cannot get 5 the Renewable Portfolio Standard goals solved in 6 an individual power plant siting case. We need 7 this broader approach that then you apply to the 8 power plant siting case.

9 And we all have agreed so far and I 10 absolutely agree. We cannot not evaluate the 11 greenhouse gas impacts of an individual power 12 plant. That exposes everyone to all kinds of 13 litigation. I mean, that is just not a solution 14 and not anything any of us are asking for.

But I think in terms of evaluating what is the impact of that power plant you have to look at the broader system, you have to look at the broader programs. You need to look at energy efficiency. You need to look at what is going on with renewable procurement and the Renewable Portfolio Standards.

22 So I think, you know, the idea of doing 23 a broader system analysis that has been presented 24 is important not only to look at the overall 25 system and the interaction of the electric system

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but the other programs that are ongoing, energy 2 efficiency and renewables. And then apply that 3 overall system approach to the individual power 4 plant in the individual power plant siting case.

5 MR. ELLISON: If I could briefly add one 6 other comment. And it goes again, Commissioner 7 Douglas, to your China example. And it also goes 8 to this issue of integrating a statewide effort that goes beyond just electricity into all energy 9 10 sources.

Fundamentally, if we are going to reduce 11 greenhouse gases you have got to do something 12 13 about demand. I mean, your point about China was 14 right. If you simply have an ever-increasing 15 demand, and even though you are adding the most efficient resources you could possibly do and 16 17 mitigating them to the fullest extent that you 18 can, you are nonetheless adding greenhouse gas 19 emissions and you are not going to achieve the 20 goal that you want to achieve.

21 But let me give you an example. Suppose 22 we decide that as part of our greenhouse gas mitigation program or for whatever other reasons 23 24 we want to electrify our mobile transportation 25 sources, okay. Well the impact on the electricity

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sector of that is probably going to be to increase 1 2 greenhouse gas emissions from the electricity sector substantially, right, even though that is 3 4 probably a good thing to do. I am making 5 assumptions here. That's probably a good thing to 6 do from an overall greenhouse gas program 7 standpoint because of the huge reductions that you 8 would be getting from mobile sources.

9 These are the kinds of things you can't possibly address in an individual siting case but 10 11 that are fundamental to achieving the goals of addressing climate change. You know, the 12 13 incremental impact of a single power plant and 14 doing a kind of CEQA cumulative impacts analysis, 15 although it should be done, is nonetheless the tail on the dog. The real heart of this problem 16 is something that has to be addressed through some 17 kind of integrated program that looks at all of 18 the emission sources. Worldwide ultimately but 19 certainly statewide for the purposes of 20 21 California. And that is what IEP supports. MR. WESTERFIELD: Bill Westerfield on 22 23 behalf of SMUD. I am going to join the chorus in

24 support of the programmatic approach. But just
25 before that I would just like to mention that SMUD

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really appreciates the inclusive format that the
 CEC has laid out for today's workshop and
 certainly for this entire informational
 proceeding.

5 SMUD has, I think, one of the less or 6 least carbon intensive footprints of the state's 7 electric utilities. We have been a leader in 8 reducing and mitigating adverse environmental 9 impacts from power generation. So that's really 10 why we think programmatic is a better approach.

11 Commissioner Douglas, I would like to 12 address your concern about what to do in the 13 meantime if, for example, there is no program in 14 place. And I think that is a real question that 15 needs to be addressed. But let's, I am going to 16 address it from the big picture rather than the 17 weeds of a CEQA analysis for a second.

18 As we all know a tremendous amount of work has gone into the Energy Commission and the 19 20 CPUC process to recommend greenhouse gas 21 strategies for implementing AB 32 at ARB. 22 Similarly, a big effort will be made, a huge effort will be made at ARB over the next several 23 24 years and at the Western Climate Initiative. We 25 all have a tremendous job ahead of us in bringing

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1 this program into fruition within the next couple
2 of years.

There have been a host of measures already proposed by ARB to tackle this problem, only one of which is cap-and-trade, and by which ARB estimates that an inordinate burden will be placed on the electric sector. You have already heard the idea that we are going to be responsible for 40 percent of the emissions.

10 And there have been some figures cited 11 in the proposed scoping plan that the electric 12 sector will take a 16 percent hit on employment, 13 business as usual, during the implementation of 14 these measures, and I think a similar hit in the 15 terms of absolute revenues.

So this program will be profound, 16 expensive and comprehensive. So not only does it 17 18 occupy the field of regulation but there are a number of economic assumptions that ARB is 19 20 counting on to make their program work. And so I 21 guess my point is that the Energy Commission needs 22 to be very, very careful about changing the economics of ARB's plans to transform California's 23 24 economy through AB 32.

25 Now cap-and-trade is the most obvious PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

example of that. It assumes a flexibility on a 1 2 portfolio-wide and statewide basis. It assumes that flexibility will allow least-cost innovators 3 4 to reduce the cost of California as a whole to 5 make this transformation to a low-carbon economy, 6 instead of requiring each individual emitter, if 7 you will, to implement the standard that we hope 8 to meet, which is a 25 percent reduction ultimately. 9

10 That's a different assumption maybe than 11 what we are looking at with CEQA. We need to allow that or be cognizant that that is the plan 12 13 or is going to be the plan that this state is 14 going to follow. And I worry that by creating a 15 new cost to power plant siting that we might, the Energy Commission could put into place rules that 16 17 could change those assumptions and truly interfere 18 with a program that we all know will happen. So that's the big picture comment I think we would 19 20 like to make in that respect.

ASSOCIATE MEMBER DOUGLAS: Actually I'll just respond very quickly. I actually expected that to be the first distinguishing -- Mr. Ellison made some very good points in trying to distinguish from my China example but I had

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expected also that one point would just be that
 California has a commitment to a low-carbon
 future, or at least is putting policies in place
 at the ARB and at the Energy Commission and the
 PUC to try to make that happen.

6 And so I think I -- I certainly do agree 7 with you that when we look at CEQA we don't want 8 to be working at cross purposes with the policies that we are trying to put in place to achieve our 9 10 AB 32 goals. I think we also though have, as Mr. Rostov pointed, out, obligations under CEQA to 11 analyze this issue and make certain findings right 12 13 now with much of the program still in development. 14 So that again gets us into our, what do we do now 15 conundrum, as well as the question of our independent energy policy role in helping actually 16 shape and help this program to succeed. 17

18 MR. WESTERFIELD: Of course, Commissioner Douglas, we certainly appreciate that 19 20 but what we do now will affect the operation of a 21 project for 40 or 50 years. We are looking at 22 what will happen in the next several years. In fact, the decisions you make to try to cover that 23 24 gap of several years of, if you will, the absence of a program, will have ramifications for 25

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generations. Because that is how long the power plants operate.

PRESIDING MEMBER BYRON: If I could just 3 4 add a comment as well. Maybe a couple of 5 comments. One is that it sounds as though we are 6 facing a substantial change in the way we might be 7 doing things. But the fact is this Commission, of 8 course, for many years has been working towards these same goals. If you look at the CO2 9 10 production per megawatt hour on the basis of GDP or per capita, this state is approximately half 11 the basis of where the rest of the United States 12 is. So the policies of this Commission and the 13 14 State have been pretty well underway for a long time. I would like to take credit for them but I 15 haven't been here long enough to do so. 16

The other comment I would like to make 17 18 is maybe dispel a little bit of the myth around what we do here today determines the next 40 years 19 20 in that if we build a power plant we are stuck 21 with it. And that is not necessarily the case. Ι 22 think it is very clear based upon the analyses that I have seen that we are relying upon 23 24 technologies that don't yet exist in order to 25 reach some of these goals.

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We have seen repowering of power plants, 1 2 we have seen major changes of rotors, et cetera, on gas-fired plants that are changed out for 3 4 efficiency purposes. And that could certainly 5 happen and will continue to happen. And the 6 notion of carbon capture and sequestration, 7 although right now seems like a very distant 8 prospect, is something that we are probably going to need to rely on, if not in this state certainly 9 10 throughout the rest of the world. So I guess I would like to dispel a 11 little bit of that myth. That this is not the 12 13 enormous sea change, perhaps, that we want to make 14 it out to be, we have been on the path for a long

15 time. And whatever we do on an interim basis does 16 not preclude correcting what we might do wrong at 17 this time, in the future, if I could state it that 18 way.

19 MR. ALVAREZ: Commissioner. Manuel 20 Alvarez, Southern California Edison. I guess -- I 21 want to bring up a couple of points. And you 22 actually raised the point that I was going to 23 raise in making it clear that we do see California 24 at a low-carbon future. That is our direction so 25 we don't have any concern with that.

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The other issue I want to bring up is if 1 2 there was an impression in the joint filed comments that we were asking for exemptions from 3 4 those requirements, I want to dispel that myth 5 because I don't think that's true. At least that 6 was our hope that it didn't come across that way. And if it did --7 8 MR. GALATI: It's my fault. I didn't mean to write it that way. 9 10 (Laughter) MR. ALVAREZ: Drafting a joint document 11 can also get very cumbersome. So I'll just share 12 13 that with you. 14 And as mentioned earlier, we are working 15 on a proposal for what the study would look like. And in fact I will offer it now, if anybody would 16 17 like to participate in that discussion feel free to contact us or any Commission staff or anybody 18 else. It is definitely something that I think has 19 to come together. But I just didn't want to leave 20 21 you with that impression. 22 It is clear from my vantage point that California is moving in that direction of the low-23 24 carbon future and that the parts that we are all working on, energy efficiency and renewables, are 25 PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

dispersed. I mean, they are located in a number of agencies. But when you look at the context of AB 32, it is definitely holding, or at least trying to hold the state together on a common strategy for climate change issues and power plant facilities and energy conservation are discussed there.

8 I think that is one of your biggest challenges, is to demonstrate to the various 9 10 parties who are in this discussion how that is 11 coordinated among the agencies who have their individual responsibilities because your 12 13 responsibilities for siting a power plant or 14 examining a facility are not relinquished during 15 the AB 32 process. So you are going to have to wrestle with that and it is a difficult task. 16

Commissioner Byron brought up an issue of future technology. And that gets to the point that Mr. Ellison brought up about you not knowing what's on the cutting room floor of projects that don't show up here. And I guess the question for me is, you know, why don't you know that.

And in fact my answer to that is, you do know that. You do take a look out into the future and ask what kind of technologies are available or

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may be available to the state to comply with their 1 2 energy requirements and set up that energy plan. It may not be as explicit as Project A or Project 3 4 B but you do present to all of us a sense of what 5 the future should look like. And then basically 6 using the planning process you do every two years 7 to kind of test yourself against that particular 8 goal.

9 Historically I think the Commission was 10 able to do that individually as a facility but 11 there were always problems with other agencies and other policies either coming from the State or 12 13 local government's directions. And now you just 14 added additional complexity on AB 32. So that's a longer and stronger effort of coordination that is 15 going to have to take place within government that 16 I don't think we have experienced in any kind of 17 18 energy planning or energy policy development 19 historically.

20 MR. GALATI: There is one other thing 21 that you could do immediate -- And first of all I 22 would like to applaud all the work that you have 23 been doing recently with the NCCP process, the 24 Natural Community Conservation Plan process, to 25 help with renewables. I think that process, while

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we all agree we wish we would have done it five years ago, five years from now we will be glad we did. So very happy about that.

4 But there is something that you could do 5 right now. You know, the Energy Commission was 6 given authority and you adopted regulations last 7 year under SB 1059 Transmission Corridor 8 Designation. And I'm sure my colleagues here who 9 practice in siting projects would agree that 10 probably the number one thing facing new renewable developers is access to transmission. And I give 11 you a lot of stories out in the desert of 12 13 transmission that is planned, permitted, not 14 built. Planned, can't get permitted. Permitting 15 processes that take 20 years. Those, I think, are exactly the reason 16 why a transmission corridor designation that we 17

fought very hard -- And I think the utilities
specifically fought very hard to make that process
so encompassing from an environmental perspective
that it would be meaningful so that when you
wanted to site a transmission line that would
benefit all these renewable projects we wouldn't
be starting from square one.

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And so I would urge the Energy

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Commission. I know that you have been working on it. But I think that that should be a number one priority for you in helping shape the future for 3 renewables. Not only to get permitted through you 4 5 but to actually get built and deliver electricity.

6 I can't tell you how many projects that 7 we are currently discussing. And when the subject 8 of transmission comes up it is a four to five hour discussion, at the end of which we don't know any 9 10 more than when we started. And what would really be great is if there were some corridors out there 11 that we knew were coming. We in the development 12 13 community will respond. There isn't the overall 14 planning that there used to be but I think you 15 guys could take a leadership role in that.

And remember, you don't have to 16 designate a perfect corridor. You could designate 17 three imperfect corridors and that would be great. 18 And those three imperfect corridors will be 19 tweaked to be made more perfect or one of those 20 21 three will be used. So I would really encourage 22 you to use that authority that you have.

PRESIDING MEMBER BYRON: Mr. Galati, 23 24 thank you. And of course you make reference to some ongoing work at this Commission, at the PUC 25

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and the ISO with regard to the Renewable Energy
 Transmission Initiative. How about six corridors?
 I mean, just pick a number. We are working
 towards that as you may know and I appreciate you
 bringing that up as an integral part of the
 solution that we are discussing here today.

7 MR. VESPA: Thanks. I just wanted to 8 get back to the question of what we do now. And 9 there seems to be general agreement that we have 10 to analyze greenhouse gas emissions as part of 11 these projects. But I think maybe some sticking 12 points would be, what do we do in that analysis.

13 And what I am hearing, maybe/maybe not, 14 is that a natural gas power could simply say, I am 15 more efficient than existing power plants. Typically the less efficient ones go on-line last. 16 I am adding new capacity and therefore displacing 17 18 older, less efficient capacity. And therefore I am also significant and that would be the end of 19 20 the analysis.

21 And that is a real concern to me. 22 Because you are displacing capacity but how are 23 you displacing that capacity? When you sort of 24 give us carte blanche to make a less than 25 significant finding, which this logic would allow

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you to do for pretty much any project, you are not looking at mitigation alternatives. And someone mentioned we do look at alternatives but not in the greenhouse gas context unless that impact is significant.

6 And I think it is important to ask in 7 any of these sitings how might we otherwise 8 displace some of these needs. Could we use renewables, could we use efficiencies? And I just 9 10 don't think it is appropriate for every project 11 just to make less than significant findings simply through this displacement argument. Which 12 13 ultimately is adding new capacity to the system 14 and I think is a little too general and doesn't 15 really allow you to find alternatives to these carbon commitments. 16

17 So I would kind of like to get to the 18 question of what the greenhouse gas analysis would 19 be. Because I think that is where, I think, there 20 is going to be a lot of disagreement.

21 MR. ELLISON: I'll offer a couple of 22 thoughts. One is, to the extent that it is 23 factually true that the more efficient plan is, in 24 fact, reducing system greenhouse gas emissions. 25 And I think it is factually true that it is not

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contributing to the cumulative impact. And 1 respect for that truth I think is an important 2 touchstone to solving this problem. Because if 3 4 you don't respect that truth you will start making 5 decisions -- for example, let's say potentially 6 turning that power plant down because you required 7 it to mitigate in a way that it chooses or cannot 8 do. When in fact, if you had let it go forward you would have improved the system. So that's my 9 10 first point, you know.

But the second point you raise is this 11 issue of alternatives and the idea that perhaps 12 13 you could do something that would be even better. 14 Even though this does not have a significant 15 impact maybe there is something even better. Well let me suggest that it is better not because of 16 its impact on greenhouse gas, it is better for 17 18 some other reason.

That if you have kilowatt hours produced 19 -- Let's say you have got a gas-fired project and 20 21 a solar project. And I represent them both. If 22 the gas-fired project is in fact, and this is an assumption I am making here. But let's assume for 23 24 the sake of the discussion that the gas-fired project is, in fact, reducing system greenhouse 25

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gas emissions and therefore it is not contributing to any cumulative impact of greenhouse gas, okay.

And the kilowatt hours from the solar project would do exactly the same thing. It is the same number of kilowatt hours, it is displacing the same thing, okay. They are fundamentally equivalent in that respect. The renewable project is not better than the gas-fired project with respect to that.

10 Now it may be better with respect to a 11 whole bunch of other things, okay. It may be better in terms of all sorts of other emissions. 12 13 It may be better in terms of diversity of fuel 14 supply. We all know a number of arguments that 15 could be made. The Energy Commission already does that analysis. And that kind of analysis is 16 something that nobody in this room I don't think 17 18 is suggesting shouldn't be done.

19 MR. RICHINS: Well let me pose a 20 question. Taking the system approach I think it 21 is recognized that generally the system will 22 become more efficient with the addition of a new 23 plant and there will be marginal improvement on 24 carbon emissions. So I guess my question would 25 be, from a CEQA standpoint that meets the test, I

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believe, of CEQA and CEQA significance.

2 However, taken out of the context of CEQA and look at it from a policy perspective and 3 4 AB 32 kind of goals and objectives, is that enough 5 and is that where the Energy Commission should 6 stop in our CEQA analysis or should we also 7 include a policy oversight or a policy, additional 8 policy considerations in our analysis? So should there be something above and beyond what the 9 10 system would show as a marginally -- marginal 11 improvement? MR. ELLISON: We are here today to talk 12 13 about CEQA. And so the answer under CEQA is no, 14 it shouldn't if the impact is not there under 15 CEQA. That is what CEQA is about. MR. RICHINS: And that's why I made the 16 17 distinction. MR. ELLISON: Now let's shift the 18 discussion to AB 32 or the Energy Commission's 19 20 authority to, you know, adopt energy policy for a 21 whole variety of other reasons. Yes, maybe you 22 should be, you know, imposing or providing guidance in siting cases or adopting new energy 23 24 efficiency standards or a whole variety of other 25 things that are necessary to move us forward.

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And I think we ought to all be working together towards that. I think a lot of the voices around the table have suggested that programmatic approaches to helping solve the greenhouse gas problem that are integrated with AB 32 make sense. That that's, you know, what we are here to do.

8 And to the extent we spend a lot of time arguing and debating about the CEQA impacts that 9 10 in the hypothetical we are discussing do not 11 exist, we are taking time and energy away of all of us, we have human resources here in this room, 12 13 from working on the other problem. So let me 14 suggest that keeping straight what your authority 15 is and what your purpose is and what you are doing is an important part of solving the problem. 16

MR. MILLER: I would like to add a point to that, Paul. This is Taylor Miller for Sempra. The reference was made in one of Mr. Rostov's statements, I think, that you might want to look at how you can -- in an individual siting case, how RPS might be complied with.

I think the basic concept of a portfolio standard is the LSEs are directed, or at least the IOUs are directed, to meet a given percentage on a

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portfolio basis. And so that is the mandate that already there and that will be now 33 percent, likely. That implies a certain amount of resource planning that is still allowed to go on at the IOUS.

6 So it is not a directive on how to get 7 there. And I think the tail would be wagging the 8 dog to have an individual siting case take up the 9 question of what is the best way to get to the 10 RPS. I do think the utilities are entitled to 11 some decision-making on that on a resource planning basis across their system. 12 PRESIDING MEMBER BYRON: Does that apply 13 14 to transmission as well? MR. MILLER: Well, you know --15 PRESIDING MEMBER BYRON: I am just 16 making reference to some alternative decisions 17 18 before the PUC right now. MR. MILLER: Yes. Well, you know, there 19 20 was a rather substantial alternatives analysis 21 done in that case. 22 PRESIDING MEMBER BYRON: We don't want

to get into that.
Mr. Richins, I think Mr. Vespa has a
comment.

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MR. RICHINS: Yes, I could see that he was jumping --

MR. VESPA: I just, you know, I take 3 4 issue with the systematic approach and the 5 assumption that all these new power plants are 6 presumptively less significant. And these are 7 carbon commitments. They are adding new capacity 8 to our system. And, you know, there is no assurance that these dirtier systems won't be back 9 10 on-line in a couple of years. And these are long-11 term commitments. And maybe at that instant that power plant goes on-line something might get 12 13 displaced. But who is to say that those other 14 things won't come back on-line in the future. 15 There seems to be an assumption there that these are less than significant and I 16

17 absolutely disagree. And I think we have to look 18 at how these new carbon commitments are affecting 19 our trajectories. And certainly that will happen 20 in a programmatic way in the future, I'm hoping. 21 But there is also a project level analysis to be 22 done and these can interfere with our carbon 23 future.

And I think they are significant on a project-by-project basis with a lot of emissions PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

going into the atmosphere. Whether they displace 1 2 for a temporary amount of time something else. You know, I don't think we can make that 3 4 assumption that all these power plants are less 5 than significant. Or else we just constantly --6 Under that logic we can do whatever we want. We 7 can build as many power plants as we want. And 8 they are all less than significant because something else is getting displaced. And that 9 10 just logically doesn't seem to flow for me. PRESIDING MEMBER BYRON: Mr. Vespa, 11 doesn't AB 32 address that? I mean, aren't we 12 13 going to be required to see these goals met by 14 certain time periods? As Mr. Ellison pointed out, 15 we are addressing the CEQA issue here today, I realize, but doesn't AB 32 really address that? 16 MR. VESPA: You know, the issue I have 17 18 with AB 32 is that it is really, it's a market-19 based system that is dealing with more than just 20 the energy sector. And I don't think it really 21 answers the question of how we are approaching our 22 energy needs in a sort of systematic way. And so it is a short-term goal. It doesn't look at 23 24 reducing climate change necessarily, it's a step 25 towards that goal.

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And I think carbon commitments in the 1 2 future. These are emissions that will be, will be for quite some time. I think you want to look a 3 4 little bit separately about whether those long-5 term commitments are really necessary or not. And 6 having a market-based system to somehow trade and 7 pass around some of these things is useful, I 8 think, more as a mitigation measure but not in and of itself as a way of determining significance. 9 10 Because these are long-term carbon 11 commitments and maybe they are necessary or they may be not. And I think AB 32 should not obviate 12 13 the need to look at alternatives to more carbon-14 intensive fuel energy production versus less 15 carbon-intensive productions like efficiency and renewables. I would hate to see those 16 alternatives taken off the table because we are 17 assuming they are less than significant. 18 ASSOCIATE MEMBER DOUGLAS: I can't help 19 -- I'm sorry, Commissioner. At this point I 20 21 really want to point out that AB 32 is not just a 22 market-based system. The scoping plan has a suite of regulations in it that affect virtually every 23 24 sector of our economy. It includes a 33 RPS, it includes our aggressive energy efficiency goals. 25

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So I think of AB 32 as a comprehensive plan to get
 our economy to the 2020 target. It does not, in
 AB 32 get us to the 2050 target.

MR. VESPA: Right.

4

5 ASSOCIATE MEMBER DOUGLAS: The market-6 based system is, you know, potentially a part of 7 it if ARB makes certain findings. The market-8 based system, interestingly, is the part of AB 32 9 that would most directly affect generators. Other 10 regulations in AB 32 put more of the burden on the 11 utilities.

So the interesting thing to me is the 12 13 market-based system is where if the point of 14 regulation is on deliverers, we actually do have 15 generators involved in a system that is getting us to our targets. I would agree that we cannot just 16 17 assume that compliance with AB 32 meets the 18 significance threshold in CEQA. That is a 19 question that has to be asked. But being a long 20 time AB 32 person I just can't, I couldn't let 21 that one go unchallenged twice.

22 MR. VESPA: Right. I guess what I was 23 referring to more specifically was entering into 24 the cap-and-trade system, specifically that part 25 of it. And I think in terms of looking at the

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significance of your impact, there are these other renewable standards and so forth. And I think it is worth asking whether adding more fossil fuel commitments is somehow going to affect your portfolio ratios and things like that. So that was sort of more what I was getting at.

ASSOCIATE MEMBER DOUGLAS: Okay.
MR. ROSTOV: I just wanted to -- This is
Will Rostov from Earthjustice. I just wanted to
give an example of the flaw in the system
approach. I think it really has to do with local
reliability.

13 Often I have been involved, not in this 14 job but a few years ago in a different job I was 15 involved in some power plant sitings where it was like, if we build this new power plant we will be 16 able to retire the old power plant. And there was 17 really no commitment to that and that wasn't what 18 19 happened. So just saying that we are going to 20 build more efficient power plants doesn't mean 21 that you are going to, one, solve your reliability 22 problem, or two, retire old power plants.

And that's part of the thing -- What we are saying is, when you look at these, when you look at project need you really have to look at

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it. Are you trying to fulfill a reliability need?
 If you are trying to fulfill a reliability need
 you really need to consider, is this project
 fulfilling that reliability need.

5 The other point I want to make about the 6 system approach is there are a lot of power plants 7 that are 50 years old in this state and a lot of 8 them are once-through cooling power plants. And the Clean Water Act, the new regulations in the 9 10 Clean Water Act are going to essentially close 11 those plants down in the next couple of years. So the idea of giving credit for greenhouse gases 12 13 from plants that are already closing down because 14 of regulations doesn't really make sense.

15 And I think that is why you really have to look at it from a project basis and look what 16 you are displacing. Are you displacing something 17 18 that was going to close down anyway or are you displacing something that was less efficient and 19 not going to close down? Because if you are 20 21 shutting down something that is already 50 years 22 old and was going to shut down for other purposes you are increasing your baseline artificially and 23 24 I don't think that is appropriate.

25 ASSOCIATE MEMBER DOUGLAS: But Will, if PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

you saw evidence in a record that those plants, 1 despite the effort to shut them down -- and the 2 Energy Commission has been advocating that these 3 4 plants be retired or repowered, consistently for 5 quite a long time. If there were evidence that 6 without newer, cleaner sources of generation 7 coming on-line the shutdown dates would most 8 likely be extended, how would that affect your argument? 9

10 MR. ROSTOV: And I think this is why you 11 need to do it on a project-by-project basis. 12 Because then you can really look at it in terms of 13 that one project and say, is this project really 14 going to have that effect. It will affect it in 15 two ways, it will affect it in terms of the 16 analysis as well.

17 So if you have a plant that is 50 years 18 old and you do know it is going to be shut down 19 and you do know there are some problems. And 20 there's maybe like a five year lag where you 21 realize, if you don't get this plant you know you 22 have a five year lag.

Say you are shutting this plant down
five years sooner than you originally did. Then
you can calculate -- Since you have already

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calculated -- We have all agreed they can 1 2 calculate the greenhouse gas emissions. You can calculate those emissions for the first five years 3 4 and then put that into an analysis for your 5 mitigations over the 40 year life span of that 6 plant. So I think you take into account, you take 7 it into account in your analysis. And that is why 8 I think it is important to have some projectspecific analysis because you really have to kind 9 10 of dig into the facts of each specific power 11 plant.

I mean, I could mostly imagine where the 12 13 way the system is set up now is there's private 14 developers who have every right, and they do it 15 every day -- or not every day but often. They propose new baseload power plants that for 16 whatever reason, you know, are not necessary for 17 18 the system and maybe not necessary in that locality, and will make a new, significant 19 20 contribution to global warming.

I think having the ability to evaluate that in terms of what is around it is very important. And some of those plants probably, you know, aren't necessary in terms of, you know, the future we are trying to go towards. And I think

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my example of the needing to do procurement only 1 2 for renewables, you know, kind of proves my point to a certain degree. If that makes sense. 3 4 MS. ALLEN: So are you suggesting that 5 the all-source procurement --6 PRESIDING MEMBER BYRON: Ms. Allen, 7 could you use a microphone, please. 8 MS. ALLEN: I am Eileen Allen; I am the manager of the Commission's Siting and Compliance 9 10 Office. Are you suggesting that the all-source 11 procurement option be set aside in favor of another approach? 12 MR. ROSTOV: I am not sure if I 13 14 understand your question. MS. ALLEN: Well as I understand the 15 procurement process, at the overview level there 16 17 are requests for offers for renewable projects and 18 then there are requests for all sources. So from 19 the all sources perspective we tend to see a 20 number of gas-fired power plants proposed and then 21 separately there are the renewables. 22 MR. ROSTOV: I think I am saying once 23 you get into the proposal for a specific plant 24 then you need to do the analysis at that time. 25 Because at that time each project has specific

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needs and specific purposes. So you have to look at the project need and purpose when you are -this is just basic CEQA law. Look at the project need and purpose when you are doing mitigations and looking at possible alternatives.

6 So I am looking at it from the context 7 of, and I am not sure about this, but from the 8 perspective of the California Energy Commission. The California Energy Commission is presented with 9 10 the siting proposal. They have to make decisions in a CEQA-equivalent document. They have certain 11 requirements to make. I think everybody agrees 12 13 that there has be some sort of CEQA analysis.

14 And I agree with Matt that the devil is 15 really in the details. But maybe my remark about public disclosure kind of overshadowed my other 16 17 point. But once you agree that CEQA analysis is 18 required there's two other requirements that flow 19 directly from it. And those are mitigation and alternatives analysis. So when you have a siting 20 21 proceeding you have to do all three as part of 22 your analysis. So you have to do it in that specific project. 23

24 MR. ELLISON: If I could jump in again. 25 There are several points that have been made in

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the recent discussion that I want to respond to,
all of which fall under the category of looking at
the existence of power plants as having impacts
and not looking so much at the operation of power
plants and the operation of the system.

6 And with respect to greenhouse gas it is 7 the operation of these power plants that matters. 8 This sort of simplistic assumption that more power plants means more greenhouse gas emissions is not 9 10 true. It is the operation of the system, it is 11 the operation of the plants that causes the emissions. So under that rubric let me address 12 13 several key points.

14 The idea that there are new, unneeded 15 power plants being proposed by power plant developers, and that those unneeded power plants 16 are being built and are generating and producing 17 18 emissions is not true. And it is not true without a regulatory solution. It is not true because of 19 the precise points I made earlier about the way 20 21 the system is dispatched.

If you build a power plant in this state that is not needed it will not be dispatched. You will make no revenue and you will lose your shirt. That is why all of the power plants that we are

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1 talking about that are being proposed are more
2 efficient than the ones that are currently on the
3 system. Because otherwise the private developer
4 won't make any money. They are needed in that
5 way. Which is why the Legislature removed the old
6 need test from the siting process, in recognition
7 that that is true. Okay.

8 And to the extent it is not true, if 9 somebody did, in fact, propose something that is 10 unneeded, there is a perfect, already in place 11 solution for it in that dispatch of the system 12 that I talked about.

Secondly, this idea that the new plant would come on-line and only temporarily displace the existing plant. Again, embedded in that is this assumption that a plan is only displaced if it is retired and goes away, okay.

18 Yes, if you build a new power plant and 19 it completely shuts down some other power plant, and then five years from now that plant is needed 20 21 and to some extent starts operating again, 22 nonetheless it is still operating less than it would have if you hadn't built that earlier plant. 23 24 Every kilowatt hour that that new plant that you build, for the lifetime of that new plant is 25

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displacing something that would be operating if that new plant didn't exist. It is not a temporary impact, okay. Again, you have to focus on operations.

5 And lastly this idea, for example. I 6 noticed, Will, in your comments there was this 7 point about a study that had been done about, I 8 believe it was an LADWP power plant that was more efficient but nonetheless had higher emissions 9 10 than the plant that it was replacing. I believe it was a repower. And I emphasize I haven't read 11 the study but I will. 12 MR. ROSTOV: And it was actually several 13 plants. I was looking at the LADWP portfolio. 14 15 MR. ELLISON: Okay. I am willing to bet my house --16 17 (Laughter) 18 MR. ALVAREZ: In today's market it's a lot less. 19 20 MR. ELLISON: -- that the reason that 21 those impacts were greater --ASSOCIATE MEMBER DOUGLAS: Do you 22 realize that this is being recorded? 23 24 (Laughter) 25 MR. ELLISON: Yes I do. Do you realize

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1 I'm holding the note. I just moved out of an 2 apartment this week.

(Laughter)

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4 MR. ELLISON: That the reason that 5 that's the case is that those plants operated more 6 than the plants that they were replacing, okay. 7 And the reason that they operated more is that 8 they are more efficient and that somewhere in the system something was operating a lot less. And if 9 10 you took a picture of the whole system and not just the DWP portfolio you would see that the 11 introduction of the more efficient plant in fact 12 13 reduced impacts.

14 If you take a snapshot of just a piece 15 of the system you get information that can be very 16 misleading. So once again, when you build these 17 new plants, if they are in fact more efficient, if 18 they are in fact reducing greenhouse gas 19 emissions, it is not a temporary impact.

20 Under CEQA you are supposed to basically 21 look at what is the impact of the decision you are 22 making, the licensing decision of this plant. Is 23 the environment better off or worse off for making 24 the decision that is in front of you. And if the 25 truth is that the environment is better off as a

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result of this then that should be the information 1 2 you provide to the public and that should be the basis for your public policy. If under other 3 4 authority, non-CEQA authority, you want to do 5 something beyond that, that's a different 6 question. 7 MR. ROSTOV: I mean I --8 MR. ALVAREZ: May I? MR. RICHINS: Go ahead, Will. 9 10 MR. ROSTOV: Just to do a fast response. 11 I mean, I think you are assuming a zero sum game. It goes back to Commissioner Douglas' question 12 13 about China in terms of, you are assuming that the 14 system never increases more power or reduces more 15 power. And actually that LADWP study that we raised and put in our comments, I was going to 16 raise in response to your question so it's kind of 17 18 funny that you raised it. I mean, there you had -- I mean, I think 19 20 it proves the point to a certain degree. You had 21 power plants that were operating less and then you 22 built new power plants that replaced them and 23 operating more and increased your emissions. So you made your system more efficient but you still 24 25 increased your emissions. And that is not

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1 necessarily --

2 That goes back to the zero sum game. Ιf you have a zero sum game for, you know, there's 3 4 only like 100 greenhouse gases in the system, 5 maybe that makes more sense. But that is not what 6 happened. What happened was there was probably an 7 increase in demand, an increase of energy use, 8 that increased, you know, all of the pollutants listed in that report. 9 10 MR. ELLISON: Okay, let me respond. First, if there was an increase in demand, okay, 11 it was not the result of those power plants being 12 constructed. Demand in California is not driven 13 14 by supply in that way for electricity, okay. That 15 demand increase would have occurred anyway, okay. Secondly I suggest to you that I am not 16 17 assuming a zero sum game. Demand is increasing in 18 the state, I understand that, okay. What I am assuming is that it is going to increase or it is 19 20 going to do whatever it does. If we develop 21 conservation programs that cause it to decrease 22 then it is going to do that. But it is going to do whatever it does irrespective of whether we 23 24 build a new power plant or not. 25 What I think you are assuming, which I

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think is wrong, is that the introduction of a new power plant increases the demand for electricity. That is not true.

MR. GALATI: Commissioners, I think that this is -- We thought about this a lot. I think that is why we came up what we are calling sort of a three step approach. These questions are great questions. And for those of us who have thought about them in the electricity industry, we are following a lot of these discussions.

It is exactly the kind of discussions 11 that should be had in a programmatic assessment to 12 ferret out whether what Mr. Rostov believes 13 happens is accurate or what Mr. Ellison believes 14 15 happens is accurate. That is exactly why we proposed a systemwide, programmatic study. So 16 that is step two. Because we are here today, and 17 18 we have power plant siting cases before the Energy Commission, so there is a step one we should 19 20 figure out.

21 Step three, in my opinion, is AB 32's 22 program as implemented. That program would be, I 23 am anticipating and it is possible that it doesn't 24 work out this way but I am anticipating that that 25 program will be so comprehensive that the Energy

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1 Commission would be able to discharge its CEQA 2 obligations by ensuring that projects that come 3 before it are compliant with and not interfering 4 with the goals of that program. It is very 5 similar to what the Energy Commission does with 6 other nationwide programs or federal programs.

7 We will have to see if that works out 8 that way. We certainly will have on a case-by-9 case basis, or maybe some other IEPR workshop 10 after AB 32 is implemented to see if that is the 11 case. So step three is AB 32 either fills the gap 12 or the Energy Commission does something to fill 13 the gap. We believe AB 32 will fill the gap.

14 Step two, let's do a systemwide study to 15 determine under what circumstances the system 16 behaves like Mr. Ellison says and under what 17 circumstances that Mr. Rostov believes. And it 18 could be in a systemwide approach that there are 19 some circumstances where it does behave like 20 Mr. Rostov believes.

21 So what do we do step one? We have 22 proposed that it is impossible for you at this 23 stage to develop a quantitative threshold that 24 makes sense. Therefore we ask you to say, look, 25 it is difficult for us to calculate under what

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circumstances an individual power plant is contributing cumulatively to a climate change 2 3 impact. Therefore what we are going to do instead 4 is to require efficient power plants and require 5 best management practices.

6 And maybe we should be doing more of a 7 workshop on what those might be in the interim. 8 But those are things that we could do in a project-by-project basis. But to establish a 9 10 threshold today to do step one, when you don't have the results from step two. I don't know what 11 you would establish it on. 12

13 Staff has proposed a few efficiency 14 based on things that might be very important to 15 ferret out in the programmatic study. Things like how does the system operate, what is the average 16 17 efficiency. How does the new plant increase or 18 decrease. Those are all good questions. We think the systemwide programmatic study will answer 19 20 that, create a framework.

21 So step one, we have to do something. I 22 think we proposed the only thing that makes sense. 23 Step two, do the programmatic study to determine 24 how it changes step one. Step three, AB 32. I would be more than happy to continue to talk about 25

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what the programmatic study should include but I 1 think we should have some discussion about whether 2 step one is acceptable to the Committee. 3 4 MR. RATLIFF: Mr. Galati, are you saying 5 that PG&E is already doing step one? 6 MR. GALATI: Pardon? 7 MR. RATLIFF: Are you saying that PG&E 8 is already doing step one? 9 MR. GALATI: I am saying that an individual power plant, what the Energy Commission 10 11 could do is ensure that that power plant is efficient and look at best management practices. 12 13 Some of which we are already doing, some of which 14 a developer would already be doing. And again, 15 this would not just be on PG&E, this is on the developer --16 MR. RATLIFF: I must have the wrong 17 18 step, maybe it was step two. Did you say that you are already doing some kind of step? 19 20 MR. GALATI: I apologize. We are 21 working with the other IOUs. We are working 22 jointly to try to develop an outline of what we 23 think a systemwide programmatic assessment would 24 look like and what the Energy Commission should 25 do.

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Many of the ideas that you have heard here today I think are ideas that are inherent in that, in that outline. And those are the kinds of things, where would you go get the information, to, how would you determine displacement. How would you evaluate demand? How would you evaluate the effects of RPS and energy efficiency programs?

8 Those are things that we think that if 9 you looked at a systemwide approach you would 10 study those, ferret those out, and your net, 11 whatever nets out of that report would inform what 12 you need to do on a project-by-project basis for 13 projects continuing to come forward.

I think we need something here that does not stop projects that are in the queue now. And I think that we have provided a CEQA-compliant approach. Understanding that it could be informed and it could be better, that's the purpose of the systemwide study.

20 MR. ALVAREZ: And I guess I would just 21 like to point out that what we are talking about 22 here is the interim period between now and AB 32. 23 Perhaps it is an act of fate that AB 32 will in 24 fact encompass the concerns that Mr. Richins 25 raised about how they will make, how the

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Commission will make its decisions and evaluations. But until that process is complete we won't really know that.

4 We may be back here, if AB 32 fails to 5 fulfill its obligations, discussing these issues 6 once again and we may have to go back to further 7 systems analysis. But I guess at this juncture we 8 have seen the work that the Commission and the CPUC have done, and other agencies have done, to 9 10 work on that coordinated function for AB 32. And 11 I guess it is an act of fate that that may in fact bring the answer to you that you will need in the 12 13 siting case.

14 And at that point you will see what gets 15 proposed to you post-AB 32 in terms of projects that you need to approve. I don't think you can 16 do that today. I don't think you can prevent 17 18 anyone from walking in and giving you an 19 application saying, I would like to build this 20 power plant, and forcing you to process that power 21 plant. I don't see how you have that constraint. MR. WESTERFIELD: I'd like to --22 MR. RICHINS: Hold it, Bill. Is it 23 24 Laura? 25 PRESIDING MEMBER BYRON: Ms. Miles.

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1 MR. RICHINS: Ms. Miles. I can't read 2 it from here.

MS. MILES: I'm afraid you can't really 3 4 see me. First of all I just want to say that I am 5 really happy to see this kind of discussion, this 6 rigorous debate happening. I had been working in 7 my past job going to a lot of Department of Energy 8 forums and they certainly did not have this kind of collaborative debate. And I am just really 9 happy to see this, I think it is healthy. 10

Secondly I just wanted to say that I am 11 really tracking what Mr. Galati said about the 12 three steps. I think we find that 13 14 unobjectionable. I think in terms of step one and 15 what we are here to do today, I think it is really important to focus on CEQA and to look at site-16 specific impacts. I'm sorry, not site-specific 17 18 impacts but the site-specific process.

And I think it is incumbent upon every project applicant to think about how they can reduce greenhouse gases at their projects. And I haven't really heard that from anyone here today, which I was really surprised.

And I know that you cannot have huge reductions at the site at this point because the

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technology is not really there but there are small things that can be done right now like using microturbines instead of duct burners or upgrading construction equipment or using adjacent land for renewables. And I think other technologies are going to be coming out that will help us.

7 So I just don't want to see the Energy 8 Commission letting go of that opportunity to hold an applicant's feet to the fire in terms of 9 10 reducing greenhouse gases at the site. Because we are seeing, we are at possibly a tipping point. 11 We are seeing, I think, the impacts of climate 12 change right here in California in terms of our 13 14 snowpack, in terms of our water resources and our temperature increases. And so I think we need to 15 take every opportunity that we can to reduce 16 17 greenhouse gases.

18 And in terms of a systematic approach I think we can, I think it makes sense for the 19 20 Energy Commission to be looking at this throughout 21 California and throughout the western electricity 22 system. But I think there are so many uncertainties that I am not sure we are going to, 23 it is going to take a lot of work to get to 24 something that is concrete and usable and 25

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defensible. But I think possibly we could get there. And it would inform, especially the CEQA alternatives analysis.

4 But, you know, I think right now 5 projects should look at alternatives in terms of 6 greenhouse gases and are there other things that could be done. Could they do a hybrid facility 7 8 where they put solar on-site with their natural gas plant, for example. Or would it make more 9 10 sense to do solar in a specific location, you know. So I think that those are concrete things 11 that need to be done at this stage. 12

13 MR. RICHINS: Okay, Bill.

14 MR. WESTERFIELD: I am actually happy to 15 go after that comment because it is a great segue for the point I wanted to make. I embrace 16 Mr. Galati's comments. I think they are very 17 18 constructive and I would like to build on those. And I would like to make a slightly different 19 20 point about the CEQA analysis of significance. 21 We have been talking about emissions 22 here as if it is the same thing as adverse 23 environmental impacts. And there is a connection 24 that needs to be made in the CEQA analysis. It is

25 not enough to say that potentially one added

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1 molecule of emission is a significant

environmental -- adverse environmental impact at 2 the project site. CEQA guidelines and CEQA law 3 4 make it plain that in analyzing what is 5 cumulatively considerable it is not necessarily 6 true that any level of incremental contribution of 7 the pollutant is necessarily cumulatively 8 considerable. That analysis has to be made. There were some very good comments that 9 were made by the energy producers and users 10 11 coalition that make those connections within the context of CEQA quidelines and CEQA law. And so 12 13 those points made in those comments are part of 14 your analysis. Your duty under CEQA is to 15 identify a significant effect on the environment in the local area where the project is going to 16 That requires a very hard analysis that I 17 be. think is quite difficult. It is probably 18 speculative. But in order to make that connection 19 20 there has to be substantial evidence for that 21 local environmental impact. 22 And so to say we have got more molecules of a greenhouse gas in a location that then 23 24 affects a world climate or the entire level of 25 greenhouse gases throughout the planet, that that PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

cause somehow comes back to actually affect some
 not quantifiable but some identifiable adverse
 environmental impact in the CEQA locality is very,
 very speculative.

5 And if the Energy Commission launches 6 that kind of investigation in the context of the 7 project review it has got to be subject to the 8 challenge that making this kind of causal 9 connection is highly speculative and not supported 10 by substantial evidence. It could be a very 11 difficult thing to defend.

ASSOCIATE MEMBER DOUGLAS: I would like 12 13 to ask you to respond to a couple of questions 14 about that. It doesn't seem to me that that's 15 necessarily such a difficult line of argument to follow. I don't think anyone is necessarily 16 17 arguing that a single power plant is a direct 18 impact. I think we are talking about cumulative impacts. But there is a fairly extensive body of 19 20 scientific research at this point underlying the 21 issue of global warming.

The State of California and the Energy Commission has been a leading part of the research that we have done how global climate change affects California. There is fairly good research

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about increased temperatures increasing air There's information about differences 2 pollution. in fire vulnerability, in water supply, changes in 3 4 hydrology, that can affect most regions of 5 California.

6 I think it would be challenging to 7 pinpoint a region of California that you could not 8 point to evidence, at least in some of the scientific research, of impacts to the local 9 10 environment from global climate change. But I 11 would like to offer you an opportunity to maybe elaborate on what you were saying and answer some 12 13 of those questions.

14 MR. WESTERFIELD: Well first of all I am 15 totally committed and a convert, if you will, to the dangers of climate change in California. 16 Ι harp about it to my family all the time. And they 17 18 dread inviting me over for dinner because I am always reminding them about it. 19

I think there is no question that we are 20 21 feeling the effects of climate change now in 22 California in so many terrible and profound ways. But the difficulty is making a connection between 23 24 that local impact and the local cause of a 25 particular project.

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And we can argue in a general sense that every contribution of greenhouse gases will add to the total burden upon the plant ecosystem. But I doubt that CEQA law and CEQA guidelines are ready to embrace the one molecule rule on a global cause and effect basis. And that's the problem that I think we face.

8 ASSOCIATE MEMBER DOUGLAS: So what you are raising is really the question of the one 9 10 molecule rule. One question that might be helpful 11 for you to provide some input to us on is whether the one molecule rule is even, is relevant to what 12 13 we are trying to do. We have a 50 megawatt 14 threshold for a project to come into our siting 15 process, so we are not in the position of say a local government approving a four-plex somewhere 16 17 and wondering whether that four-plex somehow is 18 cumulatively considerable as an impact.

19That is potentially a question that is20not faced here, although I will pose it to the21group. It is one of the questions that has22occurred to us, given the threshold for Energy23Commission jurisdiction being 50 megawatts. I24think there are renewable projects where we might25face the analytical equivalent of the one molecule

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1 test. But for some of the natural gas plants -- I
2 don't know that we do. Do we?

MR. MILLER: Yes, because if you look at 3 the system you would have to address it. And 4 5 incidently, the simple answer is, as the Court of 6 Appeals has said, the one molecule rule is not the 7 law. That's a quote. So I don't think that there 8 is any need for the Commission to feel that it has an obligation to apply that standard, that's a 9 policy question. 10

MR. VESPA: You know, I do think a zero 11 threshold can be relevant in this case if you are 12 13 looking at a project-by-project basis and what you 14 are trying to mitigate to. So if you want it to 15 be less than significant how does your threshold, that threshold would inform where you would want 16 to go. But clearly all these types of projects 17 would be significant. But the question is, how do 18 19 you get less than significant. And I think that 20 is where a numerical threshold, if that is how you 21 qo, would be relevant.

And I would just take issue with the --I don't think it is the law that you cannot have any net increase. A net zero threshold I think is appropriate in this case, given the reductions we

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need to make. I don't think the one molecule rule
 was dicta in that case to not deal with global
 warming.

And the science shows we have to make extremely deep reductions, 80 percent below 1990 levels at least by 2050. And I think actually our dangerous climate change is actually 350 parts per million, not 450, which that was based on. And I think it is fair to say that any net increase is significant, given the enormity of climate change.

But, you know, I think that is sort of a 11 separate question. ARB has a 7,000 ton threshold 12 13 with performance standards built into that for 14 industrial sources. If it was something that was 15 at that level. You know, mitigating to something like that for a 50 megawatt power plant would be 16 quite a minor difference. Between zero and 7,000 17 you're talking about hundreds of thousands of 18 tons. So to the extent a zero threshold plays 19 into this is just really where you are going in 20 21 terms of finding a less than significant impact. 22 MR. RICHINS: Okay, we have a question on the phone or a comment on the phone so we will 23 24 take the comment from the person on the phone. 25 MS. HUNTER: Yes, did you ask for a

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1 comment on the phone?

2 MR. RICHINS: Yes please. Just state your name and your affiliation, please. 3 4 MS. HUNTER: Okay, thank you very much. 5 My name is Laura Hunter and I am representing the 6 Environmental Health Coalition. We are an 7 environmental justice organization working in the 8 San Diego/Tijuana region and I really appreciate your letting us comment by phone today. We also 9 10 are represented on the AB 32 environmental justice advisory committee so we will be up again to 11 testify tomorrow. 12 We did file a letter on this issue and 13 14 it is a very, very important one for those of us 15 -- I mean, statewide obviously but we feel the importance of this very acutely. Maybe it is our 16 17 unique perspective that we are facing multiple 18 proposals of new gas-fired generation in communities, in environmental justice communities. 19 20 We are border communities and we are 21 looking at liquified natural gas starting to be kind of offered as the fuel of choice and it has a 22 higher greenhouse gas result. We are also coastal 23 24 communities so we are worried about we are going to feel the impact very acutely of sea level rise. 25

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And we are in sunny, Southern California where we have not even begun to tap the indigenous energy resources that we have as a region.

4 So we just wanted to add our voice that 5 we strongly support the zero baseline and the 6 project-by-project approach for analyzing the 7 greenhouse gas emissions from power plants. For a 8 couple of reasons in addition to the ones that 9 were mentioned earlier.

First of all, the CEC makes their decisions on power plant sitings and approvals on a project-by-project basis. So we really strongly believe that that's the best place for you as a Commission to, you know, make that judgement about, is this a project that we need and is this the best alternative.

And we outlined in our letter an approach about, just like we have in CEQA you have to designate an environmentally preferred alternative. We think you should require that one of the alternatives be a climate friendly alternative or a climate preferred alternative. And I want to follow-up on whoever it

24 was that made the comment about the hybrid 25 project. I mean, I think that you can use your

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power to force better implementation of the 1 2 loading order. And any project that comes before you, you know, that part of the greenhouse gas 3 4 emission analysis should show how could you meet 5 the same effect on the grid, either through demand 6 reduction, energy efficiency, clean renewables and 7 gas-fired plants. How could you meet that same 8 impact on the grid? That 50 megawatt peaker, how could you meet that using other elements of the 9 10 loading order?

We also -- It is a global problem we are 11 facing and we got to it, you know, by one 12 13 tailpipe, one smokestack, one fire, you know, at a 14 time. We got to it through many, many millions of 15 individual projects and we really have to address it that way. 16

So we would really hope that you would 17 drive, you know, take command and kind of drive 18 the kinds of projects you get by saying look, we 19 20 are going to be looking for hybrid, climate-21 friendly proposals that include all of the 22 cleaner, more sustainable elements of the loading order. Forcing maybe -- I know they won't like it 23 24 but maybe these energy generator companies need to get new partners in energy efficiency companies, 25

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in solar producers. And it would also help grow
 our local green economy in a way that is more
 sustainable.

Again, in our letter we address the way
you could look differently at a 100 megawatt
peaker, a gas-fired peaker. You could look at it
as maybe from a hybrid approach.

8 We really think it is about how you are, you know. We have to face a choice about how we 9 10 are going to meet this demand. And there's a comment that said, you know, every new plant, gas-11 fired plant is displacing something. Well it may 12 13 be but we are concerned when what it is displacing 14 is more energy efficiency, more money and more 15 commitment on clean renewables.

I mean, I am sitting here. We have a --16 I live in inland San Diego County, sunny day, and, 17 18 you know, my house is the only one with a solar system on the roof. And yet there is a new 19 20 peaking power plant that is proposed very close to 21 here. Why isn't part of that proposal solarizing 22 the rooftops of, you know, many, many large buildings or homes in the area? 23

I think when we look at what we care about, we look at where our money goes. And if

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all the projects keep going into more gas-fired
 plants we are really not going to get to the
 things that we need in terms of reducing climate
 change.

5 So, you know, at least now your 6 decisions are made on a project-by-project basis 7 we really do strongly support that you make these 8 analyses on a project-by-project basis. And that you force a maximum analysis so that when you make 9 10 that decision you know if there is a more climatefriendly way that this project could be met if, in 11 fact, it is needed. 12

So thank you very much for taking mycomments on the phone.

MR. RICHINS: Thank you very much, we appreciate your comments. I have three blue cards so why don't we go to the blue cards. I have a Mr. Cox. Is he still here?

MR. RATLIFF: Paul, I was wondering if before we leave the point -- I really appreciate Ms. Hunter's comments. I think one of the comments that she raised is particularly important here to our discussion and that is the issue of alternatives. And I think she was suggesting that we should be looking for alternatives to peaker

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facilities in perhaps the coastal load areas. I 1 wonder if it would be -- Our forecasting staff has 2 been wisely silent during this whole discussion. 3 4 (Laughter) 5 MR. RATLIFF: But I wonder if it 6 wouldn't be a good idea to talk about whether you 7 can have, for instance, a remote solar thermal 8 facility which serves as an alternative to a gasfired peaker in a coastal load pocket. Because I 9 think that is really important to an understanding 10 of what is feasible and what is interchangeable as 11 an alternative. And I know in my discussions with 12 the forecasting staff they say that they simply 13 14 are not interchangeable. And I would like to have some further elaboration on that if we can. 15 MR. VIDAVER: First of all, I don't 16 really like to be called a member of the 17 forecasting staff. Forecasting is a four 18 letter --19 PRESIDING MEMBER BYRON: Nevertheless, 20 21 please identify yourself. MR. VIDAVER: Dave Vidaver with the 22 electricity analysis office of the Commission. 23 24 The first thing we should perhaps be talking to is someone who is more familiar with 25 PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

the technologies, the solar technology that you 1 2 are talking about. The primary function of a peaking facility in San Diego insofar as local 3 4 reliability service would be the ability to meet 5 the ISO's requirements for coming on line within, 6 I believe, is less than ten minutes in some kind 7 of contingency which required additional 8 generation in the San Diego load pocket.

I am not familiar enough with the 9 current peaking technologies, much less those that 10 11 we are seeing proposed for San Diego to know whether they can meet that. So it would have to 12 13 be someone who is familiar with peaking 14 technologies in general or the specifics of the 15 facility in the San Diego Basin that would come before the Commission. 16

Nor am I intimately familiar with the 17 ability to dispatch, or at all familiar, with the 18 19 ability to dispatch gas-assisted solar facilities. 20 So in order to serve as a substitute for peakers, 21 which are needed largely for local reliability in 22 San Diego, they themselves would have to be dispatched among the ISO and the utility. So you 23 24 need to ask someone who knows a bit more about the two technologies than I do. How is that for 25

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1 avoiding a question.

2	MS. ALLEN: Dave's points are well
3	taken. It would be good to have the ISO as a
4	participant in this discussion so we could talk
5	more about the reliability questions when it comes
6	to looking at power plants on a global and
7	regional basis.
8	MR. VIDAVER: I would agree.
9	MR. RICHINS: Laura Hunter is going to
10	respond to Dave.
11	MS. HUNTER: Yes. I just wanted to be
12	sure that my comments were not taken out of
13	context. When we are talking about a hybrid
14	solution to a peaking plant we are not trying to
15	advocate for, you know, a billion dollars of power
16	lines to the desert. I mean, we are talking about
17	within the same service area of where that peaker
18	is that you could look at solar nearby, reducing
19	the demand through energy efficiency and stuff.
20	It is on an in-basin, again, project-by-project
21	basis. So I didn't want our comments to be
22	misunderstood that we are somehow advocating for,
23	you know, any power lines that I know we are not
24	supposed to talk about. But I just didn't want to
25	be misinterpreted, thank you.

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1 MR. VIDAVER: This is Dave Vidaver 2 again. Right now from an operational perspective 3 the need for capacity in the San Diego basin is to 4 meet local reliability needs. Over the long run 5 to be able to, from the Commission's perspective, 6 to be able to retire Encina and South Bay, the 7 aging facilities in the area.

8 In order to do that, given the transmission concerns faced by San Diego, there 9 10 needs to be dispatchable capacity. This capacity 11 in the basin. It has to be dispatched according to the ISO's or the utility's need to respond to 12 13 contingencies on a very fast basis. Building 14 capacity outside the basin and importing the 15 associated energy would not alleviate this need nor would building capacity that could not be 16 dispatched. Thank you. 17

18 MR. RICHINS: Okay. Mr. Cox, we will19 entertain your comments now.

20 MR. COX: Good morning and thank you for 21 this proceeding, this discussion and for the time 22 here. My name is Rory Cox. I am the California 23 program director of Pacific Environments. My main 24 job is to coordinate a coalition called Ratepayers 25 for Affordable Clean Energy or the RACE coalition.

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We are about 30 different environmental, community and environmental justice groups all up and down the West Coast. Most of our members are in California. The groups are everything from small community groups to the Sierra Club of California are included within our coalition. And I just wanted to make a few comments.

8 First of all I just wanted to, you know, 9 second a lot of what Earthjustice, Center for 10 Biological Diversity and Environmental Health 11 Coalition have sid thus far. I don't need to 12 restate a lot of that.

And I also wanted to second what 13 14 Mr. Ellison said when he started off when he 15 talked about truthfulness and accuracy of how we proceed with power plants and CEQA. And I wanted 16 to sort of drill down on an issue that has been 17 brought up in some of the comment letters but has 18 not really be discussed about here, which is that 19 20 it is important that the threshold count the life 21 cycle emissions of the feed stock or the fuel.

You know, the climate crisis just makes it all the more critical that California do so. In particular we are concerned with the importation of liquified natural gas. By pretty

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1 much scientific consensus, not counting the life 2 cycle emissions of that particular fuel is sort of 3 opening up a loophole that allows anywhere from 4 about four to six million tons of greenhouse gases 5 per year per LNG terminal just not go counted and 6 not be accounted for in any evaluations.

7 So when we talk about old power plants 8 with new power plants and the benefits that happen 9 with that, well that can very well be erased if it 10 is just fed with the imported LNG from Indonesia 11 when you count up all of the fuel from the tanker, 12 the processing in Indonesia, the different carbon 13 content, et cetera.

14 To quote CEQA:

15 "Any emissions or discharges that would have a significant 16 effect on the environment of the 17 18 State of California are subject to CEQA under a California public 19 20 agency, where a California public 21 agency has authority over the 22 emissions or discharges." So obviously the effects are in California, as we 23 24 have heard before. 25 And currently AB 32 is actually looking

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1 at the life cycle emissions of transportation
2 fuels but we still have to persuade them to look
3 at the life cycle emissions of electricity
4 generation, which we think is a pretty significant
5 source.

6 Unlike other sectors the life cycle 7 emissions of electricity production are pretty 8 easy to measure and track. And there is quite a growing scholarship and a growing consensus coming 9 10 from Carnegie Mellon, the Oregon Department of Energy, the California Coastal Commission and 11 other sources that pretty much point to the same 12 13 thing, which is that there is a huge life cycle 14 impact of liquified natural gas that is 15 significantly higher than that of domestic natural 16 gas. So we will be submitting written 17

18 comments to this effect, which will elaborate this 19 more, but I just wanted to bring it up in these 20 comments. Thank you very much. 21 MR. MILLER: Paul. 22 MR. RICHINS: Yes, thank you. 23 MR. MILLER: I am duty bound to respond 24 to this, I think. This is Taylor Miller with Sempra Energy. The issue of life cycle emissions, 25

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the distinction between pipeline gas and LNG is currently being evaluated by the ARB in the lowcarbon fuel standard proceedings, as you probably, mostly know. The Governor's Executive Order that originally set that in motion did require a life cycle analysis for that, for transportation fuel purposes.

8 We have done a detailed analysis of this with some assistance from outside consultants that 9 10 have looked at this in much more depth than has 11 been done up to now; submitted a study to the ARB on Friday of this last week. And that study 12 13 concludes that this conventional wisdom that has 14 been just repeated now that LNG is more carbon 15 intensive on a life cycle is in fact not true.

So we will see how that works its way out at ARB. And I am certainly not intending to debate it right now. Just letting the audience know and anyone on the phone that we have new information on that issue and we certainly intend to pursue that as much as it needs to be and through the course of the LCFS proceeding.

23 MR. COX: Has your study been posted on
24 CARB's website?
25 MR. MILLER: Yes it has been. It was

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submitted to the LCFS docket website on Friday and 1 2 I think you should be able to retrieve it there. MR. COX: Will do, thanks. 3 4 MR. MILLER: Okay. 5 MR. RICHINS: Thank you for your 6 comments. 7 PRESIDING MEMBER BYRON: Mr. Cox, if I 8 may, just before you leave, ask a quick question. 9 MR. COX: Sure. 10 PRESIDING MEMBER BYRON: Have you thought about the life cycle analysis GHG 11 emissions for renewable generation, particularly 12 13 solar, for instance? 14 MR. COX: Sure. They are there but they 15 are nowhere, they are significantly lower than domestically produced natural gas. And, you know, 16 17 not troubling. 18 PRESIDING MEMBER BYRON: So below a 19 level of significance. 20 MR. COX: It depends on how you define 21 that level of significance. But certainly below a 22 state of the art natural gas power plant. PRESIDING MEMBER BYRON: Thank you. 23 24 MR. RICHINS: Any other questions? 25 Okay, Jesse Marquez. Jesse?

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MR. MARQUEZ: Good morning, thank you 1 very much for this opportunity. My name is Jesse 2 Marguez. I am executive director of the Coalition 3 4 for a Safe Environment. We are an environmental 5 justice organization headquartered in the Los 6 Angeles harbor community of Wilmington. 7 So that people know about Wilmington, we 8 are the home of the Port of Los Angeles, which is the largest air pollution and greenhouse gas 9 10 source in Southern California. The Port of Long Beach is our neighbor, which is the second largest 11 air pollution source and greenhouse gas source in 12 Southern California. 13 14 We have four oil refineries in 15 Wilmington, two that border Wilmington. There are about eight boat-loading terminals in Wilmington 16 17 or bordering Wilmington so we take greenhouse gas 18 emissions very seriously. I also sit on the AB 32 environmental 19 20 justice advisory committee. And as many other 21 organizations, we are networked and collaborative 22 members of other groups such as RACE, California Communities Against Toxics, the Impact Project, 23

25 very extensive. We have members in over 25 cities

the Modesta Avila Coalition, so our network is

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1 in California right now and one chapter in Baja

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California, Mexico.

I want to start off by saying that we do support complete compliance to AB 32, SB 1365, all CEQA rules and requirements, as well as the California Health and Safety Act and other various codes. We do not support any CEQA override, especially for repowering old or none-active facilities.

10 To give a good example of that, in the last 12 months the CPUC approved NRG to open up a 11 1929-built power plant, peaker power plant. And 12 13 boy did they get a sweetheart deal. They are 14 getting \$30 million a year for ten years for being on standby for 150 hours a month. Three hundred 15 million could have bought a lot of solar energy 16 17 and a lot of alternative energy.

18 We do support any new facilities to be designed and built to comply with AB 32, SB 1368 19 20 as well as CEQA. We support a project-by-project 21 assessment and compliance. The global problem was 22 caused by individual project greenhouse gas 23 sources. So even though they are trying to make 24 it a big picture, in my world where I come from, in my community, it all starts at a home and then 25

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1 emanates from there.

We do not support any CEQA exemptions, 2 waivers, variances or extensions. Older 3 4 facilities that cannot comply with existing laws 5 or new oncoming laws need to be replaced. Very 6 simple as that. 7 We do not support limiting any type of 8 environmental impact assessments but do support inclusion of climate change impacts on infectious 9 diseases, respiratory and cardiopulmonary 10 11 diseases, degradation of infrastructure, transportation, housing, et cetera. 12 13 We do not support any offsets, and cap-14 and-trade programs or proposals because they fail 15 to decrease any greenhouse gases and air pollution emissions in environmental justice communities. 16 And they also fail to mitigate these impacts as 17 18 well. We do support all decision-making to be 19 20 based on feasible mitigation, which have high 21 reliability and long-term public protection and 22 global warming goals. We do not support carbon capture and 23

24 storage technologies because they will allow the 25 construction operation of polluting, greenhouse

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1 gas-generating power plants, while we know that 2 there are alternatives that do not need to go that 3 route.

We do support complete CEQA EIR compliance. We have a problem in public confidence with the CEC, CPUC as we as our local AQMDs. Last year the South Coast AQMD made a rule change, which was the Rule 1119, which was priority reserve credits, in which they allowed power plants to have access to those credits.

We opposed it because they did not do any environmental impact report and they went forward. Well, NRDC and several other groups and us filed a lawsuit challenging the South Coast District, they lost in court. So an environmental impact report or assessment is a requirement, you cannot bypass it.

18 They also tried to do the change so that 19 it would create extra credits. Well, they were 20 just found guilty two weeks ago of fraudulently 21 creating credits in order to give them to and sell 22 them to the power plant facilities. So they have 23 lost two court cases.

24There is a third court case against them25right now in that there has been a review of how

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they came up with their many credits that they
sold. And we expect them to lose that lawsuit too
because our attorneys went back and did homework
looking at how they created it and found out that
they came from thin air. So there is a lack of
public confidence if there is going to be any type
of credit and trading programs.

8 We are not trying to create barriers to any new power plants. We the public are mandating 9 10 that all future power plants be based on renewable 11 energy sources. The public no longer supports fossil fuel power plants. If you were to ask the 12 average resident today, would you like to have 13 14 solar energy installed in your home, on public 15 buildings and public schools and libraries, they will universally, and the majority will say, yes. 16 So there is a public support for that. 17

We do support the concept that any new source of greenhouse gases should be considered significant and cumulative impact. Because as I mentioned, I live in a community, an impacted community. We can't stand to have one more source.

24And I have a best friend of mine,25Mr. Richard Gateworth, Afro-American. He had an

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acute asthma attack and died in 72 hours. So when 1 2 we are talking about when there is a flaring incident or some other type of incident, or an 3 4 increase of something that is bad for human 5 health, it can have a devastating effect. He was 6 only 33 years old and left a beautiful wife and 7 three children. So we take it very seriously and 8 we ask that you take it as well. We do support the preparation of 9 complete life cycle analysis and lifetime 10 11 environmental, public health, public safety and economic cost assessments to be included. 12 13 The mitigation should not be limited to 14 just greenhouse gas technologies but also must 15 address those impacts that they cause. If there is a public health impact then the mitigation must 16 offset the cost of the public health. Both Los 17 Angeles, Harbor General Hospital, Martin Luther 18 19 King Hospital and other county hospitals have lost 20 over 100 medical doctors because of financial 21 cutbacks. 22 Well, that's because there is increasing 23 public health problems. And those need to be

25 polluters. And we do believe in the polluter

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addressed and they are not being mitigated by the

paying principle. And those costs must be built into the proposal as well. And if it does not come out economically feasible then you don't do the project, very simple as that. You look for a clean, green, non-harming technology.

6 We do not support a four-tier approach
7 as proposed by Latham & Watkins.

8 We do not support the statement that 9 construction project emissions are only short-10 term. Most of these power plants take years to 11 build. And as I mentioned in my health situation 12 case, my example, it could be devastating to your 13 life.

14 Cap-and-trade programs throughout the 15 European Union are an absolute complete failure today. It was a failure yesterday. The UK sent 16 out a memo not too long ago, they will not meet 17 this year's goals and they don't expect to meet 18 next year's goal. So no matter what lessons have 19 20 been learned from cap-and-trade, it is not 21 succeeding. And we do not encourage it or support 22 it by the CEC or by the ARB Scoping Plan as part of the AB 32 program and project implementation. 23 24 As an example of things that can be done: For six years our organization has had 25

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various campaigns at the ports. And one of them 1 2 was that since you have all this open space you should have solar energy. I am happy to announce, 3 4 because many of you do not know, last December the 5 Port of LA announced that they are going to build 6 ten megawatts of solar energy. And right now they 7 are going through that evaluation assessment of 8 the companies to do it.

9 So here is a situation where it can be 10 built on-site so there is no need for a fossil 11 fuel power plant somewhere else and there is also 12 no need for investment in any type of transmission 13 lines. You build it at the source.

14 In the last several public comments we 15 have made to both the Port of LA and Port of Long Beach for new projects we included wind turbine 16 17 energy. But we also had another factor we had to 18 deal with, because we can't have the propeller 19 type because we do have endangered birds in the 20 port. But what we did find was there are 21 vertical-mounted type of wind turbines that would 22 meet that requirement. And so there are various alternatives that we can use. 23

And I would just like to thank you at this time and we will submit these in a written

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form so you will have them as part of your record. 1 2 Thank you for your time. PRESIDING MEMBER BYRON: Mr. Marguez, 3 4 may I ask you a question? 5 MR. MARQUEZ: Yes. 6 PRESIDING MEMBER BYRON: I heard 7 everything you said but I was struck by one in 8 particular that I would like to ask you about. The lack of public confidence or the credibility 9 10 issue that you raised with the Energy Commission. Perhaps this just extends the Energy Commission by 11 association with these other organizations that 12 13 you are concerned with. But if you had something 14 in particular with regard to our credibility I 15 would be interested in hearing about that. MR. MARQUEZ: One example, there should 16 have been CEC oversight of the CPUC making this 17 18 deal with NRG. It was not a good deal. The 19 public lost on that deal. 20 Another good example is something that 21 just happened recently, again where you could have 22 had an input, was that two weeks before the close of the legislative session, Occidental College --23

Occidental Petroleum got together with the mayor

of Long Beach in terms of changing something that

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existed there. Years ago Long Beach residents
 changed the charter of Long Beach and created
 ordinances that would prohibit offshore oil
 exploration and drilling. So that was the mandate
 of the public.

6 But what the mayor did with Occidental 7 Petroleum was got together with one of the 8 assembly members, you know, who proposed a bill. And in the last two weeks before the close of 9 10 session there was a gut and amend bill. So here 11 was a bill that never went through any public process. The only reason I even heard about it 12 13 was because I read about it in the newspaper on a 14 Thursday and the hearing was going to be in a 15 committee on Friday. So I showed up with three other people including some Long Beach residents. 16

17 So here is a situation where the public already had a mandate via a city charter, via a 18 19 city ordinance, and there was a back room deal to 20 cut legislation to be passed. Which it did pass 21 through the committees because Assembly Member 22 Betty Karnette was terming out and it is the good 23 old boy/good old girl situation down there, where 24 it passed the Legislature. So now Occidental has 25 an exclusive deal in perpetuity. Whereas the

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ordinance and charter said that that could never be done. It would have to be an open bid process if it was to occur.

4 So these are just a couple of examples 5 where the public gets very concerned seeing deals 6 being made that do not seem right and they deserve 7 to have some more oversight. And those two 8 examples were examples where there should have 9 been that type of oversight.

10 PRESIDING MEMBER BYRON: All right, 11 thank you. I hope you understand, of course, that 12 we don't have a great deal of oversight over the 13 Legislature nor the PUC, although we do try and 14 exert periodic --

15 MR. MARQUEZ: But you do have a valuable public comment. And to give you an example of 16 The US EPA typically on its world of 17 that. 18 commenting on port EIRs spoke about environmental 19 impacts and mitigation but they never addressed 20 the issue of health. Well, this last go-around 21 they submitted a letter and one of the comments in 22 the letter is that there should be a health impact assessment. Well now that will probably be part 23 24 of the process in the future.

25 So by CEC making recommendations in

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public comment, when they are good ones, then we 1 2 see that they normally incorporated or being considered for future use. And those type of 3 things we can rally around and say, yes, we 4 5 support the CEC in their recommendation too. 6 PRESIDING MEMBER BYRON: I would like to 7 thank you for your comments, And I do want to 8 acknowledge the level of frustration that obviously is expressed in those comments. 9 10 MR. MARQUEZ: Okay, thank you. 11 MR. RICHINS: Yes, thank you very much. Mark Turner? 12 13 MR. TURNER: No comment. 14 MR. RICHINS: No comment, okay. And then Jeff Harris. While Jeff is 15 coming up just a note. All the comments that have 16 been filed with the Energy Commission in writing 17 18 the past due date have been placed on our website. 19 So you can go to the website and see all of the 20 comments that have been provided so far. As well 21 on the table there is a summary table that's on a 22 legal size paper that summarizes the comments of 23 each one of the participants here. 24 PRESIDING MEMBER BYRON: Mr. Harris, I

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don't mean to put you on the spot but I think

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following your comments we are going to break for 1 lunch. Mr. Richins. 2 MR. HARRIS: Nobody likes lunch more 3 4 than me. 5 MR. RICHINS: Yes, that's my plan. 6 MR. HARRIS: There you go. Thank you. 7 I'll try to keep them brief. I am going to try to 8 respond to things that were said at 10:26 and 9 11:15 and so my comments could jump around a 10 little bit. But I'll try to be brief. One of my roles in the law firm is to be 11 the language police. I hear the word programmatic 12 thrown around and systematic. I understand 13 14 programmatic and systematic to be used 15 interchangeably and not in the context of a programmatic CEQA EIR. I think that is an 16 important point to make. I don't think you need 17 18 an EIR to move forward with this, a programmatic EIR. You need to develop some kind of system 19 20 model, if you will, to understand the systemic 21 effects, to see the effect of individual projects 22 on that system. Just for that point of clarification, it 23 24 is my understanding you are not talking about a 25 programmatic EIR. I don't think you need one and

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I don't think there is any great advantage to a programmatic EIR as well because essentially that just allows you to tier off. I mean, with the dynamic nature of the electric system as well I don't think you would gain a lot in that process. So just that kind of opening comment.

7 A lot of discussion about need today and 8 I just want to put another fact on the table. At peak California imports about 40 percent of its 9 electricity. And that's a probably 2007 number. 10 11 The ISO could give you a more current number. And probably the gentlemen sitting at the table could 12 13 give you a more current number. But if you look 14 at the total peak in-state generation versus the 15 need, we are a net importer of electricity.

And a lot of the intellectual battles we 16 have in California about greenhouse gas are 17 directly related to the fact that we import 18 19 electricity. If we were a net exporter of electricity we would know exactly what the 20 21 generation mix is in California. So that's one of 22 the issues that we just haven't dealt with as a 23 state, in my mind, in terms of energy 24 independence.

25 I agree with Mr. Ellison's comments

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1 about it's the operations that matter and the 2 dispatch that matters more than anything. You 3 know, as a footnote too, we are also working on 4 one of the solar projects. Feel free to show up 5 at those meetings and support us as well moving 6 forward through this Energy Commission.

7 In terms of where this all fits in in 8 the CEQA process. I guess the point I want to make and the bumper sticker is that an EIR or a 9 10 CEQA certification by the Commission is not a 11 policy document. It is exactly the wrong place to be making policy, in individual siting cases. 12 So 13 I am glad that you are here trying to take a 14 systemic or programmatic approach to these 15 questions. We don't want to be dealing with policy in those individual siting cases. 16

17 Obviously you have to look at it. There 18 are legitimate roles for these issues in a project-specific CEQA document. You have to look 19 20 at the cumulative impacts issues. And as 21 Mr. Westerfield alluded to, it gets sort of 22 interesting with greenhouse gas because the environmental setting is the globe for GHG, so 23 24 that's a pretty big setting to deal with. 25 It is also a legitimate question in

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alternatives. What are alternatives to the 1 2 project and the project location. But again, 3 those alternatives analyses are focused on alternatives to the project or the project's 4 5 location. They are not policy alternatives. It 6 is not a broader policy view. And that is the 7 kind of thing that I think also gets lost in the 8 environmental impact setting. So take a look at the individual project and the project location. 9 It is not a policy document in that respect. 10 And then finally in terms of life cycle 11 analysis, you've heard a little bit about that. I 12 13 guess I would just admonish you to be 14 intellectually honest about those things. Those 15 questions are very important. If you do report and you say that all of the gas burned in Southern 16 California is directly attributable to an LNG 17 project, that is just not correct. That project 18 did not cause people to turn on their furnaces, it 19 is not the cause of a power plant running. 20

21 So to go all the way in this life cycle 22 analysis, not only from the production of the fuel 23 source to the burner tip and suggest that that 24 project, the greenhouse gases associated with the 25 burning of gas in Southern California is a direct

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1 result of an LNG project I think is just

2 intellectually dishonest.

And I think you do need to do it for all 3 4 technologies. We represent the Wind Energy 5 Association so I don't want to pick on wind. But 6 if you are going to be intellectually honest about 7 this thing take a look at a turbine that was 8 manufactured in Holland from steel from France, shipped across the waters and put on a rail and 9 10 put up with a derrick that runs on diesel and then do a per kilowatt greenhouse gas basis on that. 11 You may not like the result. 12

And I am not suggesting you need to do that with wind at all. What I am suggesting is you need to be intellectually honest and apply those same analytical parameters to all of your technologies moving forward. And with that I think I'll end.

19 PRESIDING MEMBER BYRON: And that 20 certainly doesn't preclude you from giving 21 additional comments, Mr. Harris. Thanks for your 22 patience.

I am going to go ahead and suggest we break. I, unfortunately, need to be on a call with the Chairman at noon here. Do you want to

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discuss when we will be back and what we will discuss in the next hour?

3 MR. RICHINS: Right, yes. Let's take an 4 hour break for lunch and be back at one. And then 5 after the lunch hour we have about an hour, an 6 hour and 15 minutes to continue this dialogue. 7 Then after that we will go into mitigation.

8 And so in the hour after lunch, I think we recognize the step one, two and three approach 9 as discussed by Mr. Galati and I think we would 10 11 like to focus on step one coming back after lunch. And maybe in specifics get down to details on, you 12 13 know, the more practical. What the Energy 14 Commission should do between now and 2012 when AB 15 32 may become, may be implemented.

And one way of doing that to stimulate the dialogue is why don't we take a look at the concepts that Matt Layton presented this morning and maybe go through those and kick those around a little bit and discuss those, as well as any other practical approaches that people have in mind.

And with that then, let's return at one o'clock from lunch. Thank you very much. (Whereupon, the lunch recess was taken.) --o00--

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AFTERNOON SESSION

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2	PRESIDING MEMBER BYRON: If you will all
3	be seated we will go ahead and restart this
4	workshop. And again, this is the workshop for
5	evaluating GHG emissions emitted from proposed new
6	power plants. And we are, I think we are pretty
7	much on schedule. I am going to turn this back
8	over to Mr. Richins who will moderate
9	Mr. Richins, I am so sorry who will moderate a
10	continuation of our roundtable discussion by all
11	participants. Mr. Richins.
12	MR. RICHINS: I think we had some very
13	good discussions this morning and we want to kind
14	of continue in that theme. I have heard
15	Commissioner Byron indicate a number of times that
16	he interested in coming up with a uniform approach
17	that can be applied in our CEQA analysis. And so
18	I think this In the interim until AB 32 is
19	implemented.
20	So I think in the hour, hour and a half
0.1	that we have before we shift means to talk shout

21 that we have before we shift gears to talk about 22 mitigation, if we can come up with some ideas, 23 suggestions, discussion topics on what would be 24 kind of a practical approach that the Energy 25 Commission might be able to consider for providing

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1 some uniformity in the CEQA analysis.

I will have Matt Layton, I think, start 2 the discussion and we will -- He is going to show 3 4 us a couple of graphs. And those will kind of 5 indicate where we are with the system, what the 6 system looks like, and then maybe have some 7 discussion about the four concepts and if you have 8 any other ideas. We are here to listen to and 9 entertain any ideas that you might have from an on 10 the ground practical approach to implementing kind of a uniform approach to the CEQA analysis for 11 greenhouse gases. Okay, Matt. 12 MR. LAYTON: Good afternoon, I am Matt 13 14 Layton. Paul asked me to put these two charts up. 15 They have been showing up in our greenhouse gas analyses that we have done to date on various 16 projects. This is ARB inventory, published 17 18 inventory, and our published demand for electricity. So it is in-state and out of state. 19 20 And this is the resulting pounds or actually 21 metric tons per megawatt hour. The trend is downward from 1990 through 22 2004. We don't have more recent numbers. So 23 24 2004, that's where the .04 metric tons per 25 megawatt hour came from that we put as a potential

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threshold in our proposals. The variations due to
 hydro or the energy crisis. So it looks like
 about a 10, 15 percent reduction over those number
 of years.

5 The actual tons. These are a million 6 metric tons. Again from 1990 through 2004. This 7 is ARB data. The top line is just CO2, it does 8 not include the bottom lines of the N20, CH4 and 9 the SF6. You can see that the tons are relatively 10 flat over those years.

Over those same years from 1990 to 2004 11 the electricity sector -- or electricity demand, 12 13 not sector, not the capacity, grew about one and a 14 half percent or 1.2 percent. I think a total of 15 18 percent over those same number of years. So there was an increase in demand by Californians 16 over those 16, 17 years. The tons are relatively 17 18 flat and then the efficiency has improved. PRESIDING MEMBER BYRON: Mr. Layton. 19 MR. LAYTON: Yes sir. 20 21 PRESIDING MEMBER BYRON: Back to your 22 previous slide. Those are CO2 equivalent, carbon 23 equivalent, correct? 24 MR. LAYTON: The top bar is just CO2. 25 PRESIDING MEMBER BYRON: Yes.

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MR. LAYTON: The bottom are the other, 1 they are not -- The top line does not include, has 2 not added it in. It would be a slight change. 3 PRESIDING MEMBER BYRON: Okay, that is 4 5 what I'm getting at. 6 MR. LAYTON: The N2O is down at the very 7 bottom and it is very flat. PRESIDING MEMBER BYRON: But those are 8 already scaled for their equivalency. 9 10 MR. LAYTON: Yes. PRESIDING MEMBER BYRON: Okay. For 11 their GHG equivalence. 12 13 MR. LAYTON: Again, they are very small 14 contributors to the overall greenhouse gas from a 15 power plant. PRESIDING MEMBER BYRON: Even that 16 information is helpful, thank you. 17 18 MR. LAYTON: And I guess Paul just 19 wanted to then go into more discussion from there. 20 MR. RICHINS: Yes. And so I am just 21 going to --22 MR. LAYTON: You can refer to these 23 graphs. 24 MR. RICHINS: Yes, I am just going to 25 open it up to the group to maybe comment on

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concept one, two, three and four. Or if you don't
 want to comment on concept one, two, three or four
 but comment on other approaches or concepts that
 you might have.

5 Also there's other, you know. If you 6 think about what Commissioner Byron would like to 7 accomplish, and that is a uniform approach, that 8 might be done through policy statements, it might 9 be done through specific concepts like we are 10 throwing out here. It also might be done by 11 Commission findings.

And so we are interested in any of those 12 13 kinds of concepts or ideas that you might put 14 forth that if the Energy Commission adopted a 15 policy statement or a set of findings that would then be helpful in providing a uniform approach. 16 All those would be something that we would 17 18 entertain. And I think those would be items that you would want to cover in your written comments 19 20 as well that are due on December 12. 21 So any reaction to that? 22 MR. CAMPOPIANO: Could I make a comment?

23 MR. RICHINS: Sure, come right up. You 24 can come to the table, there are some empty spots 25 there.

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1 MR. CAMPOPIANO: My name is Marc 2 Campopiano. I am with the law firm of Latham and 3 Watkins. I just wanted to -- I will definitely 4 touch on providing, elaborating on what was in our 5 written comments and I will leave the details for 6 our written comments.

7 It sort of expands on what I thought was 8 an open issue earlier then it adds, go towards a proposed approach which at this point we haven't 9 10 nailed down. But the issue is what constitutes a cumulatively considerable contribution to a 11 significant impact. And the Energy Commission has 12 discretion if it is based on substantial evidence 13 14 in the record to make that determination.

One thing that we have used when we have talked about what is a similar model. You can think in the air context but we also like to think about it as if a city, a lead agency in a region with significant traffic, let's say, is going to have a range of projects that come before it.

21 So there is sort of a general consensus 22 that there is this cumulative traffic impact in 23 the region. And also an understanding that if you 24 add more cars with new projects it is going to 25 exacerbate the problem. Now a range of projects

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1 are going to come before it. You can imagine a
2 project with a lot of sprawl, a lot of cars, or an
3 in-fill development project that has almost, very
4 few cars that are being added because of mass
5 transportation, et cetera.

6 So the ideas that you could look at 7 these projects in different tiers. Like it is 8 very appropriate to have different levels of scrutiny for different types of projects. It 9 10 doesn't mean that you completely abdicate your 11 responsibilities as a lead agency, but when you see certain types of projects like the in-fill 12 13 project that is heavily reliant on mass transit, 14 wouldn't it likely have a cumulatively 15 considerable contribution to the traffic impact. So that is what we kind of called our Tier 1. 16

17 I think we may have used the term 18 exemption. That might not have been legally 19 accurate as far as the statutory or categorical 20 exemption. But it is this idea that there would 21 be some level of CEQA analysis, certainly, but the 22 projects would have a very low probability of 23 significance.

Another approach would be, let's just say there was a regional transportation program

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fine where you could pay in and it mitigates your transportation impacts. It is fairly common. That could be analogous to when AB 32 comes on line. Or it could be appropriate that if you fall under that program it satisfactorily mitigates your impacts. Like in this case it would be greenhouse gas emissions.

8 Since that is not in place the lead agency would look towards other things to 9 10 determine what constitutes a significant impact. And here the traffic impact analogy I think is 11 appropriate because we would all be surprised if a 12 13 city within a region didn't look to inform its decision at the broader contents. It didn't look 14 15 at regional transportation documents. It didn't look at other things that were going on. 16

17 In this context the Energy Commission 18 could look at other things that are happening in 19 this field right now. For example, even the draft 20 stages of what is going on with AB 32, and of 21 course with Senate Bill 1368 and the performance standards. So that could be a situation where the 22 Energy Commission doesn't abdicate its 23 24 responsibilities as a lead agency but it looks at what's happening on the ground right now in 25

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determining what a current project, the significance of that project is.

3 And we propose that as sort of our third 4 tier where, for example, the Energy Commission 5 could determine that complying with the EPS and 6 1368 could lead it to determine that the impacts 7 were less than significant.

8 And then our fourth tier was where a project would have to adopt certain mitigation 9 10 measures to actually get down to a less than significant level. So that was just to sort of 11 highlight our four-tiered approach that we will 12 save the detail for our second written comments. 13

14 And then the last one was with the 15 concept of applying mitigation measures and alternatives. Of course there is going to have to 16 be a reasonable range of alternatives studied in 17 18 any CEQA document. But it isn't true that -- this is just a clarifying point, that every feasible 19 20 mitigation measure or feasible alternative is 21 required unless there is a significant impact that 22 needs to be reduced. So if the impact isn't determined to be significant it is not that all 23 24 feasible mitigation measures have to be adopted. 25 MR. RATLIFF: Could you say that last

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statement once more, your last sentence.

2 MR. CAMPOPIANO: Yes. It is the statement that if you have a significant 3 4 environmental impact that triggers the obligation 5 to implement all feasible mitigation measures that 6 reduce that significant impact. But if the impact 7 is not significant in the first instance the lead 8 agency is not required to further reduce a less than significant impact. 9 10 ADVISOR BROWN: I had a question, this 11 is Susan Brown, on the relationship to SB 1368. Could you elaborate further on how you see SB 12 13 1368, the emissions performance standards set 14 there, connecting back to either the project-by-15 project analysis or the systems assessment. You completely lost me there. 16 MR. CAMPOPIANO: Okay, I'm sorry. 17 18 ADVISOR BROWN: SB 1368 applies to 19 procurement contracts. 20 MR. CAMPOPIANO: Absolutely, it is not 21 the same. It wouldn't be -- It would be something 22 that would be, would help the Energy Commission, 23 inform the Energy Commission on studying the level 24 of what constitutes a cumulatively considerable 25 contribution. Because the idea is that you have

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1 the significant impact but not every contribution 2 to that impact is cumulatively considerable. And 3 that is grounded in the CEQA documents. That is 4 well accepted.

5 It could be that you could say any new 6 admission is cumulatively considerable. But the 7 Energy Commission has the discretion to set the 8 level somewhere else. And to inform the decision on setting that level if it looked to other things 9 that are happening. And that is why I used sort 10 of the transportation analogy. Where a city could 11 look at other things that are going on in the 12 13 region, that other cities are doing.

In that context the Energy Commission could certainly look to the determination it made in the procurement contacts. It could look to what ARB, of course with Energy Commission and PUC input, has done with the Scoping Plan. It could use the same analysis and the same approach to inform its decision in this context.

And particularly with AB 32 there is --Just as an example of the interrelationship between what is now Health and Safety Code Section 38561(a). There is a specific requirement for the Air Resources Board to consult with the Energy

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1 Commission to ensure things such as provision of 2 reliable and affordable electricity service and 3 ensuring that it is complementary, non-duplicative 4 regulations of greenhouse gases. That was just in 5 that context but it is something that they could 6 take into account.

7 ADVISOR BROWN: Well it is conceivable 8 that the panel follows this discussion will be 9 talking about some of those things, in the context 10 of mitigation at least.

MR. VESPA: I would just say, when 11 thinking about significance I think the first 12 13 place to look is CEQA. And it does have to be 14 based on substantial evidence. And it is also 15 something that has to be based to the extent, I think possible on scientific and factual data. 16 17 And I think it is something you need to frame in terms of your environmental objective. I think 18 19 ARB is a good starting point for that. I think I 20 mentioned that earlier.

The environmental objective here is to avoid dangerous climate change and that puts us on a specific emission reduction pathway toward 2050. That has significant reductions, at least 80 percent below 1990 levels. That's what we are

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going for, that's our objective. And if we are 1 interfering with that objective it is a 2 significant impact. 3 4 And there's a lot of different proposals 5 here that I just, I don't think are framed with 6 that goal in mind. And I think if you are going 7 to have a proposal you have got to look at what 8 you have got capturing in that proposal. So if I have this .400 metric ton per megawatt hour 9 10 threshold, basically, how many emissions am I not capturing there. I mean, it's tons and tons and 11 tons. And it's letting that go, a significant 12 amount. And so it doesn't seem to me that those 13 14 types of thresholds can be supported by substantial evidence. 15 I think it is worth noting that ARB, you 16 know, thought 7,000 tons with performance 17 18 standards was something that they could justify and say, well look, if we let this go for 19 20 industrial sectors we are capturing I think 90 21 percent of everything. And so are you capturing 22 90 percent of all emissions from the power sector at your threshold level? I mean, these are 23 24 questions to ask. 25 And I think if you want to support

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something with substantial evidence, assuming you 1 are not just going to follow ARB on this guestion, 2 which I think might be appropriate, I think you 3 4 will need to look at what emissions are falling 5 through the cracks. What emissions collectively 6 are not captured under your significance threshold 7 and is it okay to let those go. Or is that 8 something that is inconsistent with the 2050 objectives and stabilizing the climate. And it is 9 10 a pretty aggressive reduction strategy.

I would also add that, at least the 11 Executive Order targets, are based on 450 parts 12 13 per million atmospheric concentration, which I 14 think we are seeing too high to relieve the more 15 dangerous climate change. So these are things to think about in developing a significance criteria 16 17 should you want to make your own. And I think 18 maybe we don't need to go to this question as much 19 because these are very large projects and ARB has 20 something that seems to be supportable.

But to me, you know, the further you -potentially supportable. The further you are from zero on this issue, because it is such a critical question and the reductions are so significant. The further you are from zero, you know, the

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harder it is going to be to support what you have with substantial evidence and the more there is going to be a fair argument that emissions below that level may have an impact.

5 So I think those really need to inform 6 your analysis and looking at sort of, you know, 7 efficiency metrics. Are we doing the best we can. 8 Things sort of outside your environmental 9 objective and what you are capturing or not I 10 think are a bit of a distraction in terms of what 11 is significant and what is not.

MR. GALATI: One of the things I would 12 13 like to address is we keep hearing the ARB 14 standard proposal brought forth. The ARB is 15 pretty clear about deferring to the Energy Commission for the electricity sector. And I 16 17 think exactly for the reasons that Mr. Ellison 18 pointed out. The electricity sector operates so 19 much differently than everywhere else.

For example, if I were building a new glass manufacturing plant. Maybe a quantitative standard such as ARB would be appropriate there because there is no interrelationship between the industry down the street and how it will operate because I built a new glass plant. But clearly

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the electricity system does not operate that way. So again I think that such a quantitative standard like that is very, very difficult.

4 I think -- And again, these comments are 5 real preliminary because we are just looking at 6 them now. But in looking at number four. And 7 again, I think the environmental objective ought 8 to be not trying to do with CEQA what the AB 32 program is intended to do. I think the 9 10 environmental objective for our perspective is not to interfere with that process until that process 11 is implemented and to come up with trying to do 12 13 the best we can.

14 I think the best we can -- And I like 15 the approach of maybe looking at efficient projects. So while we haven't run these numbers 16 17 by to determine whether these numbers make sense 18 to us or not, an approach like this with other 19 best management practices during construction, 20 there might be some other things you can do. 21 Ms. Miles brought up some other issues on other 22 things maybe you can do to minimize your emissions. Those are the kinds of things I think 23 24 you should be doing between now and the time that 25 AB 32 is implemented. I would like to throw

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1 number four on the table.

2 MR. RICHINS: Well let me just ask a 3 follow-up question to number four. I think those 4 numbers were derived at kind of technology that is 5 available right now. What if those numbers were 6 used but then there was a 10 or 20 percent 7 increase or decrease, however you want to think of 8 it, in recognition of the goals/objectives of AB 9 32?

10 MR. GALATI: And again I think it is 11 difficult at this stage to anticipate and do 12 something that promotes AB 32 goals. AB 32 is 13 going to apply to the project you license between 14 now and the time it is implemented. So whatever 15 AB 32 is going to do, AB 32 is going to address 16 the sector as a whole.

17 Here what we are looking at is, I think, trying to permit efficient plants. Plants that 18 19 don't interfere with those goals. So I am not 20 sure about trying to accomplish more than that. 21 What actually would you do with that if you had --22 for example, I'm assuming, Paul, that what you were talking about is maybe taking those numbers 23 24 and reducing them by 20 percent.

25 MR. RICHINS: Correct. And then the

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difference between the actual performance of the 1 2 machinery to that standard then would require some sort of mitigation, which we will talk about later 3 4 on. I think it is kind of like what Oregon has 5 done. Oregon has set a number and then they have 6 just picked, I think 17 percent, to kind of force 7 technology and also to provide some mitigation for 8 greenhouse gases. So that is kind of the idea. 9 Okay, Chris. Unless -- I don't think Scott wants to answer. 10 MR. GALATI: No, I don't have an answer 11 12 to that. MR. ELLISON: Well, this is the first 13 14 that I have seen of these four proposals and so 15 IEP will respond specifically in their written comments. The comments I am about to make should 16 be viewed as only preliminary. 17 18 PRESIDING MEMBER BYRON: These should 19 only, these are not, certainly not Committee 20 proposals. These are conversation starters, I 21 think. The intent of these is to generate 22 discussion around some ideas that the staff has 23 presented. 24 MR. ELLISON: And in that spirit I will offer a couple of comments. My only caveat was to 25

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1 say my clients haven't seen this. Until they do I 2 don't know what they are going to say. But, you 3 know, speaking for me at least, and speaking as a 4 lawyer, again, we are talking about CEQA here. I 5 want to separate out all the other authority that 6 the Commission or other agencies might choose to 7 exercise. We are talking about CEQA.

8 And again, I am not going to reiterate everything I said this morning but the first 9 10 question is, do you have a significant, cumulative 11 impact from the particular project that you are looking at? And as I said this morning, I think 12 13 you have to account for the effect on the system 14 as a whole to make that judgment. If you don't 15 you are being dishonest and setting bad policy.

And so we are also talking here about an interim step. You know, step one is Scott's description here. So I am looking at these four proposals. First of all saying, okay, is this some sort of shorthand, temporary way of getting at this analyzing system effects problem? That is my first question.

And when I look at those in that way, number one clearly does not do that. It does not account for system effects at all and would

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require mitigation from projects which do not have a significant impact, in fact may have a 2 significant benefit and therefore I think is 3 4 highly subject to legal attack.

5 The second proposal looks to me as 6 though it is an attempt to get at the system 7 impacts. I am not going to comment on the numbers 8 but it does look like it is trying to, in a shorthand way, estimate whether the project 9 10 increases or decreases the overall efficiency of the system and I think that that has some 11 conceptual merit. 12

The third system is not so much based on 13 14 assessing the impact but more based on the kind of 15 need reliability criteria. Again, CEQA is an environmental information document. Need and 16 reliability and those things are relevant in the 17 18 siting process but they don't get at this question that I have been concerned about. So number three 19 20 to me is conceptually different and to me a less 21 desirable way.

22 And number four is basically a way of defining what the mitigation would be. If you had 23 24 found the significant impact and if you did that correctly then you are at the question of, what is 25

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1 the mitigation. And certainly one form of
2 mitigation would be to say, you have to have the
3 best technology available. I think that is
4 certainly a reasonable way of getting at
5 mitigation. You are going to discuss that this
6 afternoon.

7 It is particularly important in this 8 context because we don't have an offset protocol of any kind for greenhouse gas emissions. One of 9 10 the things that IEP members have been concerned 11 about is, if you are meeting the current emission standards, and you have installed the best 12 technology available, and there is no offset 13 14 protocol and you are required to mitigate, how do 15 you do it. How do you even legally do that? So my first reaction to these proposals 16 17 is that number two does appear to be a way to try

and get at this question of whether there is or is 18 not a significant cumulative impact, in what I 19 20 would consider to be an intellectually honest but 21 temporary way. And number four seems to be a 22 legitimate effort to get at what the mitigation might be if you found that there was a significant 23 24 impact. And so those are the two that I think 25 probably have the most merit, at least as a

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preliminary response.

2 MR. RICHINS: Well. Will agrees, I'm sure, completely. 3 4 MR. ROSTOV: Actually I disagree, 5 believe it or not. I would say that number one is 6 really the most legally and scientifically 7 defensible, and that is the zero threshold 8 mitigation for all projects. And if you want a 9 situation where you want to do the systems 10 analysis, once you have adopted number one you can. You can come in -- It should be the project 11 proponent's burden to say, we are not causing a 12 significant effect on the environment. 13 14 The significant effect is that at the zero threshold you have a point source, you know 15 what the emissions are. Say they are a million 16 tons. And then you could come back and say, you 17 18 know what, we have these other analyses and these analyses prove that, you know what, my project is 19 20 putting out a million tons. It really isn't 21 putting out a million tons because it has reduced 22 a million tons somewhere else in the system. And you can do that in the project-by-project 23 24 perspective and you can do that with number one. 25 But the burden of proof is on you.

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What is really happening here is really 1 switching the burden of proof saying -- and this 2 goes back to what I was saying earlier in my 3 4 opening comments about exemptions. We are trying 5 to say that, you know, if we are using best 6 available technologies, using the most efficient 7 things, they are de facto not significant. And 8 that is not taking into account the fact that they actually are putting out greenhouse gases. 9 10 So by saying you want to rely on 1368 as a threshold is really saying that you want to 11 exempt all the projects that comply with 1368. 12 It 13 is a different way to say the same thing. And 14 what we have been saying, and I think are still 15 saying is, number one applies. You calculate the emissions and then you find ways to both look at 16 mitigations and you also find ways to look at 17 18 alternatives within the context of your greenhouse gas analysis. And the alternatives analysis will 19 20 change now. I think you're right, the alternatives 21 22

22 analysis up to this point has been different. But 23 now that you have a greenhouse gas significant 24 impact you are going to have to look at your 25 alternatives analysis in a different way. And the

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1 alternatives analysis is going to have to include 2 the fact that greenhouse gases is a significant 3 component of your fossil fuel project. And then 4 are there different ways to mitigate or do an 5 alternative, taking into account the greenhouse 6 gases?

7 MR. ELLISON: Well let me respond 8 quickly just to say, we may not be as far apart as you think. The place where I think we differ -- I 9 10 mean, I think what I heard you say is that if a project proponent wants to bring substantial 11 evidence in about the system impact that they 12 should be allowed to do that and the Energy 13 14 Commission should consider it.

15 The place where I think we may depart, 16 at least for the moment, is that what I think you 17 will find is that every project has that system 18 impact. That you will be doing it in every case. 19 And it is for that reason that I think that the 20 Energy Commission ought to be looking at this 21 effect.

And you are going to see that that effect, although there may be some nuance differences from case to case, for the most part this system impact -- particularly remembering

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here we are talking here about a temporary bridge kind of issue here. That that system impact is going to be the same for most projects.

4 In other words, the project that is on 5 the margin now that will be displaced by new kilowatt hours in California is not different. 6 7 You know, there's a loading order, if you will. 8 There is a series of projects as you permit more and more projects. But that sort of order of 9 10 projects that are likely to be displaced or operate less is generic, it is not unique to each 11 12 case.

And I think there is some value to 13 14 having the Energy Commission, who will be 15 perceived as being, and I think is, more objective, more expert, look at this issue and set 16 some standard for saying okay, this is what we 17 18 think the system impact proxy is for these new projects as they come in. So I don't think we are 19 20 as far apart as you might believe.

Once you recognize that this kind of information is relevant then the next step is you have to recognize that it is going to come up in every case. And is it the most efficient way to litigate that in every single power plant siting

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case, recognizing that you are going to be basically having the same analysis done over and over and over again.

And is it better to have the Energy Commission do that analysis, who I would suggest is more objective. Or is it better to have the applicants, each individually, bringing this analysis in to every siting case and relitigating it over and over again. I think it is probably best to have the Energy Commission do it.

MR. GALATI: I would add to -- again in 11 support of the systemwide study. There's a lot of 12 parties. And Commissioner Byron, I think you know 13 14 exactly what I am talking about. There are a lot 15 of parties who could be useful in a siting case, if to understand the system, it is not the most 16 efficient way to try to understand the system in 17 18 an individual siting case.

So if you had a proceeding for a way to study such that CAISO could be participating. That maybe experts who are associated with what is imported and exported. Certainly the IOUs and the other load serving entities. That's the kind of information and evidence that I could see having to try to bring in an individual siting case for

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someone who got a contract and is trying to permit
 a plant.

And it just doesn't seem to me that I can see -- It absolutely is inefficient. And two, I don't think you have command over the parties in that type of proceeding because they are not parties to the proceeding. If you were to do a systemwide study you would have command over those parties.

10 PRESIDING MEMBER BYRON: May I just ask 11 a couple of questions.

MR. VESPA: Oh sure, yes.

12

PRESIDING MEMBER BYRON: I don't mean to 13 14 cut you off at all. Mr. Galati, part of the difficulty -- well, not difficulty. I just ask it 15 as a question. I don't quite see how the approach 16 17 that you are suggesting meshes with the concerns 18 that I am hearing from Mr. Rostov and Mr. Vespa with regard to once we make a decision on a power 19 plant siting case, we are stuck with it for 40 20 21 years. How do we deal with that? And I guess I 22 would then turn -- I mean, that is the issue that they have raised as well. That we have made this 23 24 GHG producing decision that is going to last for a 25 long time.

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And then I would turn, I think, this 1 2 direction and ask the same sort of question. On a case-by-case basis don't I need to not just be 3 4 looking at this year permitting it but how do I 5 make those projections over the next 40 years, 6 particularly given the plot that I see that shows 7 that baseline, if you will -- I'm sorry, not a 8 baseline. That average number going down every --It's changing, you know it's changing. Maybe 9 10 right now this year all the power plants that came 11 in for an application would be facing the same kind of analysis, systemwide analysis, but that 12 will be different every year going forward. 13 14 I am stuck with this dilemma. I'd appreciate any light the two of you could shed. 15 Or more of you could shed on that particular 16 17 subject. 18 MR. GALATI: I think the important thing to try to recognize here is that AB 32 does play a 19 role. And that role, I think is going to satisfy 20 21 that concern long-term about what a power plant

you site today in 2008, gets built in 2010, what happens in the couple of years in emissions, possibly, that occur prior to the implementation of AB 32. AB 32 will capture that power plant

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1 from now until the time the program is ended or
2 the power plant goes away.

In addition -- And so I think we are 3 4 focusing on what can we do in the interim. And I 5 think the best you can do in the interim right now 6 is try to enforce efficiency and try to minimize 7 emissions. As opposed to trying to -- If there 8 were no AB 32 program coming I think that these are important questions and I think that you would 9 10 have to identify, where are we going to be 40 years from now at the life of the plant. 11 MR. McLAUGHLIN: Could I join in, 12 please. Bruce McLaughlin, California Municipal 13

14 Utilities.

15 PRESIDING MEMBER BYRON: Welcome to the 16 table, Mr. McLaughlin.

MR. McLAUGHLIN: Thank you. 17 I had to 18 leave at ten o'clock this morning so I am not sure if I am repeating but I do know that, or at least 19 20 I heard that AB 32 was getting a little bit of a 21 beating this morning and it seems like it still 22 is. AB 32 is the law, it is a statute, it has been passed. We don't have all the regulations 23 24 yet but we do have a cap. It is 427 million 25 metric tons and that is what we will meet by 2020.

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So that is already in place. It is not fiction.

2 And however we are going to get there we do not know yet but we will get there. And 3 4 whether it is through multiple sector, multiple 5 sources, it does not matter, ARB will put 6 something in place. And so I think we are arguing 7 about something that -- And I support Mr. Galati 8 in his remarks here that AB 32 will be the great equalizer. 9

10 I also support substantial evidence and scientific fact. And I think the scientific basis 11 is very, very important and that is what we need 12 13 to talk about here as we are talking about a 14 project level or a systemwide level. Still what 15 we need to talk about is the scientific perspective of what a significant impact is and it 16 is distinguished from the project level or the 17 18 systemwide level.

By analogy, if I had a candle and I was in a tent it might heat it up. If I was in this room you might even feel it from ten feet away. If we wanted to measure the United States as the scientific system that we are measuring whether the temperature changed, it is not going to be significant. I think it is important that we

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determine the scientific perspective when we determine what a significant impact is. And when it comes to GHGs it is most definitely different than a criteria pollutant.

5 MR. VESPA: Well, I have a couple of 6 comments. I think the candle metaphor looks at it 7 as a project that will impact -- we are talking 8 about millions and millions of candles everywhere. 9 So I don't think necessarily for those.

10 But I wanted to make a couple of other 11 comments about the systemwide approach, which I just don't think is appropriate to apply at this 12 13 juncture. I mean, we saw from that graph that the 14 total emissions, while per capita are more 15 efficient, they are not going down. And we have deep emission cuts to make by 2050 to avoid 16 dangerous climate change. 17

18 And so to rely on a system of displacement that seems to only have function to 19 20 more or less keep total emissions at a sort of 21 flat level with some ups and downs, isn't our 22 target, our target is deep reductions. So I think when you are adding carbon commitments to the 23 24 system, while they may displace something, they seem only to result in sort of business as usual 25

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emission levels when we have to reduce them.

2 And I think, you know, it is appropriate to look at these carbon commitments that are being 3 4 made today. And if they are consistent with the low-carbon future and if there are other 5 6 alternatives like renewables and efficiencies that 7 might lower that kind of commitment. It doesn't 8 seem like a system approach is functioning because we are not on a trajectory to decrease, we are 9 just keeping it flat. 10 So that was just a comment about this 11 thought that everything is somehow not significant 12 13 on the systematic perspective. I mean, it just 14 doesn't, you know. Our goal is to decrease and 15 the system is not functioning to get at that decrease. So it seems to sort of undermine what 16 17 our environmental objective is. 18 And the final point I would make is, you know, all these projects, a lot of them have 19 20 significant impacts. And I think there seems to 21 be for greenhouse gases this sort of effort to try 22 to make everything less than significant through all these different tiers, all these functions. 23 24 And I think large emissions, like any other impact, can be significant. 25

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1	You can do everything you can, you can
2	do BACT or whatever else. But sometimes the
3	emissions that are a consequence of that, you
4	know, are significant by virtue of their size.
5	And I don't think we should make necessarily
6	exceptions for greenhouse gases when CEQA treats
7	other impacts that are large as significant. It
8	is part of the environmental review process.
9	MR. MILLER: I'd like to make a comment.
10	You know, I have been quiet so long I just can't
11	take it.
12	(Laughter)
13	MR. MILLER: A couple of things. One
14	thing that has occurred to me, that I'm not sure
15	if this changes anybody's minds about anything. A
16	combined cycle plant probably would have to be
17	permitted in 2009 in order to emit anything before
18	2012. So we are looking at a fairly small
19	universe, potentially, of at least the large
20	projects. I don't know how many of those there
21	are for 2009. Probably enough to cause us to have
22	to do something. So that's the first point.
23	And then Paul's idea earlier of adding
24	on 20 percent, let's say, just to sort of do good.
25	And I guess that sounds nice except I guess the

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question is, why. And coming back to the ratepayers, which is sort of what Chris was saying, you have to first of all have a significant impact. I think the evidence is pretty compelling, particularly for the peaker projects, that we probably don't have a significant impact.

8 And then I want to just repeat that if one were to find the need for mitigation the 9 10 chances are you would say, well, you can't do much with the project itself. You should do energy 11 efficiency, you should do RPS. Which is what we 12 have already been ordered to do, what the 13 14 ratepayers -- and we are doing more of every year. 15 Before 2012.

So if you combine the lack of an impact 16 with the fact that there is a lot of money being 17 18 spent by ratepayers, to then ask them to just provide another 20 percent because it sort of kind 19 of puts the icing on the cake, gives us an 20 21 opportunity to say we have done something good. I 22 don't know if that is appropriate from the policy perspective. That's my comments. 23

24 MR. GALATI: Another quick comment is I 25 respect what Matt is talking about when he is

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1 talking about, what is our greater environmental 2 objective. CEQA is not the tool to achieve that 3 objective. CEQA is the tool to identify the 4 impacts from a project and then mitigate those. 5 So AB 32 is the tool to address Matt's concern and 6 how are we going to get there.

7 And I think what we are saying is, if 8 you looked at a systemwide effect or at a 9 systemwide approach, you would find out that a 10 particular project, new efficient project now, 11 does not result in a net increase. That's how the 12 displacement argument works.

13 So again I want to go back to the goal 14 of what you do in an individual siting case would 15 not be to get greenhouse gas emission reductions. 16 Although laudable that is not what you do in a 17 siting case. That is not what you do with CEQA.

18 The appropriate -- If you want to do 19 that from a policy perspective on how energy is procured, how energy is used, greater efficiency 20 21 standards, things like that. Those are the 22 programs in which you achieve the larger objectives. And I think that in the last comment, 23 24 I think that's why we seem at odds. I don't see the individual siting case as the tool and I think 25

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1 Matt does. And I think that might be where the 2 difference is.

3 MR. ELLISON: Three quick points. The 4 first one being that I agree with what Scott just 5 said.

6 The second would be in response to your 7 question, Commissioner Byron. I agree that AB 32 8 is the main answer to that problem. I would also point out though that once you make a judgement 9 about the relative efficiency of the plant that 10 11 you are permitting compared to the less-efficient resources, I am assuming that they exist, that are 12 13 on the system at that time.

14 The way the system is dispatched from 15 that day forward will also address your problem. Because if you hypothesize that eventually the 16 17 plant you have permitted becomes the marginal plant, is the least efficient plant on the system, 18 19 it too may be displaced at some point in the future by something else that you have permitted. 20 21 Or it may be regulated by AB 32. It is not a 22 static. Once you make this decision for 40 years you have to live with it, okay. That is not the 23 24 situation.

25 And then lastly, and maybe this is the PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

most important thing I want to say. I want to go 1 2 back to this idea about CEQA being an information document for the public and about the 3 4 environmental impacts of a specific project. I 5 think an awful lot of what makes people 6 uncomfortable about what I have been saying, about 7 what other people say, is this prospect of 8 permitting new power plants and not requiring mitigation from them. 9 10 And the reason that we say that is 11 because we believe, and we believe if you look at the analysis and do it honestly you will find that 12 13 these projects in fact do not have a significant 14 cumulative impact. In fact just the opposite, 15 they have a significant cumulative benefit. If that is true, and I will leave it to 16 you to decide that. But if that is the truth then 17 what we are really talking about here is a 18 19 political perception problem. That those who 20 really understand the electric system know that 21 that's true. They know that these new plants that 22 are being permitted are in fact reducing 23 greenhouse gas emissions, not adding to them, but 24 the public doesn't yet understand that. 25 And if that is our problem then we need

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to inform the public. That is what CEQA is all 1 2 about. If instead of informing the public by putting out CEQA documents that tell the truth you 3 4 do something different, you are not only violating 5 the law, but you are really setting a precedent 6 for a whole series of bad decisions in the future. 7 MR. McLAUGHLIN: Commissioner, is this a 8 dialogue or are we supposed to be talking to you? 9 PRESIDING MEMBER BYRON: Oh no, it's a dialogue, Mr. McLaughlin. 10 MR. McLAUGHLIN: May I ask Mr. Vespa a 11 question? 12 PRESIDING MEMBER BYRON: Sure, go ahead. 13 14 MR. McLAUGHLIN: Just for clarification. I wanted to talk about the one candle. You said 15 it is not the one candle, it is the thousand. 16 MR. VESPA: Yes. 17 18 MR. McLAUGHLIN: And so I would presume that you think that, or you believe that if we 19 20 have no standard, or a very high standard, it is 21 the multitude of projects that will eventually 22 impact the climate, it is not the one plant. If only plant was built there would be no impact. 23 24 It's the multiple plants. 25 And so to switch analogies, if we had

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two screens, little screens with holes in them.
And so if CEQA is the first screen with the big
holes; we have got AB 32 as the finer screen. Why
don't you think that AB 32 is going to catch all
these plants and keep those collective thousand
candles, mixing metaphors, below the necessary
cap?

8 MR. VESPA: Well gosh. You know, first I would say there is a cumulative impact. So it 9 10 is something you look at that way and CEQA does address it. AB 32 and CEQA are very different 11 statutes and I think they have different 12 13 objectives. And, you know, CEQA is intended to 14 look at what a significant environmental impact is 15 based on scientific data.

And I think, you know, you want to look 16 17 at what is dangerous climate change and what you 18 are trying to avoid. I think it allows you to 19 look at a longer term perspective than AB 32 20 necessarily does, which is just one point on our 21 emission reduction time line. Which I think is 22 why CEQA is important, because it can allow you to look at these long-term objectives of climate 23 24 stabilization and whether additional carbon 25 commitments are appropriate.

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I mean, these power plants are going to 1 go beyond 2020 to surely 2050, and do we want to 2 be in a situation where we have got these carbon 3 4 commitments in place that we are making today. 5 This carbon lasts for a hundred years in the 6 atmosphere and it is going to be around for a long 7 time and I think we want to think critically about 8 how many more of these commitments we should be making versus other types of less carbon-intensive 9 10 commitments.

CEQA isn't necessarily the way to get to 11 2050. But I think when you are looking at what 12 13 significance is, that is the question you are 14 asking. Is it significant? Is this getting in 15 the way of our low-carbon future? That's just what significance is. And where you go from there 16 is another guestion. But I think the bar for 17 18 significance is very low given where we have to be and what our environmental objective is. And that 19 20 is just a question about significance. And how 21 you implement that through mitigation alternatives 22 is the second question. MR. ROSTOV: I think everything he said 23

24 was great. I just wanted to add one --

25 (Laughter)

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MR. ROSTOV: I just wanted to add one 1 2 extra thing. Something I said earlier today as well in my opening remarks is by talking about AB 3 4 32 we are doing a -- that's the backward approach. 5 Actually what the siting proceeding is about is 6 the CEQA approach. And then if you have some 7 problems of interaction between CEQA and AB 32, 8 once you have established your CEQA approach you then can go to ARB, through the ARB process, and 9 10 make sure there is no double counting or no double 11 mitigations. But what we need to do now as a state is 12 13 determine our CEQA approach for the siting 14 proceeding. And that AB 32, since it is in the 15 future, those can respond in terms of what we do at the end for our CEQA approach. 16 PRESIDING MEMBER BYRON: Thank you. 17 This is all very good discussion. I think 18 19 Mr. Richins may be closing us out here shortly. I 20 just wanted to make a comment. It may be a 21 question but I am not sure you can answer it in 22 the time remaining. I notice there is a 23 preponderance of attorneys around this table. And 24 Mr. Alvarez, I hope you are not offended in any 25 way.

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(Laughter)

2 MR. ALVAREZ: No. PRESIDING MEMBER BYRON: But actually I 3 4 would like to refer to a comment that you made 5 earlier. And that is, reality is these 6 applications are going to continue to come in. We 7 have to deal with them by a matter of law here at 8 the Commission. I think we have 22 or 24 of them before the Commission right now. They are not all 9 10 fossil-fired power plants.

In fact I would turn to Mr. Ratliff at 11 this time and ask -- but before I ask. We need 12 some sort of solution on an interim basis in order 13 14 to begin addressing the current applications that 15 are before us and the many more that we anticipate I think by the end of the fiscal year. My siting 16 division tells me that we may see as many as 12 17 18 more. Aren't all of the projects before us, all 19 of the Applications For Certification going to be 20 subject to the same evaluation? And that if it is 21 not something that we can do in a timely way won't 22 they all be delayed?

23 MR. RATLIFF: Yes, I think that -- The 24 simple answer is yes. Our intent is to, I think 25 staff's intent is to have greenhouse gas analyses

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in its cases going forward and that will probably 1 2 include even the alternative projects as well. PRESIDING MEMBER BYRON: Alternative 3 4 meaning renewables? 5 MR. RATLIFF: That's right. Unless the 6 Committee tells us otherwise. Or unless we decide 7 that that analysis can be fairly brief inasmuch as 8 we think that there is no potential significant effect on the environment from a renewable 9 project. But our intent is to try to analyze 10 greenhouse gas in each of our projects --11 PRESIDING MEMBER BYRON: Right. 12 MR. RATLIFF: -- until such time as 13 14 there is a programmatic approach. 15 PRESIDING MEMBER BYRON: So given that, gentlemen, ladies and gentlemen, I would really 16 17 like to get somewhat beyond the academic and the 18 legal arguments and I would really like to ask 19 your assistance on helping us to focus on a 20 practical, interim solution that we can use with 21 existing projects. 22 Now Mr. Miller has an answer that I 23 realize you may not all agree, or we may not be 24 able to get to it in the next few minutes. But I would really appreciate it if your written 25

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comments could focus on our need for an interim
 solution to this.

Commissioner Douglas, did you want to add anything to that? I would be glad to defer to Mr. Miller but I would like to ask if you had anything you wanted to add.

7 ASSOCIATE MEMBER DOUGLAS: I have a 8 couple of questions that I would be interested in hearing perspective on. One is that I think it is 9 10 very clear that at least for the natural gas plants the bulk of the emissions come from 11 operation. And at the time that we permit a plant 12 we don't necessarily know how that plant is going 13 14 to be operated over time.

We have an idea particularly based on the type of plant it is and the region or the area in which it is placed and what we know of the system right now but we don't know -- the further out in time we go the harder it is to place a precise estimate on how that plant is really going to be operated.

I think it is also challenging for us as we look at this issue to know how exactly the AB 32 regulations are going to affect the electricity sector. We have very clear energy efficiency and

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1 RPS goals.

2	But as I think everybody here knows, we
3	have faced our share of challenges in meeting
4	those goals. We are attempting to accelerate
5	them. I think every passing year will make it,
6	will clarify to us whether we in fact are able to
7	meet and whether we are able to exceed those
8	goals. But sitting here today as we face cases in
9	front of us, there is a lot that we don't know
10	that is quite germane to assessing what the
11	project impacts might be.

One way to deal with that is that rather 12 than trying to quantify what the impacts are and 13 14 think of mitigation as a lump sum up front, so to speak, there could be some kind of program that 15 16 actually is based on real operations or that looks 17 at real operations over time. I wanted to throw 18 that out. I know it is going to come up in the mitigation discussion but I wanted to get a sense 19 20 from everybody here.

I also am interested in the perspective on, you know, assuming that we are able to put together a coherent and sort of strong analysis for how we might move our system from where we are today to the low-carbon future that we want and

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what the components are. What is the CEQA 1 significance, if any, of the state actually 2 staying on target in terms of the actual building 3 4 blocks of that vision? Those are two questions 5 that I would be quite interested in, any input on 6 either now or later.

7 PRESIDING MEMBER BYRON: Excuse me, but 8 I put off Mr. Miller's response. You wanted to say something. 9

10 MR. MILLER: It is going to be anticlimactic now. I just thought that it is good 11 to point to the fact that the Commission staff I 12 13 think is doing a very good job now with the 14 drafting of the analyses on GHG impacts.

15 And the conclusion that has been reached in recent cases is that because the system impacts 16 are very difficult to analyze, that in fact there 17 18 seems to be a reasonable probability that there will be a reduction in impacts. But it may well 19 20 be speculative to reach a conclusion at this point 21 and perhaps until the study that Mr. Galati has 22 been referring to could be completed. So from a legal perspective there is absolutely nothing 23 24 wrong with that. That is allowed under CEQA and 25 you are following that process now.

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One option that could be taken, perhaps 1 in combination with some of the choices that 2 Mr. Layton has developed, would be to continue to 3 4 acknowledge the reality that it is likely 5 speculative to reach a conclusion on a 6 cumulatively considerable impact. An indicator 7 that there is not an impact is X, Y and Z. That's 8 what is in the current analysis. And then perhaps adding on maybe some reference to efficiency, 9 10 rules of thumb such as have been developed in some of the alternatives. 11 That doesn't respond to either of your 12

13 questions. That was in response to Commissioner 14 Byron's point that we have to do something now. I 15 am just saying you already are doing something and 16 I think it is quite good, actually.

MR. ELLISON: Commissioner Douglas, let 17 18 me respond to your question briefly regarding the uncertainty about how the project to be permitted 19 20 will operate in the future. That uncertainty is 21 something we deal with in the siting process 22 already all the time. You are assessing water 23 impacts, you are assessing air emission impacts. 24 All sorts of things that are related to the operation of the plant will be affected by how 25

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1 much that plant operates.

2 ASSOCIATE MEMBER DOUGLAS: Well we do. But the interesting thing is, let's take air 3 4 impacts for example. We sort of take a worst 5 case. Or we assume that the plant is going to be 6 operating probably more than most of these plants 7 actually will and that's the level of mitigation 8 that is required. 9 MR. ELLISON: I understand that and that 10 leads to my response. Which is, in the case of 11 assessing the displacement issue that we are talking about you can do that same thing. I don't 12 13 think it really matters. Because to the extent 14 that you assume the plant is operating --15 Let's say the so-called worst case maximum capacity. The greenhouse gas emissions 16 17 from the project are at its highest but the 18 displacement is also at its highest. In other 19 words, every kilowatt hour that that plant puts 20 out, no matter how many it is, has both an 21 emission factor and a displacement factor. And so 22 I don't think you have to know with perfect precision exactly how that plant is going to 23 24 operate in the future to net those two things. 25 MR. ALVAREZ: Commissioner, I quess one

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1 of the issues that I see that sort of appears, if 2 you try to do the impact on a case-by-case basis, 3 and one committee is looking at one project and 4 another committee is looking at another project, 5 each of them are going to go off on two, 6 independent paths in terms of the impacts of each 7 of the projects.

8 And ultimately to solve that problem 9 when you bring it to the full Commission they are 10 going to need to know what the system impacts are 11 anyway. So you are going to need to do a system 12 analysis at some level so that you can judge the 13 relative merits of those two projects if you get 14 down to that situation.

15 So the programmatic or the system 16 approach that we recommended I think is a 17 necessary condition ultimately, if you then decide 18 you want to do a case-by-case analysis also. I 19 don't see how you are going to avoid that.

20 MR. VESPA: I had a response to your 21 third question. I think it had to do with if you 22 find out the reality of what is happening on the 23 ground is not consistent with maybe the program 24 you have laid out.

25 And I think to me it would seem like PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

from a CEQA perspective, taking AB 32 or maybe 1 some kind of programmatic document the CEC might 2 prepare, if you are relying on the tiering 3 4 provisions I think it is 15064(h)(3). Under that 5 provision, the way I read it is, you do that if 6 there is still substantial evidence that even 7 relying on that program is still having 8 environmental impact, then you couldn't do that.

9 And so to me AB 32 coming into play, and 10 assuming that is not working out, the cap-andtrade system is not resulting in actual reductions 11 and they are just sort of phantom trades and so 12 13 forth. I think projects could be challenged under 14 CEQA that may try to tier off AB 32 and say, well 15 look, this isn't working and there is substantial evidence that there is still an environmental 16 impact. So I think CEQA can really serve as a 17 18 check on maybe systems that aren't operating as predicted. 19

20 So that would be the answer to the third 21 question. I think the second one had to do with 22 sort of real-time operations and mitigation 23 monitoring programs which are part of CEQA may 24 play into that. Maybe there is an issue now about 25 while there may be a five year time lag between

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now and when AB 32 kicks in and would you want to
 have mitigation that is temporal and then have AB
 32 come in.

4 I mean, to me it would seem like you 5 kind of look to the opposite; you would mitigate 6 fully. And then potentially, I would think, as 7 the cap-and-trade is developed try to get some 8 kind of credit for what you have done. You know, just so long as you are not actually being able to 9 10 sell those kind of credits because they were already legally required. But that's sort of how 11 I would look at it. And I don't know the answer 12 13 to the first question.

14PRESIDING MEMBER BYRON: Well, maybe I15could ask this of staff or anyone that feels they16could answer it. But how long would it take for17this Commission to do a programmatic or a system18study that would be useful for this purpose?19MR. RATLIFF: I'm glad you asked that

20 because this question has been on my mind 21 throughout this discussion. There seems to be a 22 notion that we can do this analysis and it would 23 provide us with an answer. But there has been 24 very little description of what that analysis 25 would be, how long it would take and how

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1 definitive it would be.

Again, I am not going to call Dave a forecaster this time because it will offend him, but I guess the electric analysis people really are the -- they probably have more to say about that than anyone else in terms of what are the possible conclusions that you would get from this and how long would it take you to do it.

9 I know staff has already done a great deal of analysis in the last, in the last IEPR in 10 the scenarios analysis on how you would implement 11 AB 32. And various scenarios that could be 12 13 developed that might predict what the electric 14 system would look like if we tried to meet the AB 15 32 goals. I don't know how much that plays into what is desired out of this further analysis and I 16 don't know what the further analysis would 17 18 require. But I hope maybe Dave has some idea about that because I really don't know. 19

20 PRESIDING MEMBER BYRON: So I asked you 21 one question and you added at least two more. We 22 don't know the scope and we really don't, in my 23 mind, know how useful it would be for what period 24 of time either. So it would have to be updated on 25 some regular basis too. Go ahead, Mr. Vidaver.

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1	MR. VIDAVER: I'm not certain exactly
2	what type of analysis you are talking about. If
3	you are talking about a kind of a adding a
4	project into the system and dispatching it. I
5	would agree with Mr. Ellison, you will come up
6	with emissions reductions on the system. The
7	plant will only be dispatched when it is more
8	efficient to do so.
9	I will disagree with his comment about
10	forcing it in at the number of permitted hours.
11	If you did that it could very easily increase the
12	systemwide emissions.
13	I agree with Mr. Alvarez's comment that
14	not being a veteran of the siting wars that I
15	think there would be a danger of litigating over
16	the data sets and the assumptions. Every time you
17	changed the gas price forecast and every time
18	there was an upgrade on a transmission line and
19	every time any power plant was added to the system
20	you would have to update your data set. And I
21	would strongly suspect that unless care was taken
22	to keep that from being an issue the siting cases
23	might drag on an awful long time and make lawyers
24	awfully wealthy.
25	PRESIDING MEMBER BYRON: I am reminded

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too, I forget who may have said it earlier, maybe 1 Mr. Ellison. I don't believe you put this number 2 to it. But it is about 40 percent of the CO2 3 4 emissions in this sector come from out-of-state 5 generation. And that is extremely difficult. We 6 have not done a very good job, in my understanding 7 at this Commission, in putting our arms around 8 that completely. To do some sort of definitive analysis to be able to determine all that. 9 10 So there is going to be a great deal of 11 uncertainty around this kind of analysis, let alone the amount of time it is going to take to 12 13 do. What I am trying to get to here is how 14 workable this is and what do we do in the interim? Did you want to add something, Mr. Ratliff? 15 MR. RATLIFF: Well I probably did but I 16 really wanted to make a comment. And that was, I 17 18 think -- First of all, I don't want to pick on Will and the Center for Biological Diversity. I 19 am so glad you guys came today. You made our 20 21 discussion so much more interesting, and I think

23 being here.

22

24 PRESIDING MEMBER BYRON: So now you're25 going to pick on them.

beneficial, and I appreciate that. So thanks for

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(Laughter)

2 MR. ROSTOV: We can take it. 3 MR. RATLIFF: I think Will can take it, 4 yes. The last comments about the relationship 5 between what we are doing in AB -- what the state 6 is doing in AB 32 and what the Energy Commission 7 is doing in its analyses, to me gets it exactly 8 backward.

9 What we are doing in our CEQA analysis 10 is CEQA. We are trying to determine if any individual project has a significant adverse 11 impact in this particular subject area, which is 12 13 greenhouse gas emissions. And that is a very 14 narrow focus. It doesn't tell you what your 15 system is going to be in 50 years. It doesn't tell you anything about 50 years, it tells you 16 17 what our best estimate right now for this project 18 What you are doing in AB 32, I believe, is is. much more foresighted, much more comprehensive, 19 20 much more programmatic in its embrace. And I 21 think that is where you accomplish something that 22 is real and big.

I think that the expectation that you
are going to do something much bigger through a
CEQA analysis and a significance determination

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then you would through AB 32, is absolutely
backwards. So I just had to put that in because I
felt like I was hearing the contrary. The
interaction is there but I don't think we are
doing AB 32 through the CEQA itself.

6 MR. ROSTOV: Well I disagree. But I 7 think the main point is CEQA is about new plants. 8 AB 32 is about new and old plants. So all we are talking about now is how are you going to do your 9 10 environmental analysis for your new plant that has 11 a certain amount of greenhouse gas emissions. And then if you find it cumulatively considerable, 12 13 which we believe it is, then how are you going to 14 mitigate and study alternatives. That's the whole 15 story for CEQA.

AB 32 addresses both old and new plants. 16 17 So we are saying, you have the requirement for 18 CEQA now. And then you're right, you know. When 19 you are looking at the whole system, the old 20 plants as well as the new plants, then you do an 21 AB 32 analysis. But here you are doing a project-22 by-project siting proceeding and you are applying 23 CEOA.

And AB 32 is very explicit. I'm citing our comments. I don't know the statute off the

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top of my head. That it did not take away the 1 CEQA authority. As a matter of fact it allowed 2 all the other laws to exist at the same time. It 3 4 did not, as somebody said earlier, occupy the 5 field. So I stand by my comments and respectfully 6 disagree. 7 MR. GALATI: Commissioner Byron. 8 PRESIDING MEMBER BYRON: We have someone new that's joined us at the table. 9 10 MS. SRINIVASAN: I wanted to respond to Commissioner Douglas' question about --11 PRESIDING MEMBER BYRON: Would you 12 13 please identify yourself. 14 MS. SRINIVASAN: I'm sorry. My name is 15 Seema Srinivasan and I am here on behalf of the Energy Producers and Users Coalition. 16 And I wanted to address Commissioner 17 18 Douglas' question about the conflict, the potential conflict between CEQA and AB 32. I 19 20 wanted to give you a specific example and that is 21 the example of CHP. Because the installation of 22 CHP actually increases on-site emissions because it essentially takes the place of both a boiler 23 24 and a generator, but yet it results in a net 25 decrease in emissions.

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And so therefore if there was a site-by-1 2 site evaluation it could deter the installation of CHP, which directly conflicts with AB 32's --3 sorry -- CARB's Scoping Plan recommendation to 4 5 increase reliance on CHP resources. And I just 6 wanted to point out that there is a direct 7 conflict depending on how the CEQA evaluations 8 take place.

MR. RICHINS: Okav. I think this is all 9 good discussion but we are scheduled to go to 10 mitigation here. So maybe if there's one or two 11 last comments and then we will maybe just take a 12 13 short stretch break and then go into mitigation. 14 I think Chris wants to say something. And if 15 someone else wants to say something we will and then we will wrap this up. Although the dialogue 16 17 is real good we need to move on to the next panel. 18 MR. ELLISON: I just wanted to briefly address your concerns about what workability, 19 20 Commissioner Byron. 21 PRESIDING MEMBER BYRON: Thank you. 22 Because that question is going to stand and that is really what I am looking for from you all at 23 24 this point forward. Go ahead.

25 MR. ELLISON: I understand that. You

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1 know, earlier I made the analogy that when we did 2 avoided cost pricing under PURPA. You can make 3 this analysis as complicated or as simple as you 4 want to make it in the amount of time that you 5 have and for the purpose that you have.

6 You can make it as simple as proposal 7 number two that the staff put forward. That is a 8 way of incorporating a system effect in a very 9 simple, short-term way. Or you could study it for 10 years if you want to.

The point is though, and the only point 11 I really want to make is that obviously as is true 12 13 in many technical aspects of the siting process, 14 you do the best you can with the information that 15 you have. And you try to get the best answer that you can get and inform the public as best you can. 16 The answer that you get is almost certainly not 17 18 going to be perfectly, precisely correct. And that is not limited to this area, it is limited to 19 all sorts of public policy arenas, as you well 20 21 know.

But, and here is my last and main point, you are far better off to at least try to incorporate this into your analysis to get to something that is closer to the right answer, than

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to throw your hands up and say, we are going to 1 2 use something that we know is wrong. That doesn't consider a fundamental aspect of the way our 3 4 system operates simply because we can do it 5 easily. 6 MR. RICHINS: Scott. 7 MR. GALATI: Yes. The last point I 8 wanted to make, Commissioner Byron, along the same lines was, I think your staff is going to have to 9 10 do this anyway. I think your staff is either going to be challenged to do this in an individual 11 siting case. 12 PRESIDING MEMBER BYRON: Right. 13 14 MR. GALATI: A systemwide study to 15 determine what the net emissions are. PRESIDING MEMBER BYRON: But I just want 16 to make sure I understand, based upon your steps 17 18 one, two, three, that would be in step two, correct? 19

20 MR. GALATI: That's correct. And so 21 whether step two takes place inside an individual 22 siting case, and with all the boundaries around 23 it, or step two takes place outside, I don't see a 24 real difference in the amount of work your staff 25 would need to do. In fact I think maybe the

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second step where it takes place outside the 1 2 siting case would even be more helpful to your staff because there would be other participants. 3 4 PRESIDING MEMBER BYRON: Agreed. 5 MR. GALATI: So I think that to achieve 6 the goals, and as Chris says, to tell an accurate 7 story, you have to get that information. So I 8 don't think it is a matter of how long it will take. It is more of, we have to do it, what is 9 10 the best forum to do it in. So we were trying to 11 propose from a step one perspective, how can you keep projects continuing to move forward while 12 13 this study is taking place or this is taking 14 place. 15 PRESIDING MEMBER BYRON: Understood. In fact, without showing any partiality to your 16 suggestions, I think yours were the --17 18 MR. GALATI: You never do, Commissioner. PRESIDING MEMBER BYRON: Yours were the 19 only comments that addressed really the interim 20 21 nature of what we need here. Otherwise I think we 22 are faced with the prospect that we wait for your step two, or what we have been calling our 23 24 programmatic or systemwide approach, and the time 25 it will take to do that before we can move forward

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on any other applications.

I don't think California is well-served 2 if that is the approach we take. That's why we 3 4 have tried to focus on something interim. That's 5 the purpose of the expedited schedule. That does 6 not preclude the fact that we are going to have to 7 address this in a more substantial way. 8 MR. RICHINS: Okay. And I think --MR. MILLER: I'll pass. 9 10 MR. RICHINS: Okay, all right. PRESIDING MEMBER BYRON: Would it be 11 anticlimactic? 12 MR. MILLER: No, it was actually going 13 14 to be quite climactic. But I'll save it. 15 (Laughter) MR. RICHINS: Okay, I think -- Why don't 16 we take just a five minute stretch break and then 17 18 we will move into mitigation. And we have three speakers. 19 20 But before you leave, some of you may be 21 leaving, I'm not sure, but written comments are due on the 12th. You heard from the Commissioners 22 the types of things that they are looking for. 23 24 And I think it is some guidance, some direction, some practical approaches that can be applied so 25

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that we can uniformly do a CEQA analysis for all 1 2 these power plants in the interim between now and when AB 32 might take effect, or between now and 3 4 when we do step two in a programmatic approach. 5 (Whereupon, a recess was taken 6 off the record.) 7 MR. RICHINS: Okay, thank you for 8 returning. This panel discussion is going to be on mitigation. And we want to caveat this by 9 saying that if the Energy Commission determines 10 11 that greenhouse gas emissions exceed the CEQA threshold of significance then mitigation may be 12 13 required. So this is a discussion on if 14 mitigation is necessary based on that premise. 15 And we have three speakers from --Lucille is from ARB, the Office of Climate Change. 16 Rachel is from the California Climate Action 17 Registry, and then Lisa is from the Attorney 18 General's Office. So we will take those three in 19 20 that order. And two of them have PowerPoint slide 21 presentations. 22 And then we will go to the same type of format that we had earlier this morning and 23 24 afternoon where there is a free-flowing dialogue

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where you can ask questions of the presenters or

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put forth other ideas and suggestions. But we are 1 2 interested on ideas on mitigation, existing mitigation programs and so forth that might be 3 4 able to be used if the Energy Commission decided 5 mitigation was necessary. Thank you very much. 6 MS. VAN OMMERING: Okay. Can everybody 7 hear me okay or should I be closer? 8 MEMBER OF THE AUDIENCE: Be louder, please. 9 10 MS. VAN OMMERING: Louder, okay. Well thank you very much for inviting me over here. I 11 am a little short so for those of you who can't 12 13 see me, too bad. 14 (Laughter) 15 MS. VAN OMMERING: My presentation this afternoon is going to focus on what ARB is 16 17 proposing for a greenhouse gas cap-and-trade 18 program, including the use of offsets. And so for those of you who are intimately involved in what 19 20 we have been working on I apologize for being a 21 little bit redundant. But I think it always helps 22 to bring everybody on the same page, that way we can kind of talk in the context of what you are 23 24 discussing today. 25 So what I will be doing is summarizing

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not only the cap-and-trade program but also other provisions in the proposed scoping plan that have to do with voluntary reductions and the voluntary offsets market. And hopefully that will assist you in making the rest of the afternoon a useful dialogue.

For those of you who are from another
planet, we did have legislation that was adopted a
couple of years ago, AB 32, that codified the 2020
greenhouse gas limit at the 1990 level.

It also mandated that ARB adopt a 11 Scoping Plan to achieve the maximum feasible and 12 cost-effective reductions. Our board will be 13 14 hearing from us tomorrow on the Plan but they will be reserving their action until the December board 15 meeting. We do anticipate a full day tomorrow, 16 17 probably running into the evening and possibly 18 even a full day in December as well.

19 The proposed Scoping Plan as it relates 20 to the greenhouse gas emission reductions. We are 21 recommending measures that would lower those 22 emissions down to the 1990 level.

23 We are also proposing a cap-and-trade 24 program that not only is California-specific but 25 that would link to a US-Canadian regional market.

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And AB 32 requires that all measures 1 must be launched by January 2012, which means we 2 have a very aggressive time schedule to get the 3 4 measures adopted. 5 PRESIDING MEMBER BYRON: Ms. Ommering, 6 if I may. We spent a lot of time at this 7 Commission and the PUC making some recommendations 8 to the ARB on some of those programmatic measures to take in the electricity sector. Are they all 9 included in that scoping document? Namely 33 10 percent renewables and 100 percent economically 11 achievable energy efficiency. 12 13 MS. VAN OMMERING: Yes, those are. I 14 thought you meant the joint decision and that is 15 part of the rulemaking process. Okay. So before reviewing what it was 16 17 that was contained in the proposing Scoping Plan, I just wanted to review with you some of the key 18 19 elements that any cap-and-trade program would have so that you kind of understand what the context is 20 21 when we go into the discussion of the offsets. 22 Of course there is the scope and threshold which determines who is going to be in 23 24 the cap and how large the sources need to be before they are eligible to be in the cap. 25

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We also talk about where we would set
 the cap in 2012 and how quickly the emissions cap
 would decline to the 2020 target.

4 There is a discussion of the 5 distribution of allowances. Do we freely allocate 6 allowances or emissions to sources? Do we hold an 7 auction in which every source in the cap would 8 have to go in for what they think their emissions 9 are going to be over a three year compliance 10 period? Or would we have a hybrid approach?

11 Our proposed plan is to do a hybrid 12 starting low with the auction and moving rapidly, 13 as the Energy Commission and the PUC suggested, to 14 a full auction. Whether or not we go as rapidly 15 as the two commissions suggest is a question for 16 the rulemaking process.

We also would provide for a limited amount of offsets and I will describe what we are talking about there. But those are essentially different than the offsets that power plants are used to talking about in the criteria pollutant side.

These are not the type of emissions that mitigate or offset your remaining emissions after you put on control technology, these are quite

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different. These are additional reductions that are achieved from outside the cap sector that sources inside the cap can purchase to a limited extent in order to be able to meet their total compliance obligation at the end of the compliance period.

7 Certainly we would have a very 8 aggressive reporting, tracking and enforcement program. As many of you know, we already adopted 9 10 a mandatory reporting requirement which capture 11 for reporting purposes electric generation. That is, I believe, one megawatt or larger. But in 12 13 terms of what would be in the cap would be mostly 14 key power plants, generators, but would not 15 involve -- would not include renewable energy, 16 clearly.

And finally, when we do have an auction we have to consider in the rulemaking the fair distribution of those auction revenues. It is the government that is collecting them but the revenues obviously belong to the public who will ultimately be paying the price of the program.

23 Okay, so what have we proposed in the 24 Scoping Plan? We are saying that by 2012 we 25 believe that industrial facilities who emit 25,000

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millimetric tons of CO2 equivalence or greater would be in the program, including electricity generators inside the state and a special approach for imports, which we call the first jurisdictional deliverer.

6 That definition right now is being 7 discussed. Some of you may have been 8 participating in the process. It is being discussed at the Western Climate Initiative level 9 simply because those imports affect people within 10 those other states and provinces as well as those 11 who do not belong to the WCI. So we want to have 12 13 a clear definition as to how all the participants 14 in the cap-and-trade program, or I should say all 15 the jurisdictions, will be treating imports.

Beginning in 2015 we would include the non-industrial sources of fuel combustion, natural gas, for commercial and residential use as well as transportation fuels, which is gasoline and diesel.

The capped sources. In this case when you participate in the cap-and-trade program you would be required to hold allowances sufficient to or equal to what your emissions are at the end of a three year period. So if you see the cap-and-

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trade program beginning in 2012, at the end of 2 2014 you would be expected to surrender as many 3 emissions allowances as you have emitted in that 4 period of time.

5 The auctions would be held at different 6 parts of that compliance period so that you 7 wouldn't have to anticipate at the very beginning 8 what you would need. There will be different opportunities for you to go into the market if 9 10 there is an auction, or that the state would distribute to you if in fact we decide that an 11 auction is not, is not the best way to distribute 12 13 allowances at the very get-go.

14 However, within that cap, as you have 15 been talking about before, there are different regulations and standards that the cap stretches 16 over. Those are requirements that either already 17 18 exist or policies that the state has determined are good for reasons in addition to greenhouse gas 19 20 emissions reductions. And those are the Low-21 Carbon Fuel Standard, the Pavley car standards 22 which require a greater fuel efficiency, the Renewable Portfolio Standard hopefully stretching 23 24 out to 33 percent rather than the 20, and also to 25 include the munis as well as the IOUs.

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A very ambitious energy efficiency target. And some reductions of industrial sectors, including refineries, where we think that providing them with a regulatory target provides a greater incentive and greater assurance that those reductions will occur.

7 So that being the case, when you look at 8 all those standards and regulations, those will comprise really the great bulk of the reductions 9 10 that we think will occur by 2020. Therefore if we are assuming from the emissions in the cap, which 11 are 174 millimetric tons that we will need to 12 13 reduce from the cap sectors in order to be able to 14 get to 2020, we are saying that those direct 15 regulations and policies will be responsible for about 140 millimetric tons. And that when you 16 look at offsets, which I will discuss in another 17 slide or so, the offsets cannot be used to avoid 18 19 complying with those requirements.

20 So when you look at all those direct 21 regulations and the policies as I said, you wind 22 up with about 140 tons of reductions. What is 23 left would be about 35 millimetric tons of CO2E. 24 And of that portion we are proposing that no more 25 than 49 percent of the required reductions in that

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total compliance period between 2012 and 2020 come from offsets.

And that is to ensure that the bulk of 3 4 the reductions are coming from within California. 5 That is a policy decision that I think we are 6 going to stick with. That we want to see most of 7 the reductions come from within California, even 8 understanding why because this is a global climate change problem, that we have to first look to 9 10 California to set the standard, set the goal for others to follow. 11

The cap would be set in 2012. The cap 12 13 would decline to meet the 2020 target. And then 14 further down the line we would have to set, 15 assuming if in fact the federal government doesn't do anything and I don't think that will be the 16 case. But if they were not to do something we 17 18 still, our intention is to move beyond that to the climate stabilization, which we would look at in 19 20 terms of the 2050 goal.

21 So what is an offset? As it says here, 22 they are additional reductions from un-capped 23 sectors beyond that required by direction 24 regulation or other policies.

25 So for instance, forests are not

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regulated in the proposed Scoping Plan. Ag lands 1 for the most part are not, although we are 2 proposing to have some level of manure management 3 4 over time. And landfills in terms of their 5 methane collection are not regulated. Those could 6 be examples of where you would look to get 7 offsets. In other words, surplus reductions that 8 are not already accounted for either outside of the cap, because there are certain measures that 9 10 we account for outside of the cap, as well as 11 within the cap.

The purpose of having the offsets is to 12 13 provide lower cost reductions to market 14 participants when allowances are scarce. 15 Remember, that in order to achieve our 2020 goal we are going to need emissions reduced well below 16 the business as usual. Therefore, companies that 17 18 are in the cap are going to need to think ahead as 19 to how they are going to reduce their energy 20 output as well as otherwise reduce their carbon 21 footprint.

22 We anticipate that most of these 23 reductions would come by the regulatory route. 24 Some will come from reductions from other sources 25 who may be able to go beyond or below what they

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1 are otherwise required to do. But we also expect 2 that as allowances become scarcer we will need an 3 additional source of reductions that are not 4 otherwise being controlled. If not here then in 5 other jurisdictions or in other nations. 6 Well, so what are the criteria for these

7 offsets in order for us to be able to bring them 8 into the program? We want to be sure that these 9 out-of-cap reductions withstand the same level of 10 scrutiny, certainty and enforceability as any 11 reductions we would expect from regulations that 12 we see within California.

13 That means that any offsets that we 14 allow into the cap have to reflect actual 15 emissions reductions or removal out of the 16 atmosphere.

That they have to be beyond what
otherwise would have happened or in any way
credits.

We have to be able to rely upon -reliably measure them or estimate their emissions. Obviously we have to be able to verify that in fact those reductions are occurring. They have to be permanent or backed up by a guarantee that they are not going to go away.

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1 And finally, we must be able to ensure 2 that they are enforceable in case a party decides 3 to walk away.

4 There are other things that we are 5 looking at in terms of bringing them into a cap-6 and-trade program. AB 32 requires that whatever 7 we do that we not do anything to adversely affect 8 other stiff requirements that we have in place that apply to criteria pollutants or air toxics. 9 10 And therefore as we proceed through the rulemaking 11 process we are going to take a look to see if there are any reasons why offsets should be 12 13 restricted based upon local conditions.

14 There are also in addition to the cap-15 and-trade program also other features in the proposed Scoping Plan that allow for sources 16 outside of the cap, or even potentially in the 17 18 cap, to do something more and to get credit for it. AB 32 specifically provides that we 19 20 appropriately recognize or credit voluntary, early 21 actions. The question that we are looking at is, 22 what is the starting point for that early voluntary action? 23

24 We are clearly not going to go back to 25 2000 or 2004. We want to make it early enough so

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that you are cognizant of the fact that these 1 2 reduction requirements are in place and you want to do something now rather than wait for us to 3 4 start the cap-and-trade program. But if you do do 5 that, then we want to somehow properly acknowledge 6 what you do within the baseline so that you are 7 not starting off lower than you otherwise would be 8 allowed to start off had you not done the early reduction. 9

10 So we looked at, in the Scoping Plan, three potential alternatives. One would be the 11 early action allowance set-asides. That for the 12 13 most part would either be relegated to those 14 companies inside the cap that want to start early. And we will provide -- we take out some allowances 15 and then return it to the person or the company 16 17 doing the early action so that they would have 18 some allowances to play around with and you wouldn't be shorted just because you acted early. 19 20 On the other hand we might also give

those early set-asides to institutions or local governments or voluntary renewable markets who can provide more reductions, say in energy conservation or water conservation, that the companies within the cap could not do, but that

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those companies such as the power plants would
 benefit from because it would reduce the overall
 load.

4 So what you would want to do is to 5 remove a pool or to carve out a section of the 6 total cap, provide it to these sources that will 7 be able to reduce the burden on capacity of the 8 electricity sector. And therefore by removing the allowances off the top not allow the utilities to 9 then sell their excess capacity somewhere else. 10 11 We don't want to do that, that would be double counting. 12

The second alternative would be to account for early reductions in the allocations. There what would happen would be, if we were to have an auction, to the extent that somebody reduces earlier, that company would not be required to purchase more than what he has already reduced to. So that benefits you as well.

Direct regulations could also recognize or reward early actions. so that if we were to establish a baseline for a utility -- Say, for instance, they were operating using 100 emissions, units of emissions, and they do something early on. There is a new plant in town. They do

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something that goes beyond that alternative for 1 We wouldn't set the overall cap, assuming 2 BACT. that they have gone down below where they 3 4 ordinarily would be, but we would give them enough 5 allowances so that what they did to reduce their 6 emissions earlier would be recognized. You 7 wouldn't start their baseline off with shorted 8 emissions.

9 If we were to allow any kind of voluntary offsets or early reductions I think we 10 are looking at basically the same criteria that 11 would be comparable to offsets, only in this case 12 13 it will be applicable to an individual action 14 rather than to a category of offsets such as the 15 forest mitigation or methane collection. You have to look at them category by category or source by 16 source in order to be able to ensure those 17 18 criteria are met there that you see on the screen. Those are for voluntary offsets. 19 However, there is a possibility that if you do 20 21 these things early on and we say yes, they are so 22 good we would like to recognize them if you are 23 doing them for CEQA purposes, but now those were 24 good enough for us to consider as possibly used 25 for offsets within the cap-and-trade program. We

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want to look at those actions to make sure that 1 2 they are in fact additional for credit within AB In other words, they could not be anyway 3 32. 4 credits and they have to meet an additional layer 5 of scrutiny for us to be able to accept them.

6 Early on in February of this year the 7 ARB adopted a policy statement to allow for these 8 source-specific or project-specific voluntary early actions. A number of firms, including I 9 10 believe Southern California Edison, came in with the idea that if they did something now could they 11 be recognized for doing that once the cap-and-12 13 trade program was adopted. Other sources also 14 came up to us with that idea.

The board considered it and they did 15 adopt a policy statement. And what they directed 16 the staff to do is to accept methodologies to 17 18 quantify early actions. And then if those methodologies pass scrutiny then the ARB Executive 19 20 Officer would issue an Executive Order that would 21 confirm the technical soundness of the 22 methodologies. Up to this point we have not seen 23 any -- We have seen very few proposals and none of 24 them really have passed what we believe would be 25 sufficiently enforceable or carefully drawn

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1 methodologies.

2 Okay. Voluntary offsets. Some of you 3 have or have heard of and know of these voluntary 4 markets. I forgot, one is called Terra something-5 or-other. And I want to keep calling them 6 Terragrams but they are not.

7 MEMBERS OF THE AUDIENCE: Terra Pass. 8 MS. VAN OMMERING: Terra Pass, thank you. And those occur when people go on airline 9 10 travel and they want to offset their emissions. 11 So they go into a market and they purchase these offsets. They do exist. We have put them into 12 13 the context of the proposed plan so as to give 14 them an official place in the California program.

As we indicate in the plan, we want firms and consumers who purchase such surplus reductions to be assured that they are legitimate reductions and not issued just by fly-by-night companies. So there is some level of assurance, although again, not strict enough we believe, to pass muster for an AB 32 cap-and-trade program.

At this point in time the California Climate Action Registry has identified different voluntary offset categories and the ARB has adopted several of them for use as voluntary

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offsets and you see them down there in the bullet:
 forest projects, urban forestry and manure
 digesters.

4 However, before we incorporate any of 5 these protocols in a cap-and-trade program we are 6 going to give these protocols an additional scrub 7 to make sure that they meet the more stringent 8 requirements of AB 32. Therefore, until we adopt such protocols, in whole or by reference into a 9 10 cap-and-trade program, they would not be available for use by cap sources to meet their compliance 11 obligations. 12

I just wanted to give yo sense of where we stand right now on the Scoping Plan schedule. We have already had the Draft Scoping Plan released in June. We held a number of workshops. We proposed the Proposed Scoping Plan in October. We proposed the Proposed Scoping Plan in October. Tomorrow we will be having a hearing on it and board action at the December meeting.

I just wanted to tell you what happens. Yes, there is life after the Scoping Plan adoption, which is what my staff is working on. We will be busily working on the regulatory development between 2009 and 2010. There will be numerous people working on regulations including

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policies and standards by the Energy Commission,
the PUC. The Waste Board will be looking at
measures. But my group will be working, if the
board directs us to do a cap-and-trade program, we
will be working on that regulation.

6 In order to be able to go through the 7 administrative process and have the program launch 8 in 2010, or excuse me, 2012, we will have to have 9 a final rule for the board's action no later than 10 November of 2010. So that does not give us much 11 time.

As some of my friends out here have 12 13 joked about, there will be a very intensive public 14 consultative process. We are hoping to establish 15 different working groups that will advise us in how we develop these regulations. We understand 16 that there are a number of issues, not only in 17 terms of the California program, but when you look 18 19 at the fact that we are linking to a western 20 climate program and each state has their own 21 intricacies, different ways of doing things, and 22 so it is going to be lots of moving parts.

As you yourselves know coming from the energy sector, and somebody said before, it is just not California. What we do here influences

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what happens throughout the WEC and what they do 1 also influences us as well. So we need to take 2 all that into account. I'm sure the WCI in the 3 4 different states and the WCI will be having their 5 process. We will be having ours as well. And we 6 will also be participating in the WCI process. 7 Finally, for those of you who don't know 8 where to find us, those are a few links that I think will help you. You can also not only in 9 10 time for tomorrow's hearing but also all the way up to the December board action, submit comments 11 on-line as well as formal comments by snail mail. 12 We'll accept them all. And we look forward to 13 14 seeing you tomorrow. 15 And with that, that will be a conclusion 16 to my presentation. MR. RICHINS: All right, thank you very 17 18 much. And our next speaker will be Rachel --MR. MILLER: Do we want to do questions 19 20 or not? 21 MR. RICHINS: No, we are going to do all 22 the presenters first and then we will do 23 questions. 24 MR. MILLER: Thank you. 25 MR. RICHINS: Rachel Tornek is a senior

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policy manager for the California Climate Action
 Registry.

MS. TORNEK: Thank you so much for giving me the opportunity to come here and talk to you about my organization, the California Climate Action Registry, and a new program of the organization called the Climate Action Reserve.

Again, we are speaking in the world of 9 ifs here, so if mitigation is something that you 10 all will be interested in looking for under CEQA, 11 the Climate Action Reserve is one direction that 12 you might take.

Let me start by telling you a little bit about our organization quickly just so you understand our history. We are a nonprofit organization that was actually created by the State Legislature back in 2001 as a way to encourage voluntary reporting and reductions of greenhouse gas emissions.

20 We were put in place to develop 21 protocols to track greenhouse gas emissions and 22 reductions as well. So we have focused over the 23 last seven years or so in helping companies, 24 nonprofits, academic institutions across the state 25 and across the country to inventory their

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1 greenhouse gas emissions and have those verified 2 by independent third parties. Leading businesses, 3 government agencies, over 370 members to date and 4 650 million metric tons of CO2-equivalent 5 registered in our publicly available, on-line 6 reporting tool called CRT [pronounced carrot].

7 Now that California has taken this 8 leadership role, has sort of internalized the idea of greenhouse gas reporting, we will have a 9 10 mandatory reporting program. And we have actually 11 worked to develop a sister organization called the Climate Registry that will basically create a 12 13 system for consistent reporting across the United 14 States, Canada and Mexico.

We are sort of passing the torch on entity level reporting and verification and the climate registry, the California Climate Action Registry, will be focusing on this new program, the Climate Action Reserve, and working to bring integrity and rigor to the voluntary carbon offset market.

22 So the Climate Action Reserve is the 23 name of a new California registry program to 24 register and track carbon offset projects 25 throughout the United States. Although it is a

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program of the California registry we are in no
way focused solely on carbon offset projects in
California. All of the protocols that we will be
developing into the future will be applicable
across the United States. And we are actually
looking to expand them to Mexico and Canada as
well.

8 This is a relatively new endeavor of the 9 California Registry. We launched earlier this 10 year in May 2008. We have established it at its 11 own name but it is co-branded, it is sort of a 12 sub-program of the California Registry.

Our intention is for it to be the premier place to register carbon offset projects in North America. As I mentioned, US-based projects only right now but we will be working in 2009 to expand a couple of our existing protocols to Mexico and Canada. And moving forward, hopefully to be inclusive from the beginning.

20 Why are we taking on this new role in 21 our organization, starting this new program? You 22 all have probably heard plenty about the concerns 23 of the voluntary carbon market. All the carbon 24 cowboys out there selling a whole bunch of hot 25 air.

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There's concerns that voluntary offsets 1 are not real or additional, sort of going beyond 2 3 that business as usual. We are not looking for 4 the anyway credit that Lucille was talking about. 5 We are looking at reductions that would not have 6 happened otherwise except for the existence of a 7 carbon market. 8 There's concerns that projects create other social or environmental problems. 9 10 And that credits are being double counted and double sold. 11 So we have, the California Registry has 12 13 developed a reputation for high-quality accounting 14 standards that we believe can address all of these 15 concerns. We supported ARB in the development of their mandatory reporting rule. We definitely 16 have in turn, you know, been looked at as sort of 17 18 an expert in this field. 19 So our goal is to be the recognized seal of approval for high quality offset credits. 20 There's a lot of words on this slide. 21 22 These are very similar to the principles that 23 Lucille spoke of, what goes into a quality offset. 24 It must be real, additional, permanent, verified, unambiguously owned, not harmful to the 25

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environment or to communities, and we also adopt a 2 principle of practicality. So we are trying to minimize barriers for implementation of these 3 4 projects.

5 Those principles are sort of 6 internationally standardized at that point by the 7 World Resources Institute. World Business Council 8 for Sustainable Development developed a greenhouse gas protocol, project protocol, and sort of laid 9 10 those out. ISO, the International Standards Organization has created a Standard 14064. 11 Tt's sort of everybody works around those same 12 13 principles and we base all of our work on those 14 principles.

15 To give you a sense of where we are to date, sort of how we do our work and what we have 16 done thus far. Our project protocols are 17 developed through a stakeholder-driven process 18 19 with broad, public input. The protocols that we 20 have developed are the same ones or many of the 21 same ones that Lucille mentioned. Actually the 22 protocols that ARB has adopted are the protocols 23 that we have developed at the California Registry. 24 So we have a project protocol for three 25 different types of forest projects, conservation

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management, avoided deforestation and 2 reforestation. Currently those project protocols are only applicable to California. But we are 3 4 actually going through a revision process right 5 now that will hopefully go to our board in 6 February that expanded those protocols across the 7 United States.

8 We have a landfill gas capture project protocol, an agricultural methane capture project 9 protocol, urban forestry protocol. And we do plan 10 11 to develop six new protocols over the next 12 to 18 months. So that's my job is to develop new 12 13 project protocols.

14 I wanted to introduce you to the name of 15 our credits. They are called CRTs [pronounced carrots], C-R-Ts, climate reserve tonnes. One CRT 16 is equal to one metric tonne of CO2-equivalent 17 18 reduced or removed from the atmosphere.

19 One of the things that we have done is the reserve itself is a piece of software, web-20 21 based software, where we track, serialize and 22 track each tonne that is created using our 23 approved project protocols. So each CRT has a 24 unique serial number that includes embedded information about the project type, vintage and 25

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1 location.

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This will help avoid the double 2 counting, double selling, a nd also add a lot of 3 4 transparency to this market that in many 5 situations is a bit of a black box. You buy a 6 credit, you don't know what project it came from, 7 you don't what vintage it is. We are sort of 8 getting rid of all of that, increasing the 9 transparency with our CRTs. 10 The way that the reserve works: The reserve is not an exchange. So it is not like the 11 Chicago Climate Exchange that actually has a role 12 13 in setting the price of carbon. We really act 14 more like a bank and so participants open an 15 account. You register a project, you get it third party verified. And then you transfer CRTs from 16 account to account and you can retire them within 17 18 the reserve. And all of that is publicly available and transparent. 19 20 CRTs are only issued on an ex-post 21 basis, which means there is no forward crediting. 22 They are not registered until they have been

24 the market of crediting projects -- crediting

created and verified. So we are not getting into

25 things before they have actually happened.

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1	And Paul asked me specifically to
2	address how much do these things cost. As I
3	mentioned the Reserve doesn't play a role in
4	setting the price and we actually don't require
5	our buyers and sellers to disclose the price to
6	us. That happens contractually outside of the
7	Reserve. But New Carbon Finance did a voluntary
8	carbon index study over the last few months and
9	found the current average price of CRTs at about
10	\$10.80 a tonne. At the premium end of the market
11	is the quote that they gave.
12	So I wanted to give you just a few
13	slides on, you know, what makes the Reserve
14	different than other voluntary carbon offset
15	programs out there or, you know, what we feel we
16	are doing better perhaps than the rest of the
17	players in the market, what we feel are our
18	strengths.
19	We are recognized and supported by a
20	number of organizations and stage governments.
21	The California Air Resources Board, as I
22	mentioned, the project protocols that we have
23	developed are the only ones that have been adopted
24	by them. It's for voluntary purposes but still we
25	think that that is a good vote of confidence for

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1 our program.

The State of Pennsylvania. They have a climate change committee that recently recommended the Climate Action Reserve as a source for businesses in Pennsylvania. If they wanted to buy high quality offsets they recommend the Reserve as a place where they can get those.

8 The Reserve is the only US program to 9 have received approval by the Voluntary Carbon 10 Standard, which is sort of an international 11 metastandard for setting a bar of integrity and 12 rigor in the voluntary offset market. So we are 13 the only program in the United States to receive 14 that approval.

We have a number of leading 15 environmental organizations standing behind us, 16 Environmental Defense Fund, NRDC, Sierra Club. 17 18 The last two, two of that -- Representatives from each of those sit on our board. And EDF has been 19 20 involved in every one of our project protocols 21 that we have developed, part of that multi-22 stakeholder work group.

And then some representation here in
California. PG&E's Climate Smart Program. They
have a program by which their customers can

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actually offset the emissions from the electricity and natural gas that they purchase through PG&E. And PG&E uses exclusively credits from the Climate Action Reserve to support that program.

5 And SMUD recently released an RFP for a 6 program similar to that. And although we are not 7 the only place you can get credits, or where SMUD 8 will source credits, we are definitely the first 9 place they want to go to get those credits.

10 Another of our strengths is 11 transparency. I mentioned briefly our protocol 12 development process. It is a very public and 13 stakeholder-driven process. We are up here in 14 Sacramento a lot doing public workshops, work 15 group meetings.

We bring together, it is usually about 16 20 or so individuals representing the industry, 17 18 government, academics, environmental organizations. Get them all at the table and sort 19 20 of work through the issues. That's one of the 21 reasons why our protocol process takes a little 22 bit long. Usually about eight months to a year to develop one of these project protocols. So we 23 24 take a lot of pride in that.

25 And then just the amount of information

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that is publicly available about our projects and our process. So all of our protocols and methodologies, you could go to our website today and download those and see what the rules are for developing projects under our protocols.

6 If you go to the Climate Action Reserve 7 there is a number of public reports. It lists all 8 of the account holders on the reserve. Information about each and every one of the 9 projects, including the verification report that 10 11 was, you know, created by the third party verifier and verification opinion. A list of all the CRTs 12 13 that have been issued for every project.

14 And there is even a function by which, 15 you know, let's say that someone -- you purchased an offset and they said, yeah, it's from the 16 reserve. You could actually go to the website, 17 type in the serial number that they gave you for 18 the CRT and see that it has been put into a 19 retirement account. So you know that in fact it 20 21 has been retired on your behalf.

And then another thing that we think is very important I have termed separation of powers. It might not be an exactly legally correct example of separation of powers but we have taken the

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approach where we don't do everything in the 1 process. So we develop the protocols but we don't 2 develop projects. Whereas, for example, in Oregon 3 4 the Climate Trust will actually take monies from 5 power plants and go out and source projects 6 according to methodologies that they have 7 developed.

8 That is not what we do. We allow project developers to develop the projects. 9 We 10 create the rules by which they develop the projects but we don't develop the projects 11 ourselves. 12

We also don't act as an exchange as I 13 14 mentioned before. Those transactions take place off the reserve. 15

We are a not-for-profit organization. 16 17 A very stringent third party 18 verification requirement. This is sort of the way that things have gone on the international scale 19 20 under the Kyoto's clean development mechanism. 21 You know, you have these accredited third party verifiers that conduct verification on the 22 projects on an annual basis. 23 24 We are currently changing the system.

We have been in the -- Up until this time it has 25

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been us working with the State of California to accredit all the verifiers under our program. We are actually out-sourcing that now to ANSI, which is -- too many acronyms. ISO's arm here in the United States is called ANSI. And so moving to a more internationally consistent model.

7 And then for each and every project we 8 actually do a conflict of interest assessment. So to make sure that the accredited verifier that is 9 10 conducting the verification for the project, you 11 know, doesn't have a pre-existing relationship with the project developer. Just adding another 12 13 level of assurance that the credits being produced 14 are of high quality.

So I kept it brief. You can ask me questions, I guess, after the next presentation.

MR. RICHINS: All right, thank you very much, that was very informative. Now we have Lisa Trankley from the Attorney General's Office. She is an attorney in the environmental section there at the Attorney General's Office.

22 MS. TRANKLEY: Thank you. We appreciate 23 the opportunity to be here. We were asked to come 24 talk about some of the principles of mitigation 25 that we look for in CEQA mitigation and some of

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1 the mitigation measures that we have required in 2 settlements.

A lot of what we have done in a lot of 3 4 the settlements we have reached have been in the 5 land use context or individual projects so I hope 6 what I have to say is helpful today. But I will 7 talk about the settlements that we have reached 8 and some of the various -- just examples of types of mitigation measures that we have been able to 9 10 negotiate.

11 I think as far as principles of 12 mitigation go, the buzz words as far that people 13 have used to talk about offsets as far as the real 14 and quantifiable and verifiable. I mean, all that 15 applies to mitigation as well under CEQA and that 16 is pretty much what we would look to.

17 There's a few other things that we have 18 tried to ensure when we have negotiated 19 mitigation. One of those is that the mitigation 20 should be as contemporaneous as possible with the 21 impact as far as the timing goes rather than 22 having it be deferred too far in the future. We have had people do mitigation over time but we 23 24 like to keep it as contemporaneous as possible. 25 We have also had the preference for the

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mitigation to be not only close in time to the 1 impact but also close in location. 2 In other words, that the mitigation should try to benefit 3 4 the community that is being affected. Part of 5 that has come from environmental justice 6 considerations, particularly we had these issues 7 come up in a negotiation we had on the 8 ConocoPhillips refinery in Richmond. 9 The greenhouse gas mitigation measures 10 usually reduce other pollutants as well, they have 11 co-benefits, so we like to keep them close to And it is also easier to track and verify 12 home. 13 if the mitigation is on-site or nearby. 14 I think we have really just stuck to our 15 CEQA basics. We have also had in some cases, if you are trying to reach a target in particular, we 16 will ask the entity to monitor the mitigation and 17 18 see if it is working, and if not, be prepared to 19 make changes in the mitigation. But again, I 20 think what we have done here is, if somebody 21 disagrees, is pretty basic CEQA mitigation 22 principles. Now when we first started working with 23 24 some of the local governments and development projects, land development type projects, we got a 25

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lot of criticism because we were told we were 1 2 asking them to work in a complete vacuum. So one of the things we tried to do for mitigation to be 3 4 helpful was to make a list of acceptable 5 mitigation measures. Kind of a menu. And I don't 6 know that they would be applicable here but perhaps the idea would be. But in any event, we 7 8 made a list of applicable mitigation measures for development projects. 9

10 And then we also in response to a lot of 11 the questions put together a list of mitigation measures for general plans and we posted these on 12 13 our website. So what we would ask project 14 applicants to do, or we would hope they would do, 15 is to go through and look at all our mitigation measures and then discuss in their EIR why they 16 weren't feasible for their project. Hopefully put 17 the burden on them to say, well we can't do this 18 19 because, or this isn't relevant.

20 And we have seen a number of 21 jurisdictions and a number of developers actually 22 go through and use our checklist. They don't 23 always address them in the way that we'd like but 24 at least they do go through and address the 25 mitigation measures that we have suggested they

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do.

2 So then on settlements: We have reached about I think six or seven settlements. I am just 3 4 going to talk about a few of them. And by the 5 way, all the settlements that we have reached, all 6 our comment letters on projects, we have a special 7 global warming website from the AG's Office. It 8 is our regular website which is ag.ca.gov. But then if you add a / [slash] and globalwarming, one 9 10 word, you will come up with our global warming website. 11

But one of our early settlements was 12 13 with the ConocoPhillips refinery. They had 14 500,000 metric tons of CO2 a year, which we 15 thought was significant on its face, and negotiated a settlement with them. We have only 16 filed one lawsuit, by the way, which is the San 17 18 Bernardino General Plan. These all, the rest were 19 all reached without filing a lawsuit.

But in that, in this ConocoPhillips refinery, for example, we had them conduct a facility-wide energy efficiency audit. They didn't have to implement any of the findings of the audit but we hope that they would because it made sense to do. They had to do a greenhouse gas

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1 emissions audit.

2	And then we got a little creative. We
3	had them They agreed to make a payment of \$7
4	million to a carbon offset fund that was created
5	by the Bay Area Air Quality Management District.
6	The payment was going to be used by the Air
7	District pursuant to an MOU that was going to be
8	entered into between our office and the Bay Area
9	District. And the fund would be used to pay for
10	projects undertaken in the San Francisco Bay area,
11	again we wanted to keep it kind of local, to
12	achieve reductions in GHG emissions.
13	We also had the refinery, ConocoPhillips
14	agreed to pay \$200,000 to the Audubon Society.
15	And that went for restoration of San Pablo Bay
16	Wetlands to offset the GHG emissions by increasing
17	the sequestration of carbon.
18	We had another payment of \$2.8 million
19	that went to the California Wildfire Releaf, R-E-
20	L-E-A-F, which was to use and they were going
21	to use the funds for reforestation and/or
22	conservation projects, which would be conducted in
23	accordance with the CCAR's forestry project
24	protocol.
25	Then we also Let's see. We gave them

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1 a credit of 25 -- Let's see, where was this. I'm 2 sorry. We gave them a credit if they reduced 3 greenhouse gas emissions further. We gave them a 4 credit of \$25 a tonne, I believe it was, that they 5 didn't have to pay. Or perhaps that was in a 6 different settlement. Anyway, that was the 7 refinery.

8 We also had a settlement with the Great Valley Ethanol plant. We had some similar 9 10 mitigation here. We had a provision where they 11 are paying \$1 million as a mitigation fee to a fund that was going to be established by the San 12 13 Joaquin Valley Air Pollution Control District. 14 And again it was going to be done pursuant to an 15 MOU to be paying for GHG-reducing measures.

Then we also have an agreement where the 16 plant prior to the third full year of project 17 18 operations, so that's a little bit out in front but prior to the end of the third year, they would 19 20 implement some feasible on-site and local 21 mitigation measures including things like 22 alternative on-site fuels measures, on-site 23 renewable energy projects.

And again in this -- Here it is. In this agreement we had a provision where the

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plant's payment to the San Joaquin Valley Air 1 2 District would be reduced by \$25 for each real, verifiable, permanent reduction of GHG that they 3 could achieve at their plant. So it was an 4 5 incentive for them to --PRESIDING MEMBER BYRON: Per tonne? 6 7 MS. TRANKLEY: Per tonne. Yes, \$25 per 8 tonne. To put some effort into reducing the actual emissions and not just pay the Air 9 District. 10 MS. VAN OMMERING: Excuse me. Was that 11 GHG emissions or criteria pollutants? 12 MS. TRANKLEY: GHG. 13 14 PRESIDING MEMBER BYRON: Ms. Van 15 Ommering, would you do what I didn't. Please use your microphone when you ask a question. 16 MS. VAN OMMERING: I just wanted to make 17 sure that the \$25 a tonne for mitigation on-site 18 19 was for greenhouse gas emissions and not criteria 20 pollutants. 21 MS. TRANKLEY: Yes, that's right, 22 greenhouse gas reduction. That may have had the 23 effect of reducing criteria pollutants but we were 24 just looking at the greenhouse gas reduction. 25 Then finally another ethanol plant.

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1 This was the Cilion plant. A different mitigation 2 measure that we had in an agreement here was that 3 they agreed to purchase 2,000 trees at \$50 a tree 4 over a five year period to plant within Kern 5 County. And that they would comply with the urban 6 forest carbon protocol of the Climate Action 7 Registry.

8 They also agreed to pay money into the 9 San Joaquin Valley Air District fund and also 10 agreed to undertake additional projects such as 11 installation of on-site renewable energy products 12 or looking at alternative transportation options. 13 What we really try to do when we have

14 sat down to negotiate with the companies or with 15 the jurisdictions was to be creative and find what 16 helped them, what helped us, what helped the 17 state. We didn't have a lot of restrictions, a 18 lot of rules, and so we got pretty creative.

I don't know if the settlements -- you know, these were negotiated settlements. These were compromises. I don't know if all of these measures would necessarily have been ordered by a court or whether we would have advocated something much stricter if we were, you know, in an adversarial process. But at least as far as

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getting some ideals, we have tried to be rather 1 creative in our settlements. 2 There's a few more that I don't think 3 4 are really relevant about land use. And like I 5 say, they are all listed on our web if anybody 6 wants to look them up. 7 PRESIDING MEMBER BYRON: I'm not an 8 attorney but aren't most settlements like this typically kept confidential? 9 10 MS. TRANKLEY: No, not the ones that we 11 do. PRESIDING MEMBER BYRON: Obviously. 12 13 (Laughter) 14 MS. TRANKLEY: Yes. You know, I think 15 in some instances they are. PRESIDING MEMBER BYRON: Is there a 16 reason behind that? 17 18 MS. TRANKLEY: There are reasons to have confidential settlements. And there may be parts 19 20 of it that have to be kept confidential but ours 21 are publicly available. PRESIDING MEMBER BYRON: And for that 22 purpose, so that we all understand what kind of 23 24 creative settlements were workable. 25 MS. TRANKLEY: Yes.

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PRESIDING MEMBER BYRON: Okay. 1 2 MS. TRANKLEY: They are transparent. PRESIDING MEMBER BYRON: Good. 3 4 MR. RICHINS: I think all three 5 presentations were excellent and very informative. 6 At this time now we will open it up to -- I 7 noticed there were some questions over here, I 8 know I had some questions, I'm sure everybody has some questions, and we will just open it up to 9 10 dialogue around the table. I think if mitigation is something that 11 the Energy Commission would require I think we are 12 13 looking for, you know, programs that are already 14 in existence. How can we tap into those? Things 15 that aren't maybe as complicated as what the Attorney General's Office has done because there 16 might be some difficulty from compliance and so 17 18 forth. But anyway, let's just open it up to dialogue and discussion. And Dick, did you want 19 20 to say something? MR. RATLIFF: Yes, I would like to ask 21 -- Can I call you Ms. Trankley? 22 23 (Laughter) 24 MR. RATLIFF: Lisa is an old colleague.

25

I wanted to ask you, you stated earlier that all

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of the emissions that the AG has sought in 2 settlements fit the criteria of real, additive, verifiable reductions. Sort of the magic language 3 4 which is often used for offsets.

5 But in the descriptions of the measures 6 that often appear in the settlement agreements it 7 sounds like maybe what those words mean might be 8 other than what it means when we are dealing with offsets that are in an air quality bank. Can you 9 10 be creative in terms of fashioning mitigation, you think, that meets the terms that AB 32 uses for 11 that kind of offset? 12

MS. TRANKLEY: I guess -- Technically it 13 14 may not be using it in the same way as an offset 15 but I think under CEQA you just have to use, you have to have real offsets that you can account for 16 that are specific, that are enforceable. And none 17 of that is new, that is all traditional, basic 18 CEOA law. 19

20 I don't know if the way the buzz words 21 are being used in terms of the offsets are exactly 22 what I meant but I think what I was trying to say was that everything is the same principle. The 23 24 mitigation we look for, it is not fleeting. It's got to be something very real and accountable and 25

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measurable in a way that someone can look at it 1 and ensure that it is actually being done. Did 2 that answer your question? 3 4 MR. RATLIFF: Yes, I think it does. And 5 if I, since I have still got the microphone and I 6 am going to have to pass it off to get the answer 7 to the next question. I wanted to ask if I could, 8 Ms. Overling --9 PRESIDING MEMBER BYRON: I keep saying it incorrectly as well. 10 MR. RATLIFF: I'm sorry. 11 PRESIDING MEMBER BYRON: It's Van 12 13 Ommering, Van Ommering. 14 MR. RATLIFF: Van Ommering. 15 MS. VAN OMMERING: Lucille will work just fine. 16 MR. RATLIFF: I wanted to ask you if 17 18 someone seeking credits through the Climate 19 Registry, CRTs so to speak. If those could be 20 early action credit or credited in some other way 21 by CARB in terms of the -- If we were to require 22 such mitigation for power plants would that be something that could be credited in an AB 32 23 24 context? 25 MS. VAN OMMERING: Yes, I was listening

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to that with some interest. We have not -- We 1 2 have just started this program. We are still waiting, obviously, for the board to take action 3 4 as to whether or not they want to go along with 5 it. But the law does specifically require us to 6 acknowledge in some way early reductions.

7 What we don't want to do is to do one of 8 two things. We don't want to set ourselves all the way back so that somebody who was doing 9 something for a totally different purpose or who 10 had started doing it back in 2004, to allow that 11 to come into the system. 12

13 What we want to be able to do when we 14 start the cap-and-trade program, if we go that 15 route, will be to -- We don't want to replicate the problem we had with RECLAIM where we started 16 way higher than what their actual emissions were. 17 18 We want to be able to start it at a point where their actual emissions --19

20 MR. RATLIFF: When you say started way 21 higher you mean --22

MS. VAN OMMERING: In 2012.

23 MR. RATLIFF: You worry about giving out 24 too many credits?

25 MS. VAN OMMERING: Too many credits,

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1 right.

2 MR. RATLIFF: Okay. MS. VAN OMMERING: And it's not -- And 3 4 the thing we are trying to balance out is, unlike 5 RECLAIM this is not a sector-specific cap. It is 6 a cap for the entire economy. So we need to be 7 informed by, in the instance of the utilities, 8 what they think the procurement is going to be 9 over the next several years so that we will be 10 informed as to where to start the cap and then how quickly the decline should be. Whether it should 11 be a straight line, whether there should be some 12 13 allowance, some arcing for the fact that maybe the 14 renewables can't start that quickly. So we want 15 to start the program fairly close to where their actual emissions are or slightly below. 16

17 We also want to give people an 18 opportunity of getting on the stick now to make 19 these early reductions. Or in the case of new 20 power plants that will be coming on-line by 2012, 21 what we want to be able to do is to say, if you 22 are a new plant anyway and you are going to have to meet BACT requirements for criteria pollutants, 23 24 are those requirements also good for the purposes 25 of looking to see whether or not those new plants

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can meet equally efficient low-carbon types of standards, whatever they may be.

3 And that is where we are going to be 4 looking to the Energy Commission and the PUC to 5 tell us what's a good standard from which new 6 companies can come in. If they want to put that 7 into the design of their plant now then how do we 8 recognize that within the overall context of the cap so that we are not starting them lower than 9 10 what they actually will be.

Because they are going to displace some 11 electricity but they are also going to be building 12 13 units that perhaps provide more electricity than 14 the older power plants can. And I am not the 15 electricity expert so if I am not saying it correctly forgive me. But the idea is to give 16 them some recognition, some due credit for doing 17 18 something before the program actually starts.

MR. VESPA: Could I follow up with that? I'm just wondering if you have given any thought to the intersection of CEQA and requirements under CEQA in some of these early action credits? So under CEQA some of these reductions might be required because they are feasible. And so, you know, is there some concern that then you might be

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able to leverage those again and get credits. You 1 took the action but it wasn't really additional 2 because it was required under CEQA. And how are 3 4 you dealing with maybe some of those questions. 5 MS. VAN OMMERING: We haven't. There 6 has been some discussion with another group that 7 was talking about it from the perspective of 8 mitigation credits. And so a company comes in and says -- and not on-site, they purchased they 9 10 somewhere else. And they come into the cap-andtrade program and say, I have offset all of my 11 emissions. And it is like, well you have offset 12 13 it for CEQA purposes but you still have to hold 14 allowances equal to your emissions that you are 15 emitting as part of your operations. And so what we don't want to do is to --16 first of all, we don't know whether or not the 17 18 CEQA mitigation offsets would meet the criteria that we would establish for offsets. And 19 secondly, it is a different set of requirements 20 21 that we would have. So we are not there yet. We 22 just don't --MR. VESPA: Yeah. 23 24 MS. VAN OMMERING: I think it was Mr. Galati there, Scott, that talked about how you 25 PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

have to look at the system operation and the fact 1 2 that these companies are coming in. And that the 3 cap-and-trade program is in essence the offset. I 4 am not the CEQA expert. All I can tell you is 5 what we would do under a cap-and-trade program. 6 MR. VESPA: Yeah. I would just put 7 forward to add some attention to what a project 8 might be doing under CEQA and scrutinize that on whether it is appropriate to give early action 9 10 credit for something that presumably was required and not additional. 11 It is one thing if an existing project 12 13 takes measures they weren't required to do that. 14 But if a new project takes measures as part of 15 CEQA, it would seem to me not appropriate to give them credit later on for doing something that was 16 a legal mandate. I don't know if that's been 17 18 thought about but I just wanted to bring it up. PRESIDING MEMBER BYRON: Mr. Vespa, are 19 you trying to give input to ARB on our time here? 20 21 (Laughter) 22 MR. VESPA: I am. Double tasking. I 23 think I have a question actually for Lisa also. I 24 was wondering if the AG -- I don't want to put you 25 on the spot, but have any thoughts about the power

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sector? You weren't here earlier but there were 2 some issues about, you know, what would be significant for the power sector and what 3 4 mitigation would be appropriate.

5 And I think, you know, in some ways you 6 might analogize to some of these individual 7 projects like the Conoco settlement. These are 8 big emitters. On the other hand the power sector may have some unique issues. But I was wondering 9 10 if a fair assessment of what we have talked about a couple of hours -- the AG view on some of those 11 issues. 12

MS. TRANKLEY: I caught the tail end of 13 14 the last discussion. We really haven't given it 15 any -- I can't say we haven't given it any thought because we have discussed it informally among 16 ourselves but we haven't looked at it in any kind 17 18 of systematic or, you know, formal way.

19 MR. VESPA: Okay.

MR. MILLER: I have a couple of 20 21 questions. This is Taylor Miller with Sempra. I 22 think Matt just started touching on this actually. 23 What I found myself thinking during your 24 presentation and also Rachel's was additionality 25 and enforceability.

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1 One of the unique aspects of GHG in my 2 experience, having done a fair amount of criteria 3 pollutant offsetting in the past, that could be 4 pretty difficult in itself, is the concept of 5 additionality. And GHG seems to be a broader one 6 than it has been in the criteria pollutant world.

7 There is not just the question of 8 whether there is a legal mandate to do whatever is being done, but also there is this issue of would 9 10 it have been done anyway. And then comes the question, if there is a directive in the Scoping 11 Plan to do a lot of things does pretty much that 12 13 whole universe of mandates now become non-14 additional?

Further, if there is an offset let's say required, as Matt just pointed out, as a condition of licensing. I think Dick you asked the question earlier. If you bought a CRT could that then be turned into a voluntary early action allowance somehow under those three ways then.

Again, I'll just say Lucille because it's easier, pointed out they have their standard litany on both regulatory and voluntary credits of additional enforcement. Well, on additionals. So, you know, I really think that there are some

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concerns there as to whether a lot of things that might be otherwise done would count.

3 Another problem is there's this 4 conventional wisdom that anything, and you 5 mentioned this too. Any reduction within a cap 6 sector is ineligible for an offset. So anything 7 within the electricity sector, being the cap 8 sector, would be ineligible. RPS compliance, and we have the whole REC world over there in the PUC 9 10 going on. They make the decision. And I believe the voluntary markets already have done this. 11 That any renewable project used for RPS compliance 12 13 cannot be used for GHG compliance.

14 So there are a lot of disconnects 15 potentially here between using the offset system as it has been designed, both for voluntary 16 markets and compliance with ARB, for offsetting. 17 18 If one were to need to do that, an offsetting project here. Further, it seems difficult to 19 20 transfer that credit, if there were to have to be 21 an offset here, into the AB 32 offset world in a 22 couple of years. So those are my comments.

23 MR. RATLIFF: This is what concerns me 24 about it. Because if the Energy Commission -- The 25 first time the Energy Commission finds that, say,

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the most efficient new power plant we have ever seen before is a significant impact cumulatively in global warming emissions and require it to purchase CRTs, say, it will be the only facility in the entire state that is doing so. And the old dogs, the old boiler plants running down in LA will keep right on running without buying CRTs.

8 Eventually, of course, all of these projects, all of these power plants are going to 9 10 be subject to cap-and-trade, presumably, and we hope in 2012. And if they are then they are all 11 subject to the same system of merits and demerits. 12 13 But until then the only facilities that are likely 14 to be paying mitigation, in essence, are going to be the new, most efficient facilities that we have 15 licensed here in the interim period. 16

17 I guess the question I have is, is that 18 equitable and does it make sense if they get no credit at CARB when cap-and-trade comes into 19 20 effect? And I guess my hope was that maybe the 21 purchase of CRTs could be recognized. But it 22 sounds like, if I understood your answer, and I did in part, but I think you are saying it is not 23 24 so clear. It is not so clear whether that would 25 be recognized.

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MS. VAN OMMERING: Right. I think what 1 2 we are trying to grapple with, among many other things, is number one, the mitigation that might 3 4 be done on-site and how does that fit into -- is 5 it early reduction or is it just required and 6 therefore not worthy of credit. But still, where 7 do we set the path in recognition of the fact that 8 they made an early reduction? Is that going to unfairly reduce the overall cap just because 9 10 something was required? But you still have to provide electricity for an increasing number, an 11 increasing population. 12

13 The second thing is the CRTs, which 14 happens off-site. And there what we definitely 15 have in our mind is, to the extent that we have 16 already adopted some of those protocols that CCAR 17 had, those are good candidates for bringing in as 18 official offset protocols.

19 There are, however, some things that we 20 are going to have to keep in mind. Number one, we 21 want to make sure that protocols throughout the 22 region are consistent. Because if they are laxer 23 in one state than another that provides an unfair 24 advantage to another jurisdiction. So we want to 25 try and influence the other states through the WCI

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process.

to adopt one set of protocols.

2 Number two, of course we want to make sure that they are additional. As I mentioned 3 4 before, in the short term we are not regulating ag 5 lands for manure digesters. We could do that and 6 at some point those offsets no longer are surplus. 7 And number three. And this is something 8 that is unique to California because of AB 32. We have to make sure that the use of those offsets, 9 10 which is something that the CCAR offsets don't 11 look at, well maybe you do, are the EJ ramifications. So that if we allow one company to 12 13 use offsets and emit up to a certain amount, is 14 that in fact not having the same level of 15 reductions they otherwise would have at their facility had they not purchased the offsets. 16 So what does that mean for the community that 17 18 surrounds that source. That may require an additional look at 19 20 the use of those offsets and certain restrictions 21 placed on them, whether or not they occur in a 22 certain community. But do I know that for certain what we are going to do? No I don't. Because 23 24 that is all going to be laid out in the rulemaking

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MR. McLAUGHLIN: Someone is going to 1 2 have to explain to me the concept. I understand additionality. And when we get to the greenhouse 3 4 gas world though, if I have a plant emitting 1,000 5 units and I have an offset for 100 units, the 6 world sees 900 units. 7 And then when I go and make my 8 compliance filing, let's assume we have a cap-andtrade, the end of the compliance period. As far 9 10 as I am concerned I don't see how you can require me to have any more than 900 allowances. What is 11 the logic that we would have a double obligation? 12 13 I mean, that's what I hear being said here. And I 14 see it as a real distinction between criteria 15 pollutants and the greenhouse gas world. Apples to apples to me. 16 MS. VAN OMMERING: Are you looking at 17 18 me? MR. McLAUGHLIN: I'm looking at anybody? 19 We're having a discussion. I'm talking to Scott. 20 21 Or Matt. 22 (Laughter) MS. TORNEK: It might be an issue for 23 24 CEQA mitigation. The CEC might allow CRTs. And until the time that ARB would decide that CRTs are 25

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appropriate for compliance -- in a compliance 1 mechanism. You know, let's say that the CEC, at 2 this point these CRTs are voluntary. 3 4 MR. McLAUGHLIN: Let's just make that 5 assumption. 6 MS. TORNEK: Okay. 7 MR. McLAUGHLIN: Let's make it the 8 assumption that CRTs are good. CRTs are accepted by the CEC and CEQA, because we are assuming that 9 10 we need a mitigation. And let's assume that ARB 11 has said CRTs are great. MS. TORNEK: I would think in that point 12 you wouldn't have. I mean, it would be 900 units. 13 14 MR. McLAUGHLIN: Okay. 15 MS. VAN OMMERING: One other thing though that the Proposed Plan talked about was 16 that in any event you cannot hold more than half 17 18 of what your compliance obligation is. 19 MR. McLAUGHLIN: Right. 20 MS. VAN OMMERING: So if you bought 100 21 percent of your emissions from CRTs we would only 22 recognize a certain portion. MR. McLAUGHLIN: Understood. 23 24 MS. VAN OMMERING: Okay. 25 MS. TORNEK: And just to get quickly

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back to the EJ issue. It is not something that 1 2 our protocols look at comprehensively perhaps. We don't make sure that the project -- obviously, I 3 4 mean, it's something that has to be somewhere 5 else. So we don't make sure that the impact is 6 decreased by the same amount. What we do ensure 7 that the project is not causing that facility to 8 go out of compliance. So by implementing that project they can't be out of compliance with any 9 10 air or water quality.

11 MS. VAN OMMERING: Right. And it is not 12 the project, per se, that's the environmental 13 justice concern. It's the fact that it allows a 14 company who is subject to the compliance 15 obligation to avoid getting additional reductions 16 on-site.

MS. TORNEK: Right. And that's true. 17 That's the role that offsets have to play. It's 18 the fact that we can't get all the reductions we 19 20 need at the facilities where we need them 21 necessarily, we need to look more broadly. And 22 you can't regulate through command and control mechanisms all of the sectors that we want to get 23 24 reductions in. So offsets are a way to 25 incentivize reductions in those sectors that you

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might not be able to, you know, do a command and control regulation. Transportation or, you know, supporting conservation management of forests.

4 MR. GALATI: Ms. Trankley, the question 5 I have was, in your negotiated settlements you had 6 preferred to get offsets contemporaneous in time, 7 which I understand, but also you said,

8 contemporaneous location.

9 And one of the things I am struggling with in thinking in terms of offsets, if to ensure 10 11 that if a power plant developer were licensing a plant and chose or needed to mitigate went to get 12 offsets. I think in order to make sure that those 13 14 offsets would provide compliance under AB 32, 15 number one, we would be looking outside a capped sector. And two, maybe that forces us outside the 16 17 state.

18 So my question is, from a CEQA perspective, since the impact that we might be 19 20 talking about is global climate change. Is your 21 statement that the Attorney General prefers 22 contemporaneous location, is that more of like the pirate guidelines instead of the law. 23 That you 24 would comment negatively if an applicant chose to 25 mitigate, should mitigation be required, not

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1 anywhere near the site?

2 MS. TRANKLEY: That hasn't really come up for us because we have been able to have all of 3 4 our settlements result in mitigation that's been 5 near the facility we are negotiating with. But I 6 think we prefer to see the mitigation be in 7 California for a couple of reasons. Because we 8 have got not only the CEQA but our own AB 32 reduction goals. So we want to see the reductions 9 10 be in California to help make the AB 32 goals. And second of all, the mitigation is 11 just easier to verify and to be comfortable with 12 13 if it is closer to home. We don't have any rules, 14 per se, like that but that's our thinking about 15 why we would like to see them nearby. In addition to the, you know, environmental justice issues. 16 MR. MILLER: One point that might be 17 worth pointing making here is that AB 32 requires 18 19 accounting for electricity use in California, 20 whether it is generated in California or outside 21 of California. And as Commissioner Byron 22 mentioned, 40 percent of the emissions related to electricity use are outside of California. So the 23 24 program is attempting to reduce overall emissions, wherever they may be, related to electricity use. 25

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So it's a little different, perhaps, than some of the other cases that you may have encountered.

MS. TRANKLEY: That may be. We haven't really sat and thought through a lot of the systemwide types of issues and we have been just negotiating with individual facilities. So I don't know if my comments, I don't know how they would be valid in a systemwide kind of analysis. J just really haven't thought of that.

10 MR. RICHINS: Did ConocoPhillips or any 11 of the other refineries that you may have been 12 working with make an efficiency argument that the 13 additions that they are adding or they are making 14 to their refinery make their refinery more 15 efficient, either there at that particular 16 location or their refineries worldwide?

MS. TRANKLEY: Will, we had them do an efficiency audit. Maybe I don't understand your question.

20 MR. RICHINS: Well did they ask for 21 offsets or credits? Or saying that they didn't 22 have a significant impact because what they were 23 doing now made their refinery or made their 24 systems of refineries more efficient, and 25 therefore reducing their total contribution to

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1 greenhouse gases.

MS. TRANKLEY: Maybe I don't understand 2 your question. The reason that we had them do the 3 4 efficiency audit and take the other mitigation 5 measures was because of the initial amount of 6 emissions they were emitting. So I don't think 7 they could then argue that they -- We expected 8 them to mitigate the emissions they were producing. It sounds like you are asking if they 9 10 were then saying they are not emitting as much because they are taking efficient measures. 11 And that's the point, that we want them to be 12 reducing. Yeah, the reduction in emissions can be 13 14 kind of a mitigation. Is that --15 MR. RICHINS: Well we had a lot of discussion this morning about the electricity 16 17 system being an integrated system. And that when 18 you add a new power plant that is highly efficient the amount of greenhouse gases systemwide go down 19 20 the new plant is displacing an older plant. And 21 so I was just curious, did that concept come up in 22 the context of your settlement agreements with 23 like a refinery that has multiple locations. And 24 did they make the argument that by us doing this our system contribution to greenhouse gases is now 25

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going down. Maybe marginally but going down.

MS. TRANKLEY: I wasn't part of those 2 negotiations. I don't think they made that 3 4 argument and we were -- we were only looking at 5 the emissions coming from the one refinery. We 6 weren't looking at their system. And I don't 7 think that we considered whether as a whole the 8 system emissions went down. We were just looking at one plant and what CEQA required to be 9 10 mitigated at that one plant. MR. RICHINS: Okay, thank you. 11 ASSOCIATE MEMBER DOUGLAS: I --12 MR. McLAUGHLIN: One quick --13 14 ASSOCIATE MEMBER DOUGLAS: Go ahead. 15 MR. McLAUGHLIN: I'm sorry. ASSOCIATE MEMBER DOUGLAS: No, go ahead 16 if this is on point. I was going to change the 17 18 topic. MR. McLAUGHLIN: Yes, it was on the 19 20 ConocoPhillips. Because if I remember right 21 there's actually, they shut down a smaller plant a 22 good location away. So that was one of the mitigating factors also. So they were able to 23 24 shut down an older, dirty facility. 25 MS. TRANKLEY: Was that, okay. I'm

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1 sorry, I didn't see that in our agreement.

MR. McLAUGHLIN: Yes. I think it was 2 down in Oxnard or something like that. I'm pretty 3 4 sure it's in there. 5 MS. TRANKLEY: Okay. 6 MR. McLAUGHLIN: Just bringing it up. 7 That seemed to be on point. Sorry, Commissioner. ASSOCIATE MEMBER DOUGLAS: I have a 8 question for Taylor. I saw him trying to sneak 9 10 out while you asked your last question so I had to jump in there. 11 You know, you brought up the fact that 12 13 in the greenhouse gas world we don't think about 14 allowing offsets within capped sectors because in 15 large part I think, the concern about double counting is just really difficult to get around 16 17 when you are looking within a capped sector. 18 I wanted to put on the table, and ask 19 you directly in particular, whether that reasoning is appropriate for us, the Energy Commission, as 20 21 we look at how we might mitigate the impact of new 22 power plants, given that in, I think in our assessment there is going to be the need for a 23 tremendous investment in the structure of our 24 electricity system in order to create this 25

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transformation to a clean energy system, to 33 percent and beyond for energy efficiency and so on. So should we even be looking at buying CRTs or should we be looking at something more structural within the sector?

6 MR. MILLER: You know, it sounds like a 7 repetition but to me we are already and have 8 already been looking at structural changes in the sector for quite awhile. And largely because of 9 10 the Commission's activities and, of course, the 20 percent RPS. And the PUC has been requiring the 11 utilities to then engage in efficiency programs 12 13 for a long time.

14 But I think the reality is for 15 electricity, as I think I mentioned at our first meeting, it is really hard to reduce much at the 16 site, at the power plant. In fact, it is because 17 18 the incentives economically are all to reduce fuel use and to increase efficiency that new projects 19 20 are already going to be whatever the current 21 engineering state of the art is. And that's where 22 Chris's argument comes into play that introductions of new generation will generally 23 24 reduce emissions of the overall system. 25 So the problem that keeps coming back up

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to me is that the main thing that would be 1 suggested, and as a matter of fact I believe the 2 Attorney General's guidelines have this as the 3 first two items on the list, is energy efficiency 4 5 and renewable resources would be one of the 6 mitigation areas to look to. And we agree and 7 essentially we are doing that.

8 And so from the ratepayers' perspective the question might be, as it were, we paid at the 9 10 office, you know. We are sort of already doing that. So in addition to bringing up, to 11 increasing overall system efficiency by bringing a 12 13 new power plant on-line we are also doing the 14 efficiency to reduce demand.

Whether one would want to for a new 15 project that -- And I haven't even gotten into the 16 need for firming the intermittent renewable 17 18 resources for peakers. But if one were to require offsets and really talk about any kind of 19 20 traditional offset, or now the non-traditional new 21 GHG kind of offsets, you would probably be pushed 22 out of the sector to go do forestry projects or 23 something.

24 So I don't know if that really achieves the goal. I think if there is a need to do more 25

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renewables or more efficiency that the way to get 1 2 to that is through the programs outside an individual siting case and through either the ARB 3 4 process, the PUC or your Commission perhaps. I 5 don't know if that is responsive to your question. 6 I hope so because I am going to miss a plane. 7 ASSOCIATE MEMBER DOUGLAS: Go ahead. 8 MR. MILLER: Thank you very much. MR. RICHINS: On that same note, Rachel 9 10 from the California Climate Action Registry also has to catch a plane. So if we have specific 11 questions of her. I think she can be here for a 12 13 little while longer. But if we have any questions 14 specifically to CRTs or to her programs we want to 15 ask those early on because we are going to lose her probably in a little bit. 16 MR. VESPA: I have a quick question for 17 18 her actually. We do a lot of CEQA commenting on projects and there is this open question about 19 20 mitigation fees and sort of the lack of places 21 right now. If I was a medium-size or small 22 project. You are not brokering anything. So what would be, if I would want to do a pound for pound 23 24 reduction as a project proponent, what are the obstacles from these third party contracts and how 25

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quickly can they be done? It seems a little 1 strange that you are not -- you are sort of off-2 line. So what would --3 4 MS. TORNEK: So you mean, how do the 5 buyers and sellers find each other? 6 MR. VESPA: Well what would one do if I 7 was recommending, you know, I think you should do 8 some offset mitigation and this is one place you could do it. What would that person do? 9 10 MS. TORNEK: So they could go to the reserve and look at the list of account holders 11 and reach out to the project developers or the 12 13 broker-traders. Because it is listed by account 14 type as far as who, you know, what their activity 15 is on the reserve. They can reach out to them. We have, I mean, we just started in mid-16 2008 so we have two projects that have completed 17 18 registration. There's two forest projects that actually have CRTs issued but there's another 16 19 20 that are listed that are undergoing verification. 21 Not just forest. There's a few forest, a number of landfill and a number of livestock. 22 MR. VESPA: Okay. 23 24 MS. TORNEK: And so while we only have I

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think it's about 200,000 CRTs that have been

issued in the system, our goal is to have one-half 1 million by next, by this coming June. 2 MR. VESPA: So 200,000 CRTs, excuse me, 3 4 200,000 CRTs available for purchase? 5 MS. TORNEK: Right. They have all been 6 purchased. 7 MR. VESPA: They have all been 8 purchased. So there seems to be a lag between 9 what is available and what could be purchased 10 because you are not doing prospective CRTs. MS. TORNEK: That's right. Which we 11 think is a good thing that we are not doing 12 13 prospective CRTs. 14 MR. VESPA: But then -- Sure, but then 15 it seems like there is nothing available right now to buy or are they all bought? 16 MS. TORNEK: Well the 200,000 that have 17 18 been issued have been bought. 19 MR. VESPA: Yeah. 20 MS. TORNEK: We don't issue CRTs before 21 they are created. That doesn't mean that they are 22 not contracted for before they are created. MR. VESPA: Okay. 23 24 MS. TORNEK: So you could reach out to those project developers and see out of the 25

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projects that they have that are going through the 1 verification process, if there are CRTs available 2 and get a contract in place for them. And 3 4 contracts, you know, they forward the contract so 5 they have a contract for the next ten years. 6 MR. VESPA: Okay. 7 MS. TORNEK: And our hope is that we 8 will get to the point where we have a system where 9 there is a bulletin board where people can talk 10 about how many CRTs they have available. But we are just getting the bones of it up and running 11 12 now. MR. RICHINS: And a CRT is good for one 13 14 full year? Is that the term? MS. TORNEK: A CRT is good in 15 perpetuity, it's permanent. 16 17 MR. McLAUGHLIN: You are talking about a 18 tonne. MS. TORNEK: One tonne. 19 20 MR. RICHINS: No, no, I understand. But I didn't know if it was an annual or if it was 21 22 perpetuity. MS. TORNEK: Once a CRT is created it is 23 a reduction that is --24 MR. RICHINS: Forever. 25

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MS. TORNEK: -- permanent in time 1 2 forever. MR. RICHINS: Okay. 3 4 MS. TORNEK: The projects get verified 5 on an annual basis. Forests, actually they get 6 monitored every year and verified every six years. 7 You could do it more often if you want. So CRTs 8 are created perhaps annually but the credit itself is good in perpetuity. 9 10 MR. BOYD: How do you certify their 11 permanence? PRESIDING MEMBER BYRON: Please identify 12 13 yourself on the phone. 14 MR. BOYD: My name is Mike Boyd, I am the president of Californians for Renewable 15 Energy, CARE. 16 How do you certify that there those 17 18 credits are permanent? MS. TORNEK: Well for many of the 19 project types they are permanent just by their 20 21 nature. If it is -- Like for under our livestock 22 protocol, once you capture the methane and combust it there is no way for that methane to be 23 24 recreated. 25 The places where you run into permanence

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issues are with sequestration projects or forest protocols, for example. And that is something that we in our first version of our forest protocols we left up to the contractors. So we let the buyer or the seller determine if there was a forest fire who would be replacing the CRTs and so on and so forth.

8 In this next version of our forest protocols we are actually -- We are proposing. I 9 10 can't say it will go through for sure because it goes through a, you know, a public process. But 11 what is being proposed is creating sort of an 12 insurance buffer pool of CRTs to backfill in for 13 14 any CRTs that are lost due to forest fire, disease 15 or things like that.

MR. RICHINS: Okay, Panama.
ADVISOR BARTHOLOMY: Rachel, are you
folks planning on any kind of efficiency protocol
or a green building protocol?

20 MS. TORNEK: We are not. Basically with 21 energy efficiency and renewable energy, anything 22 related to grid electricity we see regulation as 23 pretty imminent for those sectors. And since you 24 can't create offsets in sectors that are capped we 25 just don't see it as really a viable place for us

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1 to spend our time and resources to create a
2 protocol.

It does take a good amount of work on 3 4 the front side to create these protocols. We see 5 that regulation coming pretty quickly and so we 6 are not planning on developing renewable energy or 7 energy efficiency for grid electricity. We are 8 looking into potentially doing one for boiler efficiency, so fuel, but not electricity. 9 10 MR. RICHINS: Lucille. MS. VAN OMMERING: And I just wanted to 11 make sure because even though the protocol talks 12 13 about creating a permanent reduction, that a 14 company who is in the market for it does not 15 necessarily have to purchase an eternal credit. They could go in and use a company that collects a 16 pool of them and only purchase three years worth, 17 18 correct? MS. TORNEK: I don't think I understand 19 the question. 20 21 MS. VAN OMMERING: Well you create the 22 protocols, you don't create the projects 23 themselves. There are projects that go forward,

25 establish these number of offset credits.

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they abide by your protocols, and then they

Some company comes in, for instance, and 1 2 wants to mitigate their emissions for CEQA compliance purpose. But it knows that it is going 3 4 to fall under a cap-and-trade and it doesn't want 5 to buy eternal ones because they -- or in 6 perpetuity because they may not need them or they 7 may not be allowed once they are in the cap-and-8 trade program because we will only allow them to hold a certain amount, the rest have to come from 9 10 reductions on-site.

11 So in that case then I would anticipate 12 that companies like EcoSecurities that pool the 13 number of credits, could sell a limited amount of 14 offsets to a firm who may only need it for a 15 certain period of time.

MS. TORNEK: Right. I mean, you decide 16 how many CRTs you want to purchase but each CRT is 17 18 good in perpetuity. So, you know, each project creates a certain number of credits. Each project 19 20 has a crediting period of, you know, for most of 21 them it's ten years. So you can't create credits. 22 You know, sort of the life of the project is ten years. But you can't buy a CRT that is good for 23 24 three years, you buy a CRT that is good in perpetuity. You decide how many CRTs you want to 25

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1 purchase but they are not temporary.

2 MR. RICHINS: So what I hear is that 3 maybe instead of buying 100 units for the life of 4 the project you end up buying five units that 5 would cover you for three out of 30 years or 6 something.

MS. TORNEK: You know, I still don't really understand the concept of why you would only want a CRT that is only good for three years. Why you would want an offset that is only good for a temporary amount of time.

MR. RICHINS: Well the Energy Commission 12 13 is looking for a bridging strategy or an interim 14 between now and when AB 32 comes into effect and we also don't want to put a double jeopardy on 15 power plant developers. So if they are required 16 to get a CRT, say, for the life of the project, 17 18 and then they are hit a second time under AB 32, we want to try to avoid that. So we are looking 19 20 at mitigation, if mitigation is necessary, that 21 would be during this bridging time. 22 MS. TORNEK: I would say --

23 MR. RICHINS: Which might be four years
24 or some number less than the life of the project.
25 ASSOCIATE MEMBER DOUGLAS: But that

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1 doesn't mean that you want --

2 MS. TORNEK: If they were required to buy them all up front then there would be the 3 4 potential of double jeopardy. But if you would 5 allow them to buy them annually then they could 6 just buy them annually until they didn't need them anymore. 7 ASSOCIATE MEMBER DOUGLAS: Because even 8 in the first, if they used them for two years, the 9 10

tonnes they are putting into the atmosphere over 11 those two years are permanent. So the CRTs they buy to offset those tonnes would need to be 12 13 permanent. So we are not talking about time-14 limited CRTs so much as we are talking about all 15 of us hypothetically buying a number of them. PRESIDING MEMBER BYRON: Commissioner, I 16 was thinking that we might begin to wrap up for a 17 18 4:30 finish. Mr. Richins, is that all right? MR. RICHINS: That's fine. 19

20 PRESIDING MEMBER BYRON: Let's go ahead 21 and proceed that way and continue discussion until 22 then.

23 MS. TRANKLEY: May I just -- I have to 24 leave shortly also and I just wanted to elaborate 25 on what Mr. McLaughlin said. He is right that in

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our Conoco agreement one of the mitigation 1 2 measures, one of our offsets we had was that ConocoPhillips retired one of their existing 3 4 refineries. They got 70,000 tonnes of greenhouse 5 gas emissions as a credit or as a mitigation by 6 retiring their plant. Thank you.

7 PRESIDING MEMBER BYRON: Ms. Trankley, 8 we have found him to be correct most all the time. MR. GALATI: Commissioner Byron, 9 Commissioner Douglas. I just wanted to understand 10

11 Commissioner Douglas' last question to Taylor so we will try to respond to it in our comments. Was 12 13 your question about other forms of mitigation that 14 might be strengthening infrastructure? For 15 example, investment in a transmission line that might bring renewable energy on-line quicker. 16

ASSOCIATE MEMBER DOUGLAS: That's right. 17 18 My question was in thinking about other kinds of 19 mitigation that directly advance what we are 20 trying to do in the electricity sector, whether it 21 be -- and obviously programs that are not required 22 by law. So whether it be weatherization of houses in the vicinity of a project or efficiency 23 24 investments targeted at populations that aren't being reached by current utility programs. 25 Say

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heavy appliances in renter areas, for example, where there is just a real principal agent problem with getting those appliances switched out.

4 Or just other things that actually 5 accrue long-term to the benefit of the utility 6 doing them because they are in your service 7 territory. They are reducing your baseline but 8 don't necessarily present us with the issues of 9 having somebody make investments outside of the 10 sector.

And then having to work with ARB to 11 figure out how not to create a double mitigation 12 13 system that really just serves to create burdens 14 for the new efficient generation that actually 15 benefits our system that we would actually like to see come on-line, at least in the right amounts. 16 And, you know, we see some of this investment as 17 18 very necessary.

19 So that was the question. Is there a 20 more creative or more appropriate way to think 21 about mitigation than just the offset paradigm. I 22 am very -- We invited CCAR and we are talking 23 about the offset paradigm because that is one way 24 to go and it is something that we are relatively 25 familiar with. We have some experience. There

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are differences in the greenhouse gas context but 2 those differences aren't so great that we can't 3 get our minds around them on how it might work. 4 And I think we probably could work with 5 ARB and find some way of not penalizing these 6 plants in ARB's system. I don't quite know what 7 it is. I think it is something that would take 8 work. But the question was, are there better wavs? 9 10 MR. GALATI: And one of the things I think we need to think about when we do that 11 mitigation, it actually was one of the questions 12

13 that we struggled with in our first comments, is 14 to the extent that the mitigation is coming from 15 activity from the load serving entity, when the load serving entity is not generating how that 16 would work. And how do you account for it would 17 18 be an issue.

19 I don't think that it -- I am not saying that it cannot be done. But I am saying that 20 21 there would need to be a mechanism by which the 22 generator is participating or the load serving energy is participating. And I am not sure how 23 24 you would get it so that they are both 25 participating.

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Especially in an individual siting case. 1 It certainly could be something we looked at from 2 a systemwide perspective. But in an individual 3 4 siting case I am not sure Applicant A could 5 participate in Utility B's program. Or would do 6 their own program. 7 I am trying to get my head around that 8 as well. How could you make that work? 9 ASSOCIATE MEMBER DOUGLAS: I agree it's a challenge. And in fact when you look at the 10 11 regulations, either through the Energy Commission and the PUC or through ARB that apply to the 12 13 sector, I think we can say that with the exception 14 or possible exception of cap-and-trade, they 15 really apply to the load serving entities and not to the generators. 16 17 And so we have got some load serving entities or retail providers that also own and 18 19 control their own generation and so that presents 20 one set of issues. It actually resolves some of 21 those problems you brought up. But then in the 22 case of the IOUs, we do have that problem if we were to think in that direction. 23 24 MR. McLAUGHLIN: I'm going to bring up a subject that I don't want to bring up but the 25

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recent Deseret case where the EPA is going to get 1 2 the opportunity to decide whether GHG or carbon dioxide is a regulated pollutant underneath the 3 4 Clean Air Act, whether BACT is required. Does 5 anybody, maybe from the environmental community, 6 think that a BACT would be something we would go 7 near as far as mitigation as opposed to offsets to 8 projects?

9 MR. VESPA: It has always been our view that offset mitigation comes first. So anything 10 that you could do to reduce emissions on-site 11 would be appropriate. I guess first and foremost. 12 13 And that would be your best available technologies 14 and efficiencies, which it sounds like are already 15 for the most part taking place, just based on the economics. But you get to this offset issue, you 16 17 only get so far.

And I would second the idea that they should be directed at sectoral issues in a local community around efficiencies and renewables. It would seem to me that would sort of support a lot of the goals and just make a lot more sense.

23 MR. McLAUGHLIN: As opposed to -- I 24 guess I am talking about technologies. When we 25 think of BACT for criteria pollutants you think

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about scrubbers or whatever. GHG. What is that, 1 2 sequestration? We don't know. Best available technology might be --3 MR. RATLIFF: We may find out in the 4 5 relatively near future though, given that the 6 Environmental Appeals Board issued the decision 7 last week. 8 MR. McLAUGHLIN: Right. 9 MR. RATLIFF: Which did not require but apparently will result in BACT analyses for 10 11 greenhouse gases from the air districts for PSD permits. 12 MR. McLAUGHLIN: Well they are going to 13 14 determine whether they have to do that or not. MR. RATLIFF: Well, that's what the 15 decision says. But for any permits that are 16 issued in the interim, at least the air districts 17 18 that I have talked to are going to be doing what 19 they think is a BACT analysis for power plant type 20 emitters or for any PSD permit emitter. Because 21 they think they almost have to do so without 22 guarantee, the possibility that the permit will survive. 23 24 So I think we are going to see BACT analyses. The problem is there is no EPA 25

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guideline yet for what those analyses look like. 1 2 So the air districts are basically flying in the dark when they do them. But I think it will be 3 4 for, I suspect it will be for the most efficient 5 technology available. 6 MR. ROSTOV: Just following up on Mr. Galati's last question. I was just wondering 7 8 if there's other questions the Commissioners had that you would like us to address in our 9 10 subsequent comments? ASSOCIATE MEMBER DOUGLAS: I think we 11 were going to cover some of that in our closing 12 comments. Is the dialogue exhausted? Shall we 13 14 move to closing comments? 15 (Laughter) MR. GALATI: Well if it isn't we are. 16 MR. RICHINS: Yes, probably so. 17 PRESIDING MEMBER BYRON: I do not have a 18 19 list of questions other than the ones that we have 20 been working through ourselves here and I am not 21 prepared to summarize them, they are a couple of 22 pages long. So let me think, Mr. Rostov, how you 23 might be able to help me. 24 My interest primarily focuses on those kinds of recommendations that we can use in the 25

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short term in an interim process. The discussion 1 2 for the most part today I found very helpful and informative. I want to thank all of you for being 3 4 here today and those that participated by phone as 5 well. But we had a strong need, with so many 6 siting cases on our docket right now, to get some 7 assistance to the various siting committees. And 8 consistency obviously is going to be extremely helpful. 9

10 I think we have heard a number of the 11 participants who may be involved in one or more of 12 those cases indicate that if we go through this 13 process on an individual basis for each we are 14 going to definitely prolong those cases, and I do 15 not think that is in anyone's interest to do so.

16 I am concerned as well about the 17 regulatory uncertainty that this issue brings to 18 the development of future projects as well as the 19 existing ones.

20 So I am going to take the short answer 21 to your question and that is that we really need 22 to get beyond the negotiations at this point. We 23 need to get towards something that we can use and 24 work with here at the Commission. So the real and 25 positive suggestions that will be helpful to us

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will be those that give us some guidance on how we can begin to apply an interim approach to addressing GHG under CEQA.

Now that's big I know. So I'll pass it
back to the attorney on our Commission and see if
maybe she can help. Commissioner.

7 ASSOCIATE MEMBER DOUGLAS: Thank you. I 8 have one legal question that I think has, I think there has been fairly clear, divergent views on 9 10 this point. I think it is a very fundamental 11 question. And that is whether under CEQA, CEQA really asks us to stop our analysis at the point 12 13 at which we have determined whether or not a 14 project worsens existing conditions significantly.

15 Or whether CEQA is appropriately 16 extended to look at what that project might do to 17 our longer term desired trajectory, provided that 18 that trajectory is based on our knowledge of what 19 needs to be done to protect the environment.

I think that there have been a number of people around this table who have fairly strongly advocated that really once we have made a finding or if we make a finding that a power plant, regardless of what effect it may have in 2050, if CEQA really has us stop at the point at which we

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found the power plant doesn't make our world worse tomorrow because it has made the system, if anything, incrementally more efficient, that points to one path.

5 And I would say that if there is a 6 strong either legal argument or precedent that 7 could be pointed to looking at a baseline or a set of conditions that we are comparing the plant 8 against that is different than that it might well 9 10 be appropriate to the climate change issue, just 11 given the urgency and importance of the issue and the long-term commitment that California has made 12 13 to actually try to make this transformation. So 14 that is a legal question that I would be very 15 interested in participants' perspectives on and that I think would be helpful to the Committee. 16

Other than that, I would like to just 17 second what Commissioner Byron said. I think that 18 19 we are very, very, very acutely interested in 20 coming up with a set of findings or an approach 21 that makes sense for us to deal with cases that 22 are in the door today that leads to an adequate CEQA analysis of GHG impacts. And so everyone's 23 participation has been immensely valuable so far. 24 25 To the extent that you have further ideas or

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approaches now that we have all really heard each other out that you would like to suggest, that would be very valuable.

And finally, this does not end in December or January when the Committee issues its draft and final findings or whatever it turns out we draft. We take this responsibility seriously.

8 As the Energy Commission we have the ability to look into these issues further in the 9 10 IEPR. We have the ability to do technical analysis. We have a number of routes that we are 11 willing to employ to get better answers. So there 12 13 is the imperfect, near-term set of answers and 14 then there is the, you know, how might we approach 15 the longer term better answers. And I think these are all very important questions to us. 16

I am, I think, less troubled by the 17 18 question of how do we avoid double penalizing anyone in front of ARB just because I am quite --19 20 I think that there is a very strong desire on the 21 part of Commissioner Byron and myself, and 22 probably the whole Commission, not to do that. I think there are strong policy arguments for not 23 24 doing that. And I feel like once we have an approach we can find a way to make it work with 25

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ARB and AB 32 regulations. That may not be great. 1 It may sound too much like trust us for project 2 applicants to like that but I want you to 3 4 understand that that's where we are coming from. 5 And that's -- I think that might do for 6 my closing comments. We have covered a lot of 7 ground today. I think we are all tired so it is 8 probably a good time to be stopping unless anyone 9 has anything further they would like to say at 10 this point. PRESIDING MEMBER BYRON: I think we will 11 take that as our close. All right, Mr. Richins. 12 13 Again, thank you all very much for being 14 here. It was a long day but the input was extremely valuable. And I hope you enjoy tomorrow 15 and the next day at the Air Resources Board. We 16 will be adjourned. 17 18 MR. RICHINS: Thank you very much. (Whereupon, at 4:31 p.m., the Committee 19 20 Workshop was adjourned.) 21 --000--22 23 24 25

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I, JOHN COTA, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Committee Workshop; that it was thereafter transcribed into typewriting.

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

IN WITNESS WHEREOF, I have hereunto set my hand this 1st day of December, 2008.

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