

BEFORE THE
CALIFORNIA ENERGY RESOURCES COMMISSION
AND THE AIR RESOURCES BOARD

JOINT AGENCY WORKSHOP

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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Michael Tollstrup

Aram Shumavon

Dennis Peters

V. John White

Stephen O'Kane

Larry Kostrzewa

Diane Fellman

Doug Davie

John Dennis

Gerardo Rios

David Pettit

Angela Johnson Meszaros

PRESENTERS (CONT.):

Jane Williams

Gary Rubenstein

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

2 FEBRUARY 15, 2011

10:10 A.M.

3 COMMISSIONER WEISENMILLER: Good morning. I would
4 like to welcome you today to the Energy Commission Workshop,
5 we're a joint agency workshop, on Emission Offset Challenges
6 for Fossil Power Plants in Southern California.

7 First, we'd obviously like to thank the South
8 Coast Air Quality Management District for its hospitality
9 today in having this event here. We appreciate the
10 opportunity. Most of us are in -- are from Sacramento but
11 we wanted to take the opportunity to come down and listen to
12 the effected public here and talk about what's really a
13 challenging, thorny situation. I think as we get into the
14 technical detail today of -- on the one hand, we're
15 obviously trying to deal with the environmental impacts of
16 the once-through cooling plants on the coast, trying to move
17 those towards replacement, retirement or repowering. And at
18 the same time, any new plant has to deal with air issues
19 which are very tough in this area and, in fact, in terms of
20 the primitive challenges are very tough. And at the same
21 time, certain regulations are tough and getting tougher as
22 we incorporate greenhouse gas regulations into the mix. And
23 so we're trying to figure out with a lot of analytical work
24 between the CAISO, the Energy Commission, and various state
25 agencies to try to come up with an inter-agency approach to

1 try to sort out some of these issues. So again, thank you
2 for your participation today. I think it's going to be an
3 interesting session.

4 COMMISSIONER DOUGLAS: Thank you, Commissioner
5 Weisenmiller. I am Commissioner Karen Douglas. I'm also
6 very pleased to be here and join Commissioner Weisenmiller
7 and thanking South Coast for helping us provide this forum.

8 The -- the issue that we're here today to hear
9 about from the staffs of the joint agencies and from the
10 staffs of the agencies and from the public is -- is a very
11 complex one. It's one of the more complex issues that I've
12 ever run into on the commission. And it brings to us the --
13 the issue of trying to maintain reliability in a constrained
14 area where about half of Californians actually live, but
15 constrained for electricity. And also balance environmental
16 issues that are all important and sometimes competing,
17 whether it be water quality, air quality, or the effort to
18 permit and build more renewable energy, both in basin and
19 out of basin.

20 So I'm happy to be here and I'm looking forward to
21 hearing both presentations and -- and the comment. So thank
22 you.

23 MR. FLETCHER: Good morning, I'm Bob Fletcher.
24 I'm Deputy Executive Officer of the Air Resources Board.
25 And on behalf of the board, I'd like to welcome you here as

1 -- as well. And thanks to Barry for -- for hosting it here.

2 It is a complex issue and there's a lot happening
3 in the energy world right now that -- that makes it a little
4 bit uncertain and -- and that complicates the modeling as
5 well. So we're trying to develop a work plan that will
6 allow us to -- to move forward on this and address the
7 issues of the legislation. And we certainly welcome
8 comments as well. So interested in what folks have to say.

9 MR. WALLERSTEIN: Good morning. I'm Barry
10 Wallerstein, I'm the Executive Officer of the South Coast
11 Air Quality Management District and we very much appreciate
12 the commissioners being here this morning along with Bob to
13 talk about the electricity needs of Southern California and
14 how in the future we provide that electricity, which here at
15 the South Coast District, we consider as part of the
16 region's life's blood in terms of a functioning economy.
17 And because as we move forward to the future, we intend to
18 promote further electrification of various pollution sources
19 as part of our strategy to achieve clean air.

20 I think this workshop is incredibly important
21 because in a way we're setting a new path forward that we've
22 talked about in the past but one that we haven't really gone
23 down. And that is to move towards better integrated
24 planning. We have a number of very important policies.
25 Whether it's elimination of once-through cooling,

1 achievement of our local air quality goals to address
2 climate change to move to a greater use of renewables, and
3 bringing all those topics together in a single workshop like
4 this I think sets a model for how the state should approach
5 the future of environmental and energy management.

6 So I want to again thank the CEC and state
7 resources board for being here this morning and this
8 afternoon to cover this very, very important subject matter.

9 MR. JASKE: Good morning. My name is Mike Jaske
10 for the staff for the Energy Commission. I'm going to give
11 a very brief, for context setting, presentation, tell you a
12 little bit about the order of the day. And then we'll move
13 on to the more substantive presentations of this section by
14 Jon Bishop of the State Water Resources Control Board and
15 Mohsen Nazemi of the district.

16 So our basic purpose here today is to focus on the
17 so-called work plan that the interagency technical team put
18 together for AB 1318, to get comments on that plan, to
19 consider whether we should modify what we have recently
20 posted based on largely the internal team's thinking, to get
21 going with more of the analytic activities. Some are
22 already underway, but to continue those. And then to figure
23 out as a result of all that what our schedule is of bringing
24 this project to fruition.

25 So the Energy Commission and the PUC and ISO have

1 been actively collaborating to assist the Water Board in
2 development of its OTC policy. Mr. Bishop will elaborate
3 upon that process in more detail with that final about what
4 OTC policy is. But the first step in that effort --
5 actually we're not on this slide, but I should acknowledge
6 is the Water Board staff bringing together a whole series of
7 agencies at an informal working group level. We've got the
8 three energy agencies, meaning the Energy Commission, PUC
9 and ISO talking more actively about the analytic issues, how
10 we would help out Water Board staff.

11 Ultimately that resulted in a joint proposal to
12 the Water Board that was accepted and essentially bolted
13 into the essence of the OTC policy as was adopted by the
14 Water Board in May of last year. The guts of that notion
15 are basically that the large steam boiler power plants using
16 the OTC technology ought to be replaced, but they can't be
17 replaced without that process dovetailing with the
18 electricity planning process as it exists in the state.
19 With the exception of some plants in LADWP control area, all
20 of the other OTC plants are in the ISO. Some of them are in
21 local capacity areas and so their capacity is critical to
22 those particular areas until such time is a replacement can
23 be developed or an alternative that's equivalent. And as
24 Chairman Weisenmiller indicated, you know, that's going to
25 be a long process.

1 The Energy Commission's staff's opinion is that
2 most of those OTC plants are actually going to retire or
3 repower. They're not going to try to refit themselves to
4 conform to the Water Board's policy using some different
5 cooling technology. And therefore, as indicated, they're
6 going to trigger a whole new permitting process and have to
7 in one manner or another satisfy that district rules for air
8 credits and offsets. We all know that very few of those
9 offsets are available, particularly for PM 10. That's been
10 the binding pollutant in recent years.

11 And as a short term expediency the legislature
12 established through AB 1318 and SB 827 some opportunities
13 for a limited number of plants to move forward. But the way
14 we mostly think of AB 1318 is directing ARB in conjunction
15 with the energy agencies to undertake the study that ARB
16 posted a couple of weeks ago and that we're asking all the
17 various stakeholders to focus on today.

18 We're trying to understand in that study the
19 capacity requirements to satisfy reliability. Those
20 capacity additions, of course, imply offsets, how that
21 dovetails with offset availability and if there's a mismatch
22 there, any recommended options to increase offset
23 availabilities. That's the essence of the 1318 project.

24 So what brings us together as a joint Energy
25 Commission ARB workshop? Well, the 2011 Integrated

1 Electricity Policy Report, I think is the main energy
2 commission perspective. That's the vehicle whereby energy
3 commission sets state energy policy, pursues it to the
4 extent our authority allows, the basis for recommendations
5 to the Governor, our legislature and other agencies. And
6 it's, frankly, the -- the vehicle whereby most of energy
7 commissions electricity planning activities take place.

8 We've been encouraging the retirement and
9 replacement of these aging power plants ever since 2005. It
10 was analyzed at a more technical level in the years that
11 preceded that, but it was actually part of the 2005 IEPR.
12 And one of the main questions that the Energy commission
13 will need to address in this hyper cycle is the -- is the
14 forcing function of the Water Board's OTC policy sufficient?
15 There are aging plants which are not employing OTC
16 technology. Coolwater and Etiwanda are examples of -- of
17 fossil plants down in Southern California that are aging but
18 which are not OTC and there are others in other parts of the
19 state.

20 Our analyses of lode growth and renewable
21 integration are other forcing functions for capacity
22 development. We may be able to largely rely upon renewables
23 for energy, but we may need to firm that energy through
24 power plants who operate in a very low level from a annual
25 capacity factor energy production perspective but whose

1 capacity to ramp, to provide regulation services is critical
2 to the use of and reliance upon those renewables.

3 The 1318 legislation tells us to look at a wide
4 variety of measures. This is not a legislation that was
5 written in a way to focus on just replacing the OTC or any
6 other single purpose. It's -- it asks that demand-side
7 policies, renewables all be considered in developing
8 configuration that would satisfy reliability, as well as all
9 the various air quality goals and constraints that exist.
10 And so this workshop is one input on this topic area for our
11 -- the 2011 iteration of our IEPR.

12 From the ARB's perspective, and -- and Mr.
13 Tollstrup will add to this in just a few minutes, the work
14 plan of course is where our technical team is on how to
15 satisfy the requirements of the legislation. We need to
16 provide an opportunity for stakeholders to comment about
17 these detailed plans now that they've been posted and made
18 available. To the extent that comments suggest that that
19 work plan be tweaked, and we very much want to understand
20 those comments, consider them, see what they mean in terms
21 of time line and resources.

22 And then finally, of course, the AB 1318 report is
23 not a vehicle that will solve anything all by itself. To
24 the extent that it is a way to compile information that
25 provides some guidance to the district about how the

1 district can tweak its existing policies and practices,
2 perhaps things can happen quickly. To the extent that it
3 suggests that there are some larger scale modifications to
4 district rules or state law, then obviously that will take
5 time. So whatever the recommendations are they're --
6 they're not self-actualizing just by delivering this report.
7 They're -- the report is only a step in the process.

8 So our agenda today is the following: after my
9 brief remarks here Jon Bishop of the Water Board will give
10 us an overview of the OTC policy which is perhaps the single
11 largest thing you can point to saying why we need additional
12 capacity to be located in the South Coast Air Basin; we'll
13 have an update on a whole range of -- of factors underway
14 within the district itself; and then the balance of the
15 morning and most of all the afternoon will be devoted
16 directly to the 1318 work plan; an overview by the agency
17 team; comments from two panels of stakeholders; one from the
18 power plant developer utility perspective and one from more
19 of the agency and environmental advocate community advocate
20 perspective; and then we'll have some opportunity for
21 comments from the public.

22 So if I can turn your attention to the written
23 agenda we're going to go through the background, the initial
24 presentation by the staff team, and then some unique
25 perspective on the role of renewables, all before lunch.

1 We'll take a lunch break. Then we'll have our two panels
2 and comments from the general public.

3 Are there any questions about that order for the
4 day? Thank you. With that, Jon Bishop.

5 MR. BISHOP: Good morning. My name is Jonathan
6 Bishop. I'm the Chief Deputy Director of the State Water
7 Resource Control Board. It's my pleasure to be here. I'll
8 try and give you a summary of our recently adopted policy
9 for once-through cooling.

10 The goal of our policy was to minimize the impacts
11 to marine life while still maintaining the reliability of
12 our electricity grid. Just to give you a short idea,
13 there's really three impacts associated with once-through
14 cooling to marine life. There's the impingement, which is
15 essentially getting large animals stuck on the screens they
16 use to protect the equipment. There are entrainment, which
17 is the smaller animals, the larvae, the eggs, the small
18 creatures getting actually sucked through all the equipment
19 and polarized, heat treated, essentially 100 percent
20 mortality of -- of these creatures. And then the thermal
21 discharges associated with the heat of the discharge of the
22 outfalls.

23 These can be addressed in a number of ways. The -
24 - the impingement can be addressed with the -- with fish
25 screens and exclusion devices and reduction in velocity.

1 Entrainment, there's not much you can do on -- in terms of
2 add on technology, though there is some -- there is some
3 promising technologies that are moving forward and still in
4 the development stage. But for the most part the larvae
5 gets sucked through with the water and get impacted there.
6 The policy applies to the 19, well, now 16, I think, coastal
7 power plants that use once-through cooling. I believe that
8 three of them since the policy was adopted have -- have
9 ceased to use once-through cooling.

10 Along the coast, and I'll show you a quick picture
11 of those plants and the little red dots along the coast
12 there, they are, of course, too small for me to read and you
13 probably, also, but it just shows that they're spread all
14 over the state but with the largest concentration here in
15 the -- in the Southern California area.

16 The policy itself is -- is fairly simple in
17 concept. It -- it sets a technology-based requirement on a
18 statewide basis. It says that all once-through cooling
19 power plants need to switch to recycled wet coolant.
20 Essentially it means that it's the best available
21 technology. It also allows for a second alternative, what
22 they call Track 2, where equivalent technologies could be
23 used as long as they met the same reductions and impingement
24 and entrainment with some modifications for counting of
25 critters, because the ten percent leeway in there because

1 critters are hard to count sometimes.

2 The policy was adopted in May of last year. It
3 had to go through an approval of the Office of
4 Administrative Law which was approved in September, end of
5 September, and then became effective on October 1st. That
6 date became -- becomes important because there are a number
7 of activities that happen based on a year or two years or
8 five years after the effective date. And so it's -- that
9 becomes the date when all those are triggered.

10 The idea of the implementation plan is it's --
11 it's a mixture of the needs of the Water Board in addressing
12 the impacts on aquatic life and the needs of the -- of the
13 energy agencies to maintain greater liability and ensure
14 that these plants, though their individual impacts on the
15 ocean are interconnected to the grid, which I'm sure you
16 know a lot better than I do, but you can't treat them
17 individually. The Water Board in the past is really used to
18 an individual problem and an individual solution for that
19 problem. But it became clear early on in the development of
20 the once-through cooling policy that this was a problem that
21 we had to address that was interconnected with all sorts of
22 other issues.

23 And so back with the concerns with our very
24 initial scoping of this document, concerns by a number of
25 folks that we were going to impact the grid and essentially

1 cause black outs and brown outs and things that really we
2 didn't want on our resume, we put together a group of -- and
3 inter-agency group of different agencies and we included the
4 California Energy Commission, the PUC, the CAISO, the Air
5 Resources Board, State Lands, Coastal Commission, all to
6 make sure that what we were looking at took into account
7 other issues that the state was facing with these power
8 plants at the same time.

9 What that led to, I think, was a pretty monumental
10 achievement for -- at least for the Water Board. We went
11 from having every energy agency saying that our policy was
12 going to cause a shut down of the grid and power outages to
13 a proposal that matched up, as Mike discussed, the
14 implementation schedule with our requirements in a way that
15 provided a phasing. So over the next 12 years there's a
16 phased approach to repowering or retrofitting these
17 facilities. Now we don't know everything that we need to
18 know right now to do that.

19 So the way we set it up is that -- I think that's
20 on the next slide, I accidentally put that in there -- that
21 -- no, that's not it. Is that right? That the -- each of
22 the power plants will -- will submit a implementation
23 schedule to the -- the Water Board along with the
24 interagency working group and the SACCWIS, which is the
25 Statewide Advisory Committee on Cooling Water Intakes, which

1 will review those implementation plans and make
2 recommendations to the State Water Board to changes in the
3 policy and changes in the timing of that policy. And then
4 those will be incorporated into the permits. So essentially
5 we have a skeleton structure out there that -- that lays out
6 dates between now and 2024 for different plants to come into
7 compliance. And then over the next 12-14 years we'll be
8 revisiting that schedule on an annual basis and making
9 tweaks to it as more information becomes available. The
10 first week will be this coming October after the
11 implementation plans have delivered. I think we have --
12 essentially that's the dates. The April 1st is the date
13 when each of the power plants need to submit the
14 information.

15 The SACCWIS and the State Board will then review
16 that and we'll have the whole public hearing in October 2011
17 to -- to hear recommendations, changes. And my expectation
18 at this point is the Board will direct staff to modify the -
19 - the schedule to accommodate changes in those -- in the
20 schedule to meet the specific plans that submitted.

21 And I just wanted to touch on that we are also
22 looking at the two nuclear plants in the state, though
23 that's not really the topic for today, but we'll be looking
24 at a set of series of studies to determine what is possible
25 in terms of meeting reductions in entrainment and

1 impingement at those plants.

2 And I'd be happy to answer any questions regarding
3 any detail. Yes, I know, I went through it pretty quick.
4 Thank you very much.

5 MR. WALLERSTEIN: Actually, excuse me. I did have
6 one question. Would you characterize for us -- what your --
7 what your expectations are for what's going to be in the
8 compliance plans?

9 MR. BISHOP: Yeah. What we expect is that each of
10 the power plants would --will look to their future and look
11 at what they're thinking about in terms, are they going to
12 repower that plant, are they going to retrofit with some of
13 the technology, what is the time frame that they expect to
14 do that in, when the plant will be shut down or offline or
15 any modifications, essentially, the best guess that they
16 have at this point in laying it out.

17 We understand that some of this stuff is -- is
18 contingent on other things happening in the world. But what
19 our hope is, we're expecting from these plants is enough
20 information so we can look at them and look at what is going
21 to happen to the grid over the next ten years in terms of
22 when our plants going to be up, when do we expect units to
23 be down, are they -- do we need to make adjustments in the
24 schedule so that we're taking that into account. That
25 answer your question?

1 MR. WALLERSTEIN: That -- that was very good. I
2 was also going ask a follow-up question of obviously the
3 plants have some information which would be very important
4 to have the public involved in the reviewing and other parts
5 which might be more, let's just say trade secret or
6 confidential. Have you thought through how you're going to
7 parse out the documents in that sense?

8 MR. BISHOP: Sure, we -- what we expect and what
9 we ask folks to do is, each of the power plants, that they
10 have portions of their submittal that they feel are business
11 confidential, that they take those separately and submit it
12 to us with their justification for why their business is
13 confidential. We have the ability to hold those all
14 confidential, those portions.

15 I'll be blunt if we -- if someone gives us their
16 whole plan and says it's business confidential we might have
17 some trouble with that. What we're really -- at some point,
18 their -- their point when their plant or their unit is
19 expected to be down and for how long is going to need to be
20 a public document because it's going to need to go to our
21 Board -- well, it's going to need to go to the SACCWIS for
22 public hearing for their consideration, and then to our
23 Board in a public meeting to consider modifications to the
24 schedule. But the -- the intricacies of that and the
25 business pieces, we don't need

1 to -- to get involved in.

2 MR. FLETCHER: Just a follow-up question.

3 MR. BISHOP: Uh-huh.

4 MR. FLETCHER: When do you think the public
5 version of that would be available, assuming that you get
6 them on April 1st?

7 MR. BISHOP: Well, we -- the latest that would be
8 would be six months later. I expect it will be earlier than
9 that but I don't have an exact date. We'll be reviewing it
10 with the working -- the staff level interagency working
11 group, and then we will then make those recommendations
12 available along with backup documentation sometime before
13 October. I just don't have a date yet.

14 MR. FLETCHER: So the submittals themselves will
15 not just be made public as they come in?

16 MR. BISHOP: Unlikely. But, you know, once we get
17 them in and then we've had a review of what's business
18 confidential and what isn't and -- and we're comfortable
19 about that then we'll start posting things on the Board.
20 But I don't want to give you a date on that until we've seen
21 them.

22 Okay. Thank you all very much.

23 MR. NAZEMI: Good morning, Commissioners
24 Weisenmiller and Douglas and Mr. Fletcher and Barry. My
25 name is Mohsen Nazemi. I'm Deputy Executive Officer

1 Engineering and Compliance for South Coast Air Quality
2 Management District. I'm going to give you a brief
3 presentation regarding a little background about South Coast
4 and permitting process, and then talk about the status of
5 offsets and power plant siting in South Coast.
6 Unfortunately, I don't have all those animated marine
7 animals that Jon had but I'll try to go through mine very
8 quickly.

9 As you all probably know, South Coast covers all
10 of Orange County and non-desert portions of Los Angeles, San
11 Bernardino, Riverside counties. It is home to over 17
12 million people which is almost half of the state's
13 population, an area of over 10,500 square miles. However,
14 it unfortunately has the worst air quality in terms of both
15 ozone and fine particulates. And our -- as a result we have
16 to go through a very extensive program, including permitting
17 over 28,000 facilities, to make sure that the air pollution
18 is controlled in a fashion to achieve our goals.

19 So prior to construction or installation of any
20 equipment that either emits or controls air pollution we
21 require a permit to construct to be issued from our agency.
22 And one of the cornerstones of the permitting program is new
23 source review which applies both to attainment pollutants
24 and non-attainment pollutants. The overall structure of new
25 source review program includes the federal major source for

1 attainment and federal major source for non-attainment
2 pollutants, as well as the state and local minor source
3 center which applies to both attainment and non-attainment
4 pollutants.

5 So starting with the attainment pollutant, if an
6 area is already attainment there's requirements to prevent
7 significant deterioration under PSD program and to make air
8 clean or maintain it clean. As part of that program we
9 implement the federal NSR regulations which applies to major
10 sources and major modifications at major sources. And PSD
11 permitting is typically done by state and locals under a
12 SIP-approved or delegated program or by EPA in other areas
13 and tribal lands.

14 In California six districts have a delegated
15 program, including South Coast, and there are other half a
16 dozen that have SIP-approved program. An EPA does the rest
17 of the permitting for the other districts, as well as tribal
18 lands. But the Greenhouse Gas Tailoring Rule that was
19 adopted by EPA last year will probably significantly change
20 that status in California.

21 So for non-attainment areas the requirements are
22 to assure that the air quality doesn't worsen, and together
23 with all the other programs the NSR offsets present
24 reasonable further progress toward attainment. These
25 federal programs, again, apply to new major sources and

1 major modifications at major sources. The permitting is
2 done typically by state and local agencies through a SIP-
3 approved program, and EPA does it for tribal lands.

4 So for the remaining of the sources that are not
5 major sources there is also a minor NSR program in place.
6 This would apply to not only new and relocated minor
7 sources, but also modifications at minor sources and minor
8 modifications at major sources. It does apply to both
9 attainment and non-attainment pollutants. And EPA actually
10 has also proposed a minor NSR program for tribal lands back
11 in 2006 which I believe fairly soon will be final and
12 released.

13 So having said that, what are the requirements for
14 new source review programs? Of course, there are different
15 programs, but generally speaking the requirements are all
16 the same. The use of best available control technology or
17 BACT for PSD and state. And then the use of lowest
18 achievable emission rate or LAER for federal non-attainment
19 major sources and in our South Coast program for all
20 sources. There's also requirements for modeling or impact
21 analysis. The PSD also has requirements for soil
22 vegetation, visibility Class I area and endangered species.

23 But for non-attainment areas there is a common
24 requirement that -- that is emission offsets. And those
25 offsets are in South Coast data provided through emission

1 reduction credit certificates or provided by South Coast.
2 So if a facility is new or relocated or if they're going
3 through some modifications or expansions they would trigger
4 the offsets requirements. And that applies to all sources
5 except for South Coast we have specific exemptions for
6 certain sources in our new source review program that they
7 don't have to provide offsets, but the district still
8 provides those offsets through our internal offset bank to
9 meet the -- both the federal and state offsets requirements.
10 These sources include the Rule 1309.1 Priority Reserve rule,
11 the Essential Public Services which are sewage treatment
12 plants, landfills, police, prison, firefighting, schools and
13 hospitals, and some other innovative technology or research
14 operations.

15 In the early 2000s due to the energy crisis in
16 California we also amended this rule to allow temporarily
17 power plants to be able to access this internal bank.
18 However, they were provided -- they were not provided
19 offsets free of charge like the other essential public
20 services, but they were required to pay mitigation fees that
21 were then invested in emission reduction projects.

22 And we also have another Rule 1304 which the
23 state's exemptions. Under this rule facility modernization
24 including repowering of power plants and also be exempt from
25 offset. And that's important for -- for this discussion

1 today.

2 So what's the problem with providing ERC's in
3 South Coast? As you can see there is a chart that shows the
4 offsets or ERC's beginning in 2000 for PM 10 or fine
5 particulates and you can see that once the -- those offsets
6 were in demand because the power plants and other
7 facilities, that the amount of offsets dropped
8 significantly. In fact, since 2000 they've gone down by 57
9 percent. On the other hand, if you look at the blue bar
10 charts this is the price of ERCs that peak in 2009. And
11 they increased by over 4,800 percent and the highest price
12 of ERC in 2009 that was -- that was traded was at \$350,000
13 per pound per day.

14 During that time we actually had three projects
15 that had all received their power purchase agreement from
16 Southern California Edison. And those three projects alone
17 needed almost twice as much ERCs that were in the market.
18 And I have to point out that when I say in the market, these
19 are valid ERCs. But the holders of these ERCs or not all
20 interested to sell them because they're the type of
21 facilities that are not typically exempt from offsets in our
22 Rule 1309.1 or Rule 1304. So they -- they envision that
23 they're going to have expansions that they need to utilize
24 these ERCs for.

25 So as a result the district began some work based

1 on some state agency recommendations or projections that
2 there will be another electricity shortfall, specifically in
3 Southern California, in the near future. And when you look
4 at the slides that Jon and Mike showed earlier, actually a
5 third of all of our generating capacity here in South Coast
6 is subject to once-through cooling, over 7500 megawatts.
7 And if you look at the overall structure over half of our
8 generating capacity is more than 40 years old. That's
9 10,000 plus megawatts.

10 So we amended our new source review rule to allow
11 the new and clean air power plants to come in and replace
12 these older and dirtier power plants, and also continue to
13 require a mitigation fee to be used for emission reduction
14 projects in addition to offsetting their emissions through
15 our internal bank. So this was an additional reduction that
16 the basin
17 could -- could entertain.

18 At the same time the district has been utilizing
19 our track -- NSR tracking system to show that the sources
20 that are exempt from our offsets still provide the -- we
21 provide the -- the necessary offsets from our internal bank.
22 And that tracking system has been in place for 20 years.
23 But EPA asked us to adopt a rule to memorialize it in -- in
24 a rule language. So we did that also in 2006, 2007.

25 As a result of the rule amendments we were sued by

1 the environmental groups for adoption of Rule 1315 and
2 amendments 1309.1. Based on this lawsuit which was based on
3 CEQA analysis being inadequate a writ was issued by the
4 state court in November of '08 enjoining us from
5 implementing these two rules.

6 And subsequent to that there was another lawsuit
7 filed by environmental organizations in December of 2009
8 that would argue that the state legislation that was adopted
9 to avoid a permit moratorium for certain sources was
10 violated separation of powers and that AQMD use of minor
11 source offsets before conducting CEQA violated both. This
12 lawsuit was dismissed in June of 2010 but it is on appeal
13 with no hearing date set.

14 And at the same time, in the federal court there
15 was a lawsuit filed by the environmental groups in August of
16 2008 that argued that offsets in all of our internal offset
17 accounts are not valid under the federal Clean Air Act.
18 This lawsuit was dismissed in January of 2010 but it is on
19 appeal in the Ninth Circuit Court of Appeal and there is no
20 hearing date set for this one as well.

21 So what was the result of the state court
22 decision? There was a permit moratorium that went into
23 effect after the writ was issued and prevented us from
24 permitting any more projects under 1309.1 Essential Public
25 Services and under 1304 Exemptions including repowering of

1 power plants. As a result of that there was state
2 legislation Senate Bill 827 that was signed into law to lift
3 the permit moratorium. And at the same time, we decided
4 that we're not going to amend our Rule 1309.1 anymore for
5 the power plants, but we went forward and worked on re-
6 adoption of our NSR tracking rule and, actually, earlier
7 this month, two Friday's ago, our Board adopted Rule 1315.

8 Senate Bill 827 was signed into line October by
9 the Governor and went into effect January 1st and it has a
10 sunset date of May 1st, 2012. And it lifted the permit
11 moratorium to allow AQMD to again permit 1309.1, 1304
12 sources. The environmental organization finally petitioned
13 with EPA in December of '09 asking EPA to order South Coast
14 not to issue any permits under Senate Bill 827. This
15 petition was denied September of -- it should say actually
16 2010 not 2011 -- and denied the -- the request from the
17 environmental groups by EPA.

18 At the same time there was a second bill
19 introduced by Assemblyman Manuel Perez, AB 1318, which is
20 particularly the subject of the workshop today. And this
21 was also a bill that went into effect January 1st and has a
22 sunset date of January 1st, 2012. It went into effect
23 January 1st of last year, not this year. And it applied to
24 only one power plant, the CPV Sentinel, which is outside the
25 South Coast Air Basin and had a power purchase agreement

1 prior to 2008. It does require South Coast to supply the
2 offsets for this project, but it does require similar to
3 what 1309.1 would have done to pay a mitigation fee that
4 will be used for emission reduction projects. But most
5 importantly it also requires the study to be done by our
6 Resources Board and consultation with the Energy Commission,
7 ISO, and -- and State Water to do an evaluation of
8 electricity reliability needs for South Coast Air Basin and
9 recommend most effective and efficient means to meet the
10 needs and report to the legislature and governor.

11 At the same time there was a tailoring rule
12 greenhouse gas that we mentioned earlier that -- that make
13 things more complicated in terms of the permitting
14 requirements. This rule became effective or would have gone
15 into effect January 2nd, 2011 requiring all sources of
16 greenhouse gases to be subject to requirements on their
17 federal PSD and Title V. So as a result EPA proposed
18 tailoring rule to minimize the number of sources that will
19 be subject to greenhouse gas requirements, and it was
20 adopted in May of 2010. And EPA issued some guidance on how
21 to determine BACT for these sources last November.

22 This, you probably cannot read it very well, but
23 this shows the permitting process. The first step which
24 went into effect January 2nd, 2011, and it will be in effect
25 until July 1, applies only to modifications, not to new

1 sources, and it only applies to a source that was already
2 subject to PSD. But if a source is subject to PSD and has
3 more than 75,000 ton per year CO2 equivalent, greenhouse gas
4 emission increases would also be subject to greenhouse gas
5 tailoring rule.

6
7 Step two will go into effect July 1 of this year
8 and that continues step one process as was before, but it
9 would also apply to new sources which have greenhouse gas
10 emissions on greater than 100,000 ton per year CO2
11 equivalent, as well as modifications, whether or not they
12 are subject to PSD or not, that increase greenhouse gas
13 emissions by 75,000. There's some additional phases that
14 require EPA to do study for smaller sources and so on and
15 the implementation that -- that is listed here.

16 So South Coast amended our Title V and PSD rules
17 last November and we submitted the rule for -- PSD rule for
18 inclusion in the SIP that went to ARB and has been now
19 submitted to EPA last December. And we are continuing to
20 maintain our PSD delegation for non-greenhouse gas sources
21 under PSD program.

22 So, okay, this brings me to the last series of my
23 slides, which is the status for once-through cooling
24 facilities in South Coast. And as mentioned earlier,
25 there's over 7,600 megawatts that is subject to once-through

1 cooling. Of all these facilities only two facilities have
2 been issued permits for repowering. The NRG El Segundo for
3 Units 1, 2 and 3, and LADWP Haynes Facility for Units 5 and
4 6. They're both replacing them. In one case we combined
5 cycle gas turbine dry cooler cooling and in another case,
6 simple cycle gas turbine with dry cooling.

7 I just also want to point out that the Scattergood
8 Facility is required to repower their Units 1 and 2 under a
9 settlement agreement with South Coast. So it's in addition
10 to the once-through cooling requirement that is in place.

11 So what's the status of the pending power plant or
12 proposed power plants? Well, of the once-through cooling,
13 as I mentioned, two of the facilities have already received
14 their permits. They were issued under the 1304 exemption
15 for repowering under Senate Bill 827. And they cover three
16 units at NRG, so there will be one unit left, and only two
17 units at Haynes LADWP. So there will be additional units at
18 both of these facilities that are still subject to once-
19 through cooling.

20 Of the existing power plants there was some
21 expansion at Riverside. They did not go through any kind of
22 legislation. They had to provide their own ERCs. And then
23 there is another one pending for Watson Cogen to add the
24 fifth train, which is also utilizing SB 827 and 1304
25 exemption.

1 The new power plants, Sentinel was the one I
2 mentioned earlier that would be subject to AB 1318, and City
3 of Anaheim also had a project that has used ERCs. But they
4 had to spend over \$16 million on purchasing ERCs for that
5 power plant. And unfortunately, a third of that was a
6 profit by an investor who invested in ERCs and the city had
7 to pay for it.

8 There are other project that didn't go through.
9 The Vernon project that was denied, the AES Highgrove
10 project that we denied, so there are no more pending
11 applications for these projects. The Walnut Creek is the
12 only one that was issued a license by CEC, but it's still
13 pending a permit from South Coast. And then there are two
14 other projects that have been suspended and -- and their
15 permit is pending. So those are the status of those.

16 And finally, I wanted to just show you the status
17 of some renewable energies. There are three projects that
18 went in at landfills for Landfill Gas to Energy Project,
19 that all three of these were permitted under SB 827 for
20 1309.1 exemption. There is one, Sunshine Gas Production,
21 that's still pending. And then finally the Palen Solar
22 Power project at Desert Center, the 500 megawatts that we
23 recently issued permits and CEC license. And they also use
24 SB 827 for certain pollutants but provide a VOC, volatile
25 organic compound ERCs to license that project.

1 And that concludes my presentation. Do you have -
2 - to answer any questions? Thank you.

3 COMMISSIONER WEISENMILLER: Thank you. I have one
4 question. I see as you indicated, many of these plants are
5 -- the once-through cooling plants are located here. And at
6 the same time looking at the interagency working group,
7 obviously, it's much more Sacramento entities.

8 o I was going to bond here if there's any way the
9 CEC -- I'm sure the other agencies can facilitate your
10 participation and that working group would be happy to work
11 on that.

12 MR. NAZEMI: We'll be happy to participate in any
13 working group that would like us to.

14 COMMISSIONER DOUGLAS: Thank you, Mohsen. I'll
15 just add, first of all, thanks for that very thorough
16 presentation. It was really helpful to me.

17 And just piling onto what Commissioner -- Chair
18 Weisenmiller just said, it's -- it's so important that we
19 work together in this effort. And there are so many
20 variables when you look at new fossil generation in South
21 Coast from air quality laws, once-through cooling schedule,
22 the amount of energy efficiency, renewable energy,
23 distributed generation, that we're able to do transmission
24 upgrades which might, in some instances, be able to
25 substitute for new fossil generation. So -- so there are so

1 many variables.

2 And part of the purpose of this entire exercise is
3 to try to get ourselves in working in public process on the
4 same page for how this could look. So we really appreciate
5 your involvement and your help here.

6 MR. NAZEMI: Thank you.

7 MR. TOLLSTRUP: Good morning. I'm Mike Tollstrup.
8 I'm Chief of the Project Assessment Branch at the Resources
9 Board. This morning we're going to do a joint presentation
10 to talk about the work that is being undertaken to satisfy
11 1318. We're going to cover the legislative directory
12 briefly -- directive briefly, talk about some of the
13 activities to date, talk quite a bit about the work plan and
14 what we're proposing to do in the work plan to address the -
15 - the requirements under 1318, public participation process
16 -- we hope to have a very active process going forward --
17 our schedule, and then the next steps.

18 So 1318 basically had two requirements. The first
19 was it required ARB in consultation with the Energy
20 Commission, the Public Utilities Commission, the independent
21 system operator and also the Water Resources Control Board
22 to do this analysis of electric -- the electrical system
23 reliability needs in the South Coast Air Basin.

24 The second part of that is taking results of that
25 assessment or that study and determining what is needed to

1 make sure if we identify additional capacities needed,
2 making sure that we have a process going forward that we can
3 get those facilities built and permitted in a sustainable
4 fashion.

5 So today, the -- the agencies have sat down quite
6 numerous times to discuss implementation of 1318. It was
7 evident early on in the process that -- that the work that
8 had been done so far, the studies that have been done, the
9 studies that were in process didn't quite answer the
10 question that we needed to answer under 1318. In addition,
11 there is no scope of the analysis, so to speak, in 1318. It
12 doesn't tell us how far we have to go out. We kind of
13 determine based on the tools that we have that we probably
14 would do the analysis out to 2020. That's about as far out
15 as we could go.

16 But the work going forward will be done through
17 two different teams basically. We have one team that is
18 basically doing the needs analysis. This is the innermost
19 work of the Energy Commission, the ISO and the PUC in
20 identifying the reliability needs. The second group would
21 be looking at the -- the offset question or the permitting
22 issues associated with getting the -- the analysis or the
23 facilities built. We did have one initial meeting back in
24 November 10th so we have started this process and plan to go
25 forward from here.

1 At this point, what I'm going to do is turn it
2 over to Mike Jaske to talk about the needs assessment and
3 others, and then I'll wrap up talking about the offsets at
4 the end of this presentation.

5 MR. JASKE: So this presentation will actually get
6 divided up, sort of, myself going first, and then Dennis,
7 then Aram Shumavon will have a few things to say about how
8 it interacts with PUC processes.

9 So broadly speaking our objective is to pay
10 attention to what we need to do for the long term. So we're
11 -- we're trying to identify the amount of capacity that we
12 need to locate in the basin to support load growth, to
13 enable retirement of OTC facilities, repowering some of
14 those facilities to enable renewal integration. We need to
15 understand the generation requirements of these various
16 factors in enough detail that we can, you know, create a
17 credible range. We're not going to, obviously, get into the
18 business of predicting exactly what's going to happen. The
19 future is too uncertain. So some sort of scenarios that
20 address a variety of the factors including load reductions,
21 repowering, transmission development are all ingredients
22 that we're trying to address.

23 We have this background slide that sort of
24 identifies the alphabet soup of agency responsibilities. I
25 won't dwell on it. As has been said a couple of different

1 ways, this project is analytically very challenging. Number
2 one the legislation ask that there be a reliability
3 assessment for the South Coast Air Basin. Well, that's not
4 a district, you know, a unit of geography that makes any
5 sense, except from an air pollution attainment perspective
6 and the chemistry of -- of pollutants in the air. It's not
7 the way the electrical system is configured. It includes
8 all of the service area, DWP and some minor utilities, but
9 only a portion of southern -- of the Southern California
10 Edison system, which in turn is embedded in the California
11 ISO.

12 And furthermore, the opposite is true. There are
13 elements of how the ISO system operates that critically
14 affect what goes on in the South Coast Air Basin So that --
15 that geographic mismatch will -- will be an issue.

16 There are, of course, many changes underway in the
17 electricity industry. We've already mentioned most of them
18 today. They increase uncertainty and they complicate
19 planning. So trying to bring together all of these
20 perspectives is part of our replant proposal.

21 The -- the people talent, the resources to do this
22 work are in many respects focused on other things. They're
23 -- they were originally focused on elements that -- you
24 know, of this overall project. So particular people have
25 been pulled together, but we are still somewhat resource

1 constrained. And this will take time to conduct all of the
2 analysis that we believe are necessary. And has been
3 mentioned many times, there's both the strong need for and
4 recognition of interagency coordination.

5 I had originally had this slide not knowing what
6 Jon Bishop or -- or Mohsen would say. But just suffice it
7 to say that of the Water Board's OTC policies the -- the
8 three plants that are highlighted in the gold color,
9 Humboldt, Portrejo, and South Bay, are already closed down.
10 They're not demolished and, you know, premises suitable for
11 some other reuse, but that's eventually what's going to
12 happen there.

13 And as you go down that list you will eventually
14 start seeing lots of power plant names that are in the
15 Southern California area. And if you slide then over to the
16 far right hand column you'll see the compliance dates that
17 are at the end of this decade. And that was the advice we
18 gave to Water Board and they accepted it. The challenges of
19 figuring out how to address those OTC facilities are just so
20 formidable that it wasn't wise to try to move faster than
21 that schedule. We may in some instances be able to once we
22 complete this analysis, but our preliminary advice to the
23 Water Board was -- was not to try to do that but to rather -
24 - to take advantage of the things that were already on the
25 pipeline in Northern California and San Diego, and -- and

1 that's already beginning to pay off.

2 This slide, of course, shows visually what I said
3 earlier, is that we have in the beige color the jurisdiction
4 of the South Coast. We have LADWP's service area, not their
5 control area -- actually their control area, the legend is
6 wrong. The control area would include the transition lines
7 that go off to the rest of the interconnection. And then
8 this green shaded area here is a critical element of the
9 ISO, that is the local reliability area for the LA Basin.
10 And at present it extends quite a block to the east, and
11 then sort of from there all the way over to the coastline
12 where all the OTC plants are.

13 And so that's, as I said earlier, this is a
14 challenge, trying to pay attention to these different pieces
15 of geography, what loads are, what resources are, how -- how
16 these things interact with our whole fundamental issue of
17 emissions and offsets.

18 This slide just gives a brief recitation of the
19 various factors that we refer to for, some of which tend
20 toward increasing capacity needs and therefore the need for
21 offsets, and some decreasing capacity needs and therefore
22 lesser reliance or necessity for offsets. I don't need to,
23 you know, run through all these, but those are all of the
24 elements that various kinds of analyses we're going to need
25 to take into account.

1 This slide is far too detailed for you to read,
2 but its purpose is to show that the LA Basin local capacity
3 area, which is that large ellipse, sort of a simplified
4 version of the more detailed diagram a couple slides back,
5 has within it these pink dots, and that's critical. The LA
6 Basin local reliability area is about to split into two
7 portions, the western portion and the eastern portion. This
8 is all due to transmission developments that are going to
9 accentuate interconnections up in this part of the Edison
10 transmission system. That will all effectively mean that
11 these areas -- this part of the LA Basin local reliability
12 area is no longer enough separate from the overall
13 transmission grid that it has to be paid special attention
14 to.

15 What will have to be paid attention to is still
16 the western portion of the LA Basin. Unfortunately, that's
17 where all the power plants are. So there's an even more
18 confined area where the OTC plants, whether they're going to
19 retired, need to have some alternative solution, either a
20 new green field plant or a repowering that will, you know,
21 work its way through the licensing process, some kind of
22 generation alternative that isn't -- that -- that provides a
23 reduction in load in a manner that can be predicted and
24 relied upon. So even our -- our current relationships with
25 that local areas versus big areas can change over time as a

1 result of transmission develop.

2 So let me talk now a bit about our analyses, and
3 then Dennis will get into that in more detail. So we're
4 bringing together a lot of different perspectives on how to
5 conduct reliability analyses that we -- frankly, no one
6 entity has done all of these things in this in the way that
7 AB 1318 requires ever before. We're -- and -- and the work
8 plan document, you know, lays out a good bit of, you know,
9 our understanding.

10 We've evaluated all studies that we can get our
11 hands on trying to understand what value they have for
12 identifying the key uncertainties. We've spent a fair
13 amount of time in the electric reliability chapter laying
14 out some of those and devising the beginnings of some
15 scenarios to assess their consequences. We're trying to
16 figure out what studies that we need to do, fresh, new, that
17 have to be done just for purposes of this AB 1318 report.
18 Then of course, have to then do those things. The result of
19 that is a range of emissions from capacity additions. We'll
20 see how that matches up to offsets.

21 Mike Tollstrup indicated before that we have
22 chosen, even though AB 1318 doesn't require it, to do our
23 modeling out to 2020. I think we'd probably actually like
24 to go even further, but that's about as far as we can go
25 with the data and modeling tools that we have available to

1 us right now. But we're going to be conducting the various
2 reliability studies for the areas that make sense from a
3 reliability perspective. Once we know that we'll translate
4 that into the South Coast Air Basin. We're going to be
5 doing some -- a variety of scenarios so as to take into
6 account the -- the directive in AB 1318 if you look up load
7 reduction and renewal development.

8 We're trying to do this in a way where we don't
9 over commit ourselves to powerful instability studies which
10 are extremely labor intensive and will really stretch out
11 the timeline of the project. We're trying to use less
12 complex, you know, sort of screening tools where those are
13 appropriate, identify the key things that need analyses of
14 those heavyweight tools.

15 And if I bring all this right into the picture,
16 the perspective of how these plants are going to operate,
17 because that's, of course, key to their emission profile
18 across the months and the year and therefore the offsets
19 that are going to be necessary, whether through ERC markets
20 or through some other mechanism.

21 We're trying to rely upon three particular kinds
22 of assessments, local capacity area efforts that began. We
23 have resource adequacy requirements through the PUC and ISO
24 programs in about 2007 where regional requirements of the
25 sort that have been around much longer than that looking at

1 overall systems
2 or -- or broad zones within those systems, like the three
3 IOUs within the ISO. And then trying to bring to bear the
4 contribution the renewable integration analyses where we are
5 getting a much clearer understanding that solar and wind can
6 provide lots of energy, but their pattern of operation
7 doesn't match that of the load. And therefore we need power
8 plants that ramp up and ramp down and to provide regulation
9 services so as to be assured that system -- overall system
10 reliability is satisfied.

11 Dennis will now talk about some of the existing
12 studies and new studies.

13 MR. PETERS: Good morning, Commissioner
14 Weisenmiller, Mr. Douglas, Mr. Fletcher, Mr. Wallerstein.
15 Dennis Peters with the California ISO. And I just -- before
16 I get into talking about existing studies and their
17 relevance and what some of the further studies that we need
18 to do, just wanted to agree wholeheartedly with some of the
19 things that have been said from the dais and then some of
20 our presentations is absolutely one of the most complex
21 issues we've, you know, any of our organizations have had to
22 deal with, many variables, difficulty modeling it. And on
23 the positive side of things, I think someone suggested, you
24 know, this is the collaborative approach that we've taken is
25 -- is a model.

1 And, you know, starting back in May of 2008 with
2 the Water Board convening the NERC working group, for three
3 years now we've been meeting regularly. And out of that
4 came a smaller technical working group that consisted of
5 staff from the ISO, the California Energy Commission, and
6 the CPUC. And literally we've been meeting for the last,
7 almost three years on a weekly basis. So I think it's the
8 only way we're going to accomplish this. So we appreciate
9 the collaboration and -- and look forward to that ongoing.

10 So with that, as I said, I'm going to talk a
11 little bit about, just briefly, the existing available
12 reliability studies, talk about what their relevance is in
13 terms of accomplishing the goals that were established in AB
14 1318, and then talk about the further studies we think are
15 necessary in order to -- to accomplish the goals of AB 1318.

16 So to begin with one of the analyses that was, you
17 know, available to us is the ISO's 2011 local capacity
18 technical analysis. And I probably need to explain that a
19 little bit. You've seen it on some of the maps. I think
20 Jonathan Bishop in one of his maps showed a map of
21 California with all the OTC plants and some bubbles, and
22 those bubbles are basically location local capacity areas.
23 And -- and those ten areas are essentially areas within our
24 balancing authority area where there is constrain and
25 transmission. And there needs to be a certain minimum

1 amount of generation on in those areas in order to meet the
2 load requirements.

3 So the -- the local capacity technical analysis,
4 the 2011 analysis anyway, was completed in April of 2010.
5 I've kind of already explained what it -- what it does.
6 It's available on our website. It -- it begins and utilizes
7 the CEC's forecast and gives us an idea of, you know, what
8 our minimum generation capacities needed in each of the
9 local capacity areas including LA Basin, as well as if we
10 need to create any reliability must-run contracts to -- to
11 backstop that for liability purposes. This, as you can see,
12 it comes out in April of each year. So approximately in
13 April of this year we'll have the 2012 local capacity
14 technical analysis.

15 The next one is -- is more of a longer term look
16 at the local capacity requirements. Actually, what's
17 indicated up there is 2012 to 2014. In December we actually
18 released the 2013 through 2015 local capacity technical
19 analysis, and that is also available on the ISO's website.
20 It -- it's a longer term look. It's for informational
21 purposes.

22 And just to continue on, back in 2008, long before
23 the OTC policy was approved and then later implemented in
24 2010, the ISO did sort of a worst case analysis of the
25 impacts of once-through cooling on system reliability. That

1 too is available on our -- our website. It's more of a
2 bookend analysis. We essentially looked at essentially
3 everything retiring except for the nuclear plants and a
4 couple of combined cycle turbines that utilize once-through
5 cooling. The CEC as Mike already mentioned has, in Chapter
6 30 of the 2009 IEPR, an assessment which concluded that --
7 that the delayed retirement scenario presented no near-term
8 reliability threats.

9 And of course, as we've mentioned, the South Coast
10 Air Basin and the area that we're looking at involves two
11 balancing authority areas, the ISO as well as LADWP. And
12 the LADWP has three once-through cooling plants that have
13 been mentioned before. I just -- we mentioned here in our
14 presentation what -- what LA has available on one of their
15 websites in terms of integrated resource planning.

16 So what was the relevance of all those studies?
17 As we looked at those we had a number of concerns that --
18 that existing studies weren't adequate to answer all the
19 expectations of AB 1318. The time horizon is too short.
20 And as we mentioned we decided to look out to 2020. There's
21 really no evaluation at that time at demand-site policy
22 option. In fact, a lot of those are still being developed
23 at the time when we looked at this. There was no evaluation
24 of possible capacity value of renewable generation
25 development. There was not a comprehensive assessment of

1 transmission options. And the potential accumulated and
2 aggregated impacts on transmission reliability due to the
3 OTC generator actions to comply with the Water Board policy,
4 it hasn't been fully assessed. And -- and one of the
5 reasons for that is that there again, as I've mentioned, so
6 many variables in this whole issue. And one of them is an
7 understanding of what existing generator owners' plans are.

8 Jonathan Bishop mentioned that the generators
9 implementation plans are due to the Water Board April 1st.
10 And sometime after that the energy agencies will have access
11 to that information and be able to do some more
12 sophisticated analysis. There's just more information that
13 we don't have right now. Back in 2008, the assessment I
14 mentioned we did, we had to just assume most things off
15 because we didn't know which ones would repower, so that was
16 our worst case. And, you know, we know some will repower
17 and we will update our models in that way once we have that
18 information. And as a result of not having all of the
19 above, we really couldn't examine what the emissions
20 implications were.

21 So that moves us then to what further studies are
22 required. So far one of the things that we've started to do
23 is -- is to look at in the first quarter kind of the hybrid
24 scenario, the hybrid renewable scenario. What -- what
25 happened there to sort of explain what that means, it's --

1 it's an ISO created scenario. You might be aware that the
2 CPUC has created through the long-term procurement planning
3 proceeding for scenarios for RPS. We didn't have those
4 until later in -- in 2010. And so we -- we put together our
5 own cases that came very close to what the CPUC scenarios
6 were and came up with what's called a -- a hybrid case.
7 Basically it was a high-utilization portfolio which we
8 started with. We had also created three other cases; One
9 was a high DG case, one was a high out of state case, and
10 then the one that we're -- we're sort of looking at it 2020
11 here as far as once-through cooling is concerned is the
12 hybrid case which -- which added some -- we took the high
13 utilization case, which essentially means pretty much near
14 full utilization of the existing and planned transmission,
15 and added in some out of state and distributed generation,
16 as well as some renewable generation from imperial
17 irrigation district. The way we created those cases again
18 is available on our website at that link.

19 Further studies, again, we need to -- again look
20 at the local capacity requirements in the LA Basin. As we
21 get more information that analysis becomes more refined.

22 And finally review and reexamine our evaluation of
23 -- of the sort of the zonal impacts within our balancing
24 device, those balancing authority area. Some of you know,
25 you know, Zone SP26.

1 We do -- we did do a study based on 33 percent RPS
2 hybrid scenario in our comprehensive transmission plan, the
3 2010-2011 cycle. And that conceptual plan will be posted as
4 a draft in mid-March of this year.

5 And to continue on we -- the energy agencies
6 together completed what we call a load and resource scenario
7 analysis tool. This is more complex than maybe it seems
8 than the few words we have up there on it. Essentially it's
9 an Excel spreadsheet that was developed by -- by the three
10 agencies, utilizing it -- essentially utilize it as a tool
11 to determine what are the critical years where we see
12 reliability being an issue with regard to load and demand.

13 What -- what is included in there are the -- the
14 -- the four things, renewable scenarios, as well as the
15 hybrid case that the ISO had developed. And there are also
16 three load scenarios, so essentially we've created a matrix
17 in there. The three load scenarios are low, medium and high
18 net load scenario. And it begins with -- or CEC forecast,
19 and the load modifiers include energy efficiency demand
20 response and combined heat and power based upon the
21 California Clean Energy future goals.

22 Another task that we need to do is -- is because
23 the South Coast Air Basin includes the LADWP balancing
24 authority area, we're going to extend the -- the tool that I
25 just mentioned, the Excel tool for scenario analysis to

1 include the LA Balancing Authority area. And again, the
2 tool itself gives us scenarios and years that may require
3 further technical analysis. And that -- what I mean by that
4 are, you know, more sophisticated power flow cases, voltage
5 stability analyses, as well as dynamic stability analyses.
6 And as Mike had mentioned in his talking points, these are
7 very time intensive studies. And so we want to make sure
8 we're -- we're, you know, being as efficient as possible in
9 our work to get to the right answer. And so the scenario
10 analysis tools gives us those critical years to then go
11 forth and do the more intensive studies.

12 So this next slide, I'm not going to go through
13 all the details in that, but basically it gives you an idea
14 of what I just went through in -- in the tool, the load and
15 resource analysis tool. We've modeled the four PUC cases,
16 the ISO hybrid case, and you can see how they're modified
17 for -- to create low and mid and high net load.

18 So additional studies, we've -- we've heard
19 several times that generator owners are submitting to the
20 Water Board or required to submit to the Water Board by
21 April 1st their implementation plans. We hope to get those
22 soon after they're submitted. We know there are
23 confidentiality issues, as
24 Bishop -- Mr. Bishop explained. And soon after that we
25 would then, you know, update our load and resource analysis

1 tool to reflect those -- those plans. We would then do
2 analyses using the updated tool, and we'd also update our
3 LCR analysis.

4 So once we get things modeled accurately and there
5 -- there are a lot of modeling issues, not just information
6 but, you know, for example, in the CPUC's high DG case, as
7 you can imagine that's a difficult thing to model with
8 distributed generation down to distribution level voltages,
9 trying to model that at -- at buses in the powerful models
10 is -- is a -- a very labor intensive effort.

11 But once -- once we've found the scenarios and we
12 have all of the information model in the base cases we'll be
13 able to do our technical assessments, the power flow
14 instability studies for the CPUC renewable scenarios and --
15 and the load modifiers. What that does is then identify as
16 far as potential range of capacity additions across the
17 various scenarios.

18 Given that, then we would do an assessment of a
19 range of -- of operating profiles, and -- and that could be,
20 as we've said up there, adverse and optimistic is sort of
21 the -- the range. Adverse would be -- might be more fossil
22 plants, whereas optimistic would be more renewables, so
23 really from an emission's perspectives. And then given that
24 range we can then come up with an assessment of a range of
25 admission offsets that are consistent with what we need in

1 terms of generating capacity additions.

2 So just, you know, to summarize, we're planning to
3 develop this range of generation emissions. It's a result
4 of these various scenarios through 2020 to meet -- meet load
5 requirements, to also, you know, allow OTC mitigation, to
6 integrate renewables, and all at the same time ensuring that
7 we maintain reliability.

8 And this is some of the other bullets I've already
9 covered in the last slide, but essentially develop a range
10 of estimates of emission factors and then use those to --
11 factors to develop -- to develop the actual, you know, range
12 of emissions that -- that might be needed. And then that
13 all feeds into what Mike Tollstrup is going to talk about
14 next which is the Offset Availability Assessment.

15 So I'm going to -- unless you have questions at
16 this point, I was going to turn it over to -- or unless --
17 and I'm sorry Aram Shumavon has some comments on it.

18 MR. SHUMAVON: Yeah. Hello. Thank you. This is
19 Aram Shumavon from the Public Utilities Commission. I just
20 wanted to add on a few brief points here.

21 One thing, I think, may not have been quite clear
22 in what Dennis just said which is that -- that the tool we
23 were referencing for looking at local capacity areas is
24 actually a publicly available tool and that the inputs are
25 capable of being modified by anybody interested in doing so.

1 I -- with that -- with that out of the way, I -- I
2 want to emphasize that it only gets more complicated as we
3 look at these issues. And I just briefly wanted to touch on
4 the Public Utilities Commission's long-term procurement
5 planning process, which to some extent overlaps nicely with
6 the 2020 timeframe. It is generally a ten year forward
7 look. And out of that process we would expect authorization
8 for procurement for the PUC jurisdiction on the utilities on
9 behalf of the system when -- when necessary.

10 We've been working very closely with all of the
11 entities involved in this process, and in particular with
12 the ISO on -- on looking at renewables integration needs
13 which have the potential to kill two birds with one stone,
14 relative to some of the OTC issues that we're looking at
15 from a local area reliability perspective.

16 And I will emphasize that as part of that LTPP
17 process we do create -- we -- we have the potential to
18 create new products that -- that may need to be procured by
19 our utilities to ensure reliability to meet environmental
20 goals and hopefully to keep costs as low as possible. I
21 wanted to just very briefly emphasize that point, that --
22 that one thing to keep in mind as part of this process is
23 that we -- we do -- we need to be cognizant of the fact that
24 we -- we can, as part of this process, be picking new
25 interims and that we need to be very aware of the fact that

1 scarcity of resources in one jurisdictional entity's purview
2 has -- has the potential to affect the market solutions that
3 another entity may be -- may be looking at or working
4 towards.

5 And so as the LTPP process moves forward at the
6 same time as the AB 1318 and OTC issues we would hope that
7 parties that would be interested in or -- or believe there
8 could be a need for a new product such as ancillary service,
9 inertia, something along those lines that might come out as
10 a part of these powerful studies and reliability studies
11 that we would hope to be able to create those products
12 inside our LTPP process. It happens on a two-year cycle.
13 And it is a derivative. So if it doesn't work for syncing
14 up our -- our processes this time around there -- there is -
15 - there will be an opportunity in the not too distant future
16 to -- to reexamine that issue and hopefully ensure the
17 lowest cost solution to some of these problems.

18 MR. TOLLSTRUP: So this leads us back to the --
19 the offset portion of the discussion. Not to take away from
20 a lot of the technical work that's being done by the energy
21 agencies to get the needs assessment done, but I think in a
22 lot of respects, the -- the next part of the -- the 1318
23 report is probably the most complicated. And -- and it's
24 because there's really no clear path forward. I mean, I
25 think that the district has looked at this issue and -- and

1 hasn't identified a way around this yet. There's a lot of
2 people that have looked at this -- whoops -- and it -- it --
3 it's going to require a lot of work and a lot of thinking
4 outside of the box, so to speak, to try to find -- identify
5 concepts that we can move forward with that may help.

6 Obviously the outcome of the study is going to
7 impact, you know, the overall scope and breadth of -- of the
8 options that we're going to need to identify. I mean, the
9 more megawatts that we need, you know, the -- the more
10 options we're going to have to have in identifying what the
11 recommendations going forward are going to be.

12 What we had hoped to do in the process was look at
13 putting together like a -- a working group with the
14 agencies, including the district and some of the
15 stakeholders, and see if we can walk through and try to
16 identify what some of the options were. You know, one of
17 the options -- one of the -- the recommendations that we
18 have is perhaps is start with the recommendations that came
19 out of the South Coast NSR working group a couple of years
20 ago as possibly a starting point and going through some of
21 those bullets to see if some that makes sense or there's
22 some way of moving that forward and on.

23 What we would do is or what we'd propose to do is
24 as we go through and identify, you know, potential concepts,
25 basically do an analysis of each for legal, environmental,

1 administrative, you know, timing issues -- timing is a big
2 issue here -- and what it would provide, and basically the
3 quantity of offsets, you know, ranking those options to see
4 what -- what makes sense, what to pursue first and again,
5 you know, reconciling those recommendations along with the
6 outcome of the -- the study would be an important key effort
7 in that. And after going through that, then working with
8 the South Coast in implementing whatever recommendations go
9 forward and on in the final report.

10 The potential concepts really fall into three
11 buckets, you know, district level options, things that the
12 district could do either through amending rules, policies,
13 procedures, federal actions, working with EPA to see if
14 there's something that can be done at the federal level to
15 provide some form of relief or figure out a way that we can
16 work out a program for, you know, moving some of the power
17 plants forward and then, obviously, state level actions,
18 what we can do at the state level that would allow the
19 district to perceive forward.

20 One of the biggest issues, and I specifically call
21 it out here that we've had, that the district has had and
22 other districts as well, is SB 288. SB 288 basically
23 prevents districts from modifying or amending their NSR
24 rules in any way that would -- that would result in a
25 weakening of that rule. The 288 that's otherwise known as

1 Protect California Air Act of 2003, the legislature put this
2 bill in place because of concerns at the time over some of
3 the federal NSR reforms that they thought might undermine
4 some of our existing programs in the state. And again,
5 generally what it does is it prohibits the districts from
6 weakening their NSR rules in any way.

7 It's very specific about what it requires and
8 there are certain things that are line by line. In other
9 words for a particular source there can no -- can be no
10 weakening of the requirements for BACT. You can't redefine
11 the definition modification, can't mess with the calculation
12 methods or change the thresholds.

13 There is a little bit of more flexibility on
14 offsets. Offsets can be done on a programmatic basis. So
15 overall their program has to result in the same mitigation
16 overall. It doesn't have to be on a source by source basis.
17 But if a source does get relief from the offset it has to be
18 picked up somewhere else. The district would have to find
19 that mitigation somewhere else in the process.

20 So this is one example that is something we could
21 look at. You know, I don't know whether there's some way of
22 looking at 288 and still keeping the air quality protections
23 that it provides while providing some more flexibility of
24 the district. But again it goes back to, you know, I don't
25 think we have a lot of recommendations at this point in

1 time. We're going to work with those to see what we can
2 identify and how we work forward from this process, and
3 that's part of the public process that we'd like to have.

4 I think, again, having a working group to walk
5 through some of these concepts and discuss them in detail,
6 you know, making sure that folks are onboard and
7 understanding what some of the issues are here in the South
8 Coast Basin, I -- I think that would be helpful in
9 identifying the work as we go forward. It's work that
10 really does need to start now instead of waiting until we
11 get the outcome from the needs assessment. Obviously when
12 we get that kind of product on the -- the needs assessment
13 part of that, those two have to circle back and sync up at
14 that point in time, that at least some of the concepts we
15 can get out and get fully discussed and vetted and get some
16 of the work done ahead of time, you know, starting early in
17 the process.

18 We do have a web page that you can go to, to get
19 additional information we're posting. The work plan is
20 there. And soon as the results of the studies come out
21 we'll be posting information. We will make, you know,
22 certainly make that work available to the public and plan to
23 have a public meetings all through out the process so that
24 people have plenty of input along the way and understand
25 where -- where things are heading and what we're thinking

1 and, more importantly, get input from folks, as well. And
2 certainly when we get to the -- the draft final report we'll
3 be sharing that as well for -- for comments.

4 So really one of the things we're hoping for today
5 is we are looking for input on the draft work plan we've put
6 out there. We have initiated some of the studies but
7 there's a lot of work that has yet to be started and we're,
8 you know, we are waiting for those comments back before we
9 get some of that additional work done. And we hope to get
10 the -- the we're hoping to get, you know, this -- the public
11 process started through the workshop that we already in
12 November through the workshop today and through meetings
13 into the future.

14 So with that -- that wraps up our presentation.
15 We'd be more than happy to answer any questions at this
16 point in time. COMMISSIONER WEISENMILLER: Thank -
17 - thank you.

18 MR. WALLERSTEIN: Mr. Turner, I was wondering if I
19 could just make a few comments. In the course of the public
20 work shops that we've conducted over the last several years,
21 we've had two reoccurring questions that have been asked of
22 us that the comprehensive study you're putting together, I
23 believe, answer -- will answer. But I think it's important
24 that it be very specific in answering these two questions.

25 The -- the first question you hear from the

1 general public is can't we just do all renewables? And I
2 think there needs to be a clearly articulated answer to
3 that.

4 The second, which the staff has outlined as part
5 of the study is how much of the power generation has to come
6 within the South Coast region? But along with that, it
7 would be important to articulate whether or not it matters
8 where in the region.

9 And so from a stability standpoint and reliability
10 standpoint, there's a question of can you just put it all in
11 the coastal zone or can you put it all in the Inland Empire
12 or do you really need to mix?

13 There was several other points that I'd -- that
14 I'd like to just quickly mention. And for us one of the
15 critical needs is to understand beyond the repowering at
16 what specific year do we project we might need a new fossil
17 fuel powered plant. And in doing that, it's important to
18 obviously take into consideration the permitting and
19 construction schedules. And I think this is a significance
20 from the standpoint of if there was to be a need to somehow
21 change either state or federal law we know when that window
22 is. And for example in state law, we'd want to go through a
23 normal legislative session without having to do an urgency
24 measure and so on. So knowing that timing would be very
25 important.

1 I also wanted to mention that as part of South
2 Coast priority projects to the upcoming year, we are
3 reinitiating our new source review work group to look at
4 mid- and long-term changes to overall new source review that
5 may be necessary. And I leaned over to Bob to say it would
6 be good to really kind of fuse the efforts that Mike was
7 describing along with what we're trying to put together.
8 Because we recognize at some point, we're just simply not
9 going to have offsets. And it isn't just a power plant
10 issue, it's a general issue for us.

11 And so if there's a need to amend federal law then
12 we need to be working on that now so that if there is an
13 occasion, which happens infrequently when the federal Clean
14 Air Act is opened up, that the region is prepared to
15 present, you know, hopefully a consensus proposal. And in
16 this workgroup that we're going to put together we're going
17 to have a broad cross section of stakeholders including
18 those that have been critical of our offset reserve, as well
19 as the regulated community.

20 Lastly, I'm just going to briefly say something
21 about SB 288 because it's a sore point for those of us at
22 South Coast as the CARB staff knows. I personally, along
23 with my counsel Barbara Barrett who's sitting over there,
24 negotiated SB 288 language. The original version of the
25 bill specifically had offsets in the operable language. We

1 told the authors and the sponsor of legislation we could not
2 support such a bill. That language was struck for that very
3 reason.

4 Now after the fact we're told by some that offsets
5 are part of SB 288 which now is necessitating potentially a
6 need to reopen SB288 and modify it. Now it's a valuable
7 lesson for me personally. It's not enough to remove
8 language from a bill. You have to insert language that says
9 specifically offsets are not included. But the -- those
10 negotiating the bill had a very clear understanding of the
11 discussion. And my recollection and my council's
12 recollection is also supported by the other air pollution
13 control officers that were involved in the negotiation. So
14 it's unfortunate but we have to talk about amending SB 288
15 at this point for these reasons, but it apparently is where
16 we're at.

17 COMMISSIONER WEISENMILLER: Thank you for those
18 comments. I think certainly the way I would look at it, I
19 think -- I think I speak for all the agencies, but for now
20 it's the Energy Commission, is that the purpose of the
21 study, you're basically the client, you, the audience down
22 here in South Coast, to get answers back. Now as we know
23 these are very complicated issues. And we do have the tool.
24 I think next we're going to provide some sort of Rubiks cube
25 where you can try to align the -- the various complicated

1 issues and try to come up with a solution. But we certainly
2 want to make sure as we march forward that what we come out
3 with is indeed useful to you and the decision makers down
4 here.

5 MR. WALLERSTEIN: Mr. Chairman, I thank you for
6 that. Because it -- we like being thought of as the client
7 here, along with the general public here in South Coast.
8 But of course, what this all traces back to is the initial
9 lawsuit that mostly referenced on our 1315, 1309.1
10 adoptions. And it was, as Mohsen indicated, at the end of
11 the day it was a CEQA issue. And in that case, I don't know
12 if you've had a chance to look at the judge's decision, the
13 judge asked us to analyze why everything couldn't basically
14 be renewable, asked us to analyze the environmental impacts
15 of the transmission corridor. And at that point in time we
16 said, well, wait a second, it is our colleagues at Energy
17 Commission at the PUC and the CAISO that are really the
18 energy experts for the state. We're just the little old air
19 quality district, and that the scope of the analysis really,
20 that the judge was asking, was beyond our expertise.

21 And it is in large part for that reason that when
22 we just readopted 1315 we did not include the ability of
23 power plants, new power plants to call upon the district's
24 offset reserve.

25 COMMISSIONER WEISENMILLER: I was going to say in

1 terms of -- go ahead. No.

2 COMMISSIONER DOUGLAS: I was just going to say on
3 that point and in response to Barry, I have read the judge's
4 decision and I think the questions asked there are important
5 questions. They -- they very much parallel the questions in
6 -- in 1318 itself. And the questions that you asked that we
7 also here whenever we go out to site a power plant, you
8 know, why -- why this plant, why here, does it really have
9 to be specifically, precisely here, well, how many plants
10 here do we really need. And of course, by a statute we are
11 not allowed to deny a project on the basis of need, but --
12 but it's a question that surfaces immediately. And so I
13 think one of the
14 important -- is raised immediately particularly by
15 interveners and members of the public.

16 So it's a -- it's -- it's a really important
17 opportunity to address these issues here and -- and,
18 obviously, it's an important question to the public and it's
19 important to you, given -- given that there are pretty
20 clearly is a need but is a -- it is an important need for
21 new generation or repowers or both in the South Coast Basin.

22 But we need to put our fingers on how much so we
23 can get to the second part of the question which you and
24 Mike talked about some of the like images really
25 complicated. So -- so once we identify the need, what do we

1 do about it? And -- and obviously we'll want to work very
2 closely with you and ARB in -- in addressing that.

3 MR. WALLERSTEIN: If I could, I think there's
4 another interesting policy aspect for this that has been
5 raised to us and in part is an environmental injustice
6 issue, and that is that if under the current framework in
7 essence, we're moving to where you can only put a power
8 plant in a place that's a repower. That means that in that
9 particular location the community will experience less air
10 pollution because we'll be putting in new more efficient
11 equipment that will produce less emissions per megawatt
12 generated, although because it's new it may run more than a
13 40-year-old or 50-year-old power plant. But then it begs
14 the question of if offsets were widely available are there
15 other locations that would be suitable from a reliability
16 standpoint that are further away from communities that may
17 be impacted, not only by that power plant but by other
18 sources that from an environmental justice or comprehensive
19 air pollution control perspective would in fact be better
20 locations because the power plants are away from people?

21 And so I hope in the course of your study that the
22 data will be able to shed some light on what are the
23 appropriate policies in regards to that issue, as well.

24 COMMISSIONER DOUGLAS: Thank you. And that also
25 brings up what Aram had mentioned, which is that there is

1 definitely a market aspect, as well, and a market in which
2 only repowers are possible if you're in a different market,
3 in a market in which different sites and different companies
4 can come in. So -- so there are -- there are a lot of
5 implications and -- and it's -- it's more illuminating the
6 choices and the options than it is particularly settling on
7 one. But at least if we're able to set out what these
8 different choices and options look like we'll be able to
9 take the next step which is generating the -- the consensus
10 and the will to -- to move towards the scenario that we need
11 to get to.

12 MR. WALLERSTEIN: I was also going to note we --
13 we had an earlier workshop where the staff had done a need
14 assessment paper. We had comments. And many of the
15 comments were sort of, in some respects, knee jerk to the
16 term need assessment. And certainly that was an issue that
17 senate had made, the Rules Committee. And I -- I think
18 Energy Commission used to do need assessment. A lot of
19 people had difficulties with that. We're obviously not
20 trying to recreate that or move back to the past, but move
21 forward to address the issues now.

22 And certainly what I observed is in our site in
23 cases where we don't look at need per say, if from the CEQA
24 analysis we determine that there are significant unmitigable
25 impacts, then at that point we have to look at alternatives

1 to that project, including a no project alternative. And
2 so, in a way, I think the amenities facilities, you know,
3 have pretty significant impacts. But you know, ultimately
4 we do have to address those issues.

5 I think the -- the other sort of message to people
6 coming out of that workshop was that obviously the new
7 governor has a very high priority on -- on energy demands,
8 and a very high priority on what he wants to see occur
9 there. And certainly we're in a process of repositioning
10 our IEPR to better reflect his priorities, and certainly
11 those priorities will ripple into study design here. I
12 mean, that much is -- is pretty clear. And we haven't
13 issued the ruling yet at this point but, for example, when
14 you look at his plan there is -- there's certainly an
15 emphasis on storage. So in our scenario development, we're
16 going to look at storage. And similarly there is a very
17 strong emphasis on distributed generation.

18 And so again, we have to, as part of the study
19 plan, look at sort of a very aggressive distributed
20 generation plan. And certainly for, you know, our technical
21 experts to the extent that there's not information to
22 really assess some of that then we need, as part of this
23 IEPR, to develop exactly what information we need, how to do
24 research and development to address that information.

25 But anyway, I can say from my conversations with

1 the governor he's very serious about his priorities in this
2 area, and certainly we're going to reflect those in this
3 assessment.

4 MR. WALLERSTEIN: If I could just quickly, Mr.
5 Chairman, first let me say that in the discussions I've had
6 with my governing board, especially during the time in which
7 1318 was proposed, while we understand there is a past
8 history to when the CEC did a needs assessment as part of
9 the power plant licensing, my board generally conceptually -
10 - and I know there's others in the audience that starts
11 shaking in their seats -- is supportive of you doing that.
12 We -- we frankly don't want power plants unless they're
13 really needed. We're not desiring to be the power plant
14 capital of the state or of the world, in a sense.

15 Secondly, I should probably mention that another
16 priority project that my board has approved in the last two
17 weeks is for us to move forward this year and see if we can
18 initiate five megawatts of renewable distributed generation
19 with storage. And the reason for that is we have a third
20 initiative this year which is to move forward with the
21 demonstration program to electrify goods movement,
22 transport, whether it be by fixed rail or maybe even by
23 trucks. And so we want to start to look at ways to generate
24 that electricity needed for such a system for renewables.

25 COMMISSIONER DOUGLAS: Just very quickly to follow

1 up on that, I think that this analysis will look at need in
2 a context in which it is most appropriately looked at, which
3 is at a larger scale, more systemic analysis and factoring
4 in policy goals such as efficiency, renewable and
5 distributed generation, storage, and -- and on other side,
6 electrification and, you know, balancing and reliability.

7 So I think this will give us ranges in which we
8 can -- we can assess where we are. Is electrification going
9 on as quickly as we had anticipated? Is distributed
10 generation, are those goals being met as quickly as we had
11 anticipated? So it will give us range in here in which we
12 can sort of locate progress and -- and know year by year
13 whether we're low or high and be able to adjust.

14 COMMISSIONER WEISENMILLER: I -- I think the
15 other, in terms of the other workshop and in terms of things
16 that are emerging, is that it seemed like when these study
17 plans were being developed last summer, you know, that there
18 was a certain vision of when the OTC compliance balance
19 would come in and a variety of things we ramped up. And in
20 fact, things have basically slid back. So one of the things
21 I've talked to President Peevey about and he agrees is that
22 it's a good time to look at the Energy Commission IEPR
23 process, the PUC, LADWP process and certainly the ISO
24 process is in trying to get things back we synced up. And
25 as part of that we may see this process taking somewhat

1 longer, you know, but hopefully we can sort of move things
2 along more simply. At the same time we can make some
3 progress by trying to sync up across the agencies analysis
4 we're doing. And I think that also gives the energy
5 commissioner a chance to focus somewhat more on the
6 renewable part of this story and in the near term and try to
7 pull together the building blocks for this analysis,
8 somewhat later than we were hoping say, last summer.

9 After I -- I think at that point I was going to
10 ask V. John White to speak before lunch.

11 MR. WHITE: Thank you, Mr. Chairman, Members.
12 It's nice to be back in Diamond Bar. I had the opportunity
13 to testify on the original rule change that was proposed and
14 unfortunately, it's taken some out of those recommendations
15 have been followed and -- but we're glad to see the
16 collegial working relationship that really is required to
17 get answers to these questions. And -- and it's going to
18 take more time, it's going to take more hard work, and it's
19 going to take maybe some rethinking and admitting of
20 mistakes, starting with the mistake that the legislature
21 made when they eliminated the need assessment function of
22 the CEC. I think in retrospect that was part of the
23 deregulation misadventure where we envisioned that we didn't
24 need to have an independent forecast of need because the
25 market. We could say remember all that, that was also how

1 we got into some of the problems with the power plants.

2 I -- I really thank the staff of all the agencies
3 for working on this. My only regret is that we don't have a
4 stronger PUC presence here, because in the end I think the
5 PUC is a vital part of this enterprise. Their policies, in
6 fact, have contributed to the confusion. And if you go to
7 the PUC, as we often do, there's a significant number of
8 proceedings that are relevant here that don't have a -- I've
9 been spending time on wildlife issues so they don't have a
10 habitat connectivity, okay, between of say the integrated
11 energy policy report and the long-term procurement plans of
12 utilities. So that's one area where I hope your study will
13 -- will engage.

14 A couple of thoughts and observations in areas for
15 adding to your work plan, which I think on the whole is a
16 good effort, and -- and we have to recognize this is a
17 dynamic situation. Since we've been talking about this the
18 economy has flattened and demand has fallen and, you know,
19 that's -- that's the bad news. The good news is we got some
20 breathing room on load grids. So we aren't facing a repeat
21 of the earlier part of the -- the decade and we can take
22 some time to think this through and get it right.

23 I -- I also would make note of the South Coast
24 plans that have been discussed for the 2030 and after
25 period, a very interesting set of PowerPoints, Barry, that

1 you put together, looking at that post 2030 period where
2 we're talking about really trying to limit and phase out
3 combustion within the basin. That's where we're going to
4 have to head.

5 And so I think it might be useful to think about
6 adding a longer term planning horizon. I think this is
7 something, Barry, you mentioned, to this work effort. Even
8 though the focus is on what do we need to do short term and
9 what do we need and the next power plant needed, we also
10 need to be thinking how this is all going to fit together
11 with those long-term goals.

12 And I think one of the challenges that we face
13 here is that we need capacity to keep the lights on and to
14 power the economy. But having the capacity available isn't
15 where the emissions problem comes. The problem comes
16 because the people that own the capacity want to run the
17 capacity to make money. Okay. So the -- the -- the dynamic
18 we may have to face is we want to have all the capacity that
19 we need with a cushion, but we don't want that capacity to
20 run any more than it has to because it's going to be running
21 on the hottest days of the year. And so that may mean that
22 -- or hottest and -- and worst air days.

23 So -- so as we think about this policy we need to
24 think not just about having enough capacity online but how
25 to operate in such a way as to minimize the number of hours

1 that it runs. And that will require different incentives
2 for the generators than the ones they have now. Okay. So
3 that's why the PUC needs to be here because they have the
4 money for a lot of this.

5 Now the second area where I think you have some
6 opportunity for leverage that you need to seize and use is
7 for the AQMD and the CEC together to bring the ISO,
8 California Independent System Operator and the Los Angeles
9 Department of Water and Power together and get them, despite
10 their reticence, they have religious differences with
11 respect to the market design that have gotten in the way of
12 good communication, those religious differences needs to be
13 respected and -- and understood in terms of how we go
14 forward, but there is no reason not to have a seamless
15 agreement adopted between the ISO and DWP that would allow
16 the system to take advantage of itself in an engineering and
17 a technical way. This is purely a political problem and
18 there isn't any engineering or scientific reason it can't be
19 done.

20 But if we could begin to let the system use its
21 whole self the Castaic storage plant up at -- which needs to
22 be modernized, I understand there's a Unit 7 modernization
23 that's relatively inexpensive that would make a big
24 difference in providing regulation on a statewide basis.
25 Okay. That seamless agreement I think requires some

1 delicate diplomacy. And when I say leverage, I'm thinking
2 that both DWP and the people operating in the ISO have a
3 need for favorable consideration by both of your agencies,
4 and that getting them to the table and getting -- maybe
5 starting as part of your work plan to do a study of what the
6 costs and benefits would be of operating the system
7 differently and how much generation we could do without if,
8 in fact, we were able to share
9 informally -- now this has got to be done carefully because
10 nobody wants to give up control of their systems or anything
11 like that. But it's -- it's -- it's -- engineering wise
12 it's not hard.

13 The other thing is there are two pump storage
14 projects that are -- one has been approved by FERC at Eagle
15 Mountain. Another -- excuse me, at -- excuse me, Lake
16 Elsinore has been approved by FERC. The other project is at
17 Eagle Mountain. Probably you don't need both of them, but
18 one or the other would be a very substantial addition to the
19 flexibility that you would have to operate the system.

20 And -- and I think being able to share is part of
21 the module we're going to have to get to when we start
22 trying to integrate renewals. Because this problem of the
23 different balancing areas and the balkanization of the grid
24 is very different than in Europe where they have it unified
25 grid. We need to move towards a system, again, probably

1 virtually and carefully so that we can share and integrate
2 these -- these renewable issues together. This is something
3 that is being talked about throughout the West, but we can
4 start right here at home.

5 We shouldn't forget our friends in Imperial, which
6 also has an -- have an opportunity to participate, and there
7 needs to be Edison, and they have some business that they
8 should be doing. Edison has a line that they can build that
9 would give better access to Imperial resources. All of
10 those projects together with the projects that you have
11 already approved in the renewable fast track can provide a
12 filling in the gaps on this -- on this question.

13 I would point out for the record that all
14 renewables are not the same with regard to capacity. Solar
15 thermal, which we're going hopefully get a couple thousand
16 megawatts worth has inertial capacity that is just like a
17 steam generating plant. And I think the ISO tends to under
18 value the wind resource as it doesn't provide much capacity
19 but it does provide some. And when you think of them
20 together and think about all the new transmission that we're
21 going to bring online, we're going to have the capacity to
22 manage the system differently.

23 But also, another area that is part of a
24 distributed generation discussion that needs some attention
25 is the opportunity to use fuel cells for local reliability,

1 provide combined heat and power with zero emissions, and in
2 some cases with landfill gas or waste water treatment gas,
3 using renewable fuel. Dr. Scott Samuelson down at UC Irvine
4 has done some very important work valuing these
5 technologies. It should feed right into the PUC where
6 there's no reason we couldn't have a pilot feed and tariff
7 for -- for fuel cells to provide the money that's necessary
8 to get these in the ground, along with our PV resources.

9 So I know, both South Coast and Energy Commission
10 has done a lot of work in supporting this area, but these
11 technologies are now to the point where we can start to fit
12 them in. And particularly to get to Barry's earlier point
13 about where we're going to need the systems, we may want to
14 give some locational value to certain kinds of technologies
15 in certain places, pay them more for being there so that we
16 can have them available.

17 Lastly, I would say that the -- the resource
18 adequacy question and the way the PUC treats resource
19 adequacy is a vital part of this discussion. I -- I -- and
20 -- and one of the things we got to get the PUC to do is get
21 its head out of all the individual silos that they're in and
22 -- and really look at how resource adequacy and what they
23 tell the utilities to do on that side affects the long-term
24 procurement plan and affects the work that you're doing.

25 So we'd be eager to help. We have some folks in

1 our organization, Rich Ferguson who helped with the Ready
2 Project and Jim Caldwell who is on our board and formally
3 at DWP, are resources we'd like to make available to you to
4 help with the work. And I thank you for giving me the
5 opportunity to testify today on behalf of the Center for
6 Energy Efficiency and Renewable Technologies. Thank you.

7 COMMISSIONER WEISENMILLER: Yeah. Thanks a lot
8 for coming down, John, and for giving the presentation. I
9 think certainly one of the most interesting aspects of this
10 project, aside from the complexity, is the hope that when
11 one looks at the needs for Edison and then looks at the
12 needs for LADWP and combines them that the sum of that
13 combination is not simply additive, but there are some
14 synergies there that can get us to a better place with less
15 investment than simply each doing it's own energy
16 independent role.

17 MR. WHITE: But it's a very difficult diplomatic
18 arrangement that's required. And so that's why I -- I
19 mentioned leverage but, of course, you wouldn't want to
20 start with that. But the point is that there's really good
21 reason now to encourage that kind of participation and
22 collaboration. Because it's -- it's more expensive if we
23 don't do it. And it will cost more in public health if we
24 don't. Thank you for having me.

25 COMMISSIONER WEISENMILLER: Thanks again.

1 MS. KOROSEC: Mr. Chairman, I think we're about
2 ready for our lunch break. We do have full panels this
3 afternoon, so I would like to suggest that people be try to
4 be back by one o'clock. There is a cafeteria on site here
5 that -- that I understand has -- has decent food. So I
6 think that would -- that would be the suggestion but there
7 are things that are also available up and down Golden
8 Springs Boulevard if people do want to leave the building.

9 COMMISSIONER WEISENMILLER: Thanks.

10 (Off the Record From 12:16 p.m., Until 1:13 p.m.)

11 MR. JASKE: Good afternoon. For the record, Mike
12 Jaske of the Energy Commission staff. This afternoon we
13 have three things on our agenda, discussion with two panels,
14 and then comments from stakeholders, both in the room and to
15 the extent there are any through WebEx.

16 So our first panel this afternoon is organized
17 from the perspective of power plant developers, load-serving
18 entities whether utilities or -- or energy service
19 providers. And I've asked the panelists to make their
20 comments, of course, through the frame of reference of the
21 AB 1318 work plan report but, of course, their own
22 particular emphasis coming from their perspective.

23 I've talked to the panelists and we're going to go
24 through them in the order that they're printed in the agenda
25 just so that you and the dais and those in the room can

1 remember who's talking if you're not familiar with all these
2 people. And to the extent that we have, you know, some
3 interaction between the panelists and each other or with the
4 -- with the dais, that's fine. We only need to be cognizant
5 of the fact that we need to move on to the second panel and
6 then still have some time for public comment. So with that,
7 we're going to start with AES Stephen O'Kane.

8 MR. O'KANE: Good afternoon. As he's mentioned,
9 my name is Stephen O'Kane and I'm the Director of Permitting
10 and Regulatory Affairs for the AES Southland Repower Team.
11 AES Southland really consists of three, natural gas fire-
12 generating plants is in the South Coast Air Basin
13 representing approximately 4,000 megawatts of thermal
14 generation. These are at Redondo Beach, Huntington Beach
15 and Alamitos. We have a couple other assets within the
16 basin, one which has been permanently decommissioned and
17 almost fully demolished today, and one small facility
18 currently permitted that will hopefully become some sort of
19 a research and technology demonstration facility.

20 I'd like to thank the Committee for inviting me to
21 participate in this panel. The study being conducted as
22 part of AB 1318 really couldn't be more relevant to my
23 team's job today. With the promulgation of the State Water
24 Resources Control Board 1316(b) -- 316(b), once-through
25 cooling regulation, we are in the process of developing an

1 entirely new business model for AES in California. Our
2 repowering team has been assembled to identify and develop
3 the best options for natural gas fired generation businesses
4 in California, not just as individual power plants but as
5 part of AES California's vision for competing in an
6 environmentally regulated constrained business environment
7 and evolving power market.

8 Our thermal generation AES Southland is merely a
9 subset of the AES California, a diversified generation
10 business that includes wind, solar and our thermal power
11 generation. The investments we are making to diversify the
12 mix of generation and deliver it to Californians reflects
13 what the state is unequivocally said they want, secure,
14 affordable, low emission and renewable energy.

15 It's a great time to be a part of the evolution of
16 the power industry in California. Consistent with our
17 history, California is leading the world with energy
18 environmental policy and regulation which is changing the
19 way we think about the business of generation and delivering
20 power and forcing a new paradigm for the industry. A
21 convergence of policy and regulation aimed to protect our
22 water, air, climate and energy security has created
23 opportunities for the development of new technologies, new
24 types of generation and is accelerating the retirement of
25 older, less efficient plants.

1 New markets in renewable energy and carbon will
2 change the generation mix in California, just as the
3 existing emission reduction credit market has already
4 changed the way all industries do business in the South
5 Coast Air Basins while at the same time improving our
6 quality. Carbon, renewable and the ERC markets all create
7 opportunity and forced change. And AES California is
8 investing in these opportunities. As the state moves
9 towards a 33 percent renewable energy standard we are
10 developing and building wind and solar plants to meet that
11 demand. At the same time we are planning to help integrate
12 those intermittent renewable resources into the California
13 market by developing flexible highly efficient generation in
14 the most critical areas within the South Coast Air Basin and
15 retire our older assets.

16 Critical to our business plan and vision is a
17 clear understanding of the reliability needs of the Southern
18 California electrical system and the energy market demands.
19 In an effort very much similar to that mandated by AB 1318,
20 AES has embarked on a transmission system and power market
21 analysis. As a result of our work to date we see a new
22 market emerging that will place a high value on services as
23 opposed to just energy. Flexible, low prolonged generation
24 without a contingency reserves, ramp speed and duration, and
25 start stock capabilities are what we see the market needs.

1 We also believe there is adequate capacity in the
2 South Coast emission reduction credit market to enable the
3 changeover existing generation fleet in the Basin. The
4 regulatory path provided by the South Coast Air Quality
5 management district's rule 1304 and a retirement of older,
6 less efficient generation in the South Coast Air Basin is
7 what will enable the development of new sources.

8 Now I should make a clarifying point here, I -- I
9 have not made an assessment of the South Coast's own
10 internal ERC market bank which will be critical to
11 implementing Rule 1304. Combined with other environmental
12 regulation it is actually a tight ERC market that is helping
13 to push the evolution of the power generation industry and
14 we should be extremely wary of any attempt to weaken the
15 power of that market, especially when we consider how
16 California and the ARB have essentially endorsed this market
17 tool in the their drive to reduce emission reductions
18 through their recently adopted and approved AB 32.

19 From this perspective we believe the information
20 provided in the work plan presented is based on old
21 assumptions which no longer apply. The penetration of
22 renewables into California's energy market and the response
23 to the industry and related markets to invest in renewables,
24 demand management, distributed energy and transmission has
25 already affected the market demand for thermal generation

1 within the South Coast Air Basin.

2 The changes to energy market that we've already
3 witnessed are the result of policies that apply equally to
4 all participants and provide certainty to investors.
5 Special treatment of one segment of the ERC market or power
6 generation industry will hamper the progress we've already
7 made. California's witnessed the power of capitalism
8 affecting change and should resist any attempt to socialize
9 the ERC and power generation markets.

10 If indeed this AB 1318 study finds that there is a
11 critical need for incremental generation -- we should be
12 careful of the word additional generation as it's been
13 spoken about today -- if there is indeed a critical need for
14 incremental generation that can not be developed through
15 existing rules and available industries then a just solution
16 should be -- should be sought to help alleviate that need
17 which does not undermine the value of any existing market
18 participant, whether that market participant is an ERC
19 holder or an existing generator.

20 Attempts to, quote, "fix" the ERC market for new
21 developers by simply making more available or providing
22 special exemptions to new participants runs the risk of
23 undermining the entire ESR -- EERC market, thereby weakening
24 one of the best tools the South Coast Air Quality Management
25 District has to reduce emissions from all industries. And

1 of course, as has been alluded to earlier, any weakening of
2 rules would probably be illegal under existing -- under
3 existing law. Any attempts to undermine that market also
4 manipulates the energy market by destroying value of
5 existing businesses, and it also destroys the value of ERC's
6 already held by market participants.

7 AES was cautiously optimistic that study required
8 under AB 1318 would come to some definitive answers
9 regarding the physical needs of the electrical system in
10 South Coast. Now it was an interesting decision to have ARB
11 lead this study and -- and have the South Coast essentially
12 relegated to a commenter's role and not a full participant.
13 At least the writing did seem to understand the electrical
14 power market transmission system and power plant siting are
15 into a part of the study.

16 However, AES is not as optimistic now that the
17 first document is released. The work plan produced seems to
18 be written with a number of predetermined ideas, conclusions
19 and recommendations which is a dangerous way to start any
20 study. It also ventures into territory that is completely
21 outside the mandate presented in AB 1318. A specific
22 concern that we have is the lack of consideration or enough
23 consideration of developed and integrated renewable
24 generation capacity and the foregone conclusion regarding
25 the availability of ERCs and permit-ability of new power

1 plants.

2 Lastly, the idea that this study should even try
3 to address market competition is completely outside the
4 mandate of AB 1318. AB 1318 is very specific in requiring a
5 physical assessment of the electrical system needs and the
6 restrictions, if any, in requiring the physical assessment
7 of the -- by -- and the needs, if any, presented by the ERC
8 market in meeting those needs. Market competition is
9 outside the scope of this committee's mandate and should be
10 best left to the CPUC.

11 Now without giving out much else, before we get
12 into probably a heated panel discussion question and answer,
13 I'd like to move -- hand it over to my esteemed colleagues
14 and we can move on.

15 MR. KOSTRZEWA: Good afternoon. My name is Larry
16 Kostrzewa. I'm managing director of commercial management
17 for Edison Emission Energy. And I think as -- as Stephen
18 introduced, we're going to start some controversy.

19 It is of critical importance that a means is found
20 to enable the replacement of aging, inefficient and
21 inflexible once-through cooled power plants that are in many
22 cases older than me with new efficient flexible gas fueled
23 technology that's well suited to be a reliability reserve to
24 vamp up California's growing intermittent renewable
25 electricity resources.

1 Edison Emission Energy appreciates the efforts of
2 ARB, CEC, CPUC, CAL ISO and South Coast through this study
3 to find a way to resolve the apparent policy conflicts that
4 currently impede those necessary replacements. The draft
5 work plan is a sound road map toward identifying policy
6 solutions.

7 I'd like to provide a few thoughts for your
8 consideration.

9 Although AB 1318 lists several state and federal
10 laws and regulations that must be considered in this
11 evaluation of the electrical system, reliability needs of
12 the South Coast Air Basin and its goal to recommend the most
13 effective and efficient means of meeting those needs, we
14 believe that it's important for the agencies to also
15 recognize that your recommendations will be implemented in
16 the context of California's competitive wholesale power
17 market.

18 Market structure has six implications for this
19 study. First, recommendations that can be effective through
20 market mechanisms will be of more practical value than those
21 that depend on command and control authority that may not be
22 present in competitive markets.

23 Second, recommendations that may be technically
24 preferred but are commercially infeasible should be --
25 should be avoided. For example, developers may opt out if

1 the power plant permitting and contracting process is
2 characterized by cost and risk that is significantly out of
3 line with the potential reward. Edison Emissions Walnut
4 Creek Project, for example, will have taken eight years to
5 develop and build at best and have gone to extraordinary
6 lengths to offset emissions.

7 Third, a technical solution that recommends just
8 the right amount of generation in the basin to meet resource
9 adequacy needs creates a commercial problem since some
10 surplus generation above the just right amount is necessary
11 to ensure competitive market pricing at transmission
12 constrained area because demand elasticity for electricity
13 is quite low.

14 Fourth, a competitive market also requires that a
15 district and CEC issue permits for more power plants than
16 are needed or will actually be built, so that when the CPUC
17 determines that there's a need for new generation there will
18 be more than one viable project competing to meet that need.

19 Fifth, recommendations of generation technology or
20 location that are overly prescriptive could interfere with
21 competitive outcomes and convey pricing power to those that
22 are recommended.

23 Lastly, although new more efficient generation may
24 not always directly result in retirement of aging
25 inefficient generation, market forces acting through CAL

1 ISO's security constrained economic dispatching generation
2 are likely to have that same result indirectly. More
3 efficient generation will displace production from one or
4 several less efficient power plants since the physics of
5 electricity assure us that supply can not exceed demand --
6 exceed what customers demand even for a second.

7 Getting to some specifics of the work plan, on
8 pages 31 and 67 of the draft work plan there are some
9 observations made about the district's offset exemption rule
10 for aging power plants, Rule 1304(a)(2). Option number 13
11 on page 75 of the work plan suggests a possible rule change.
12 I'd like to point out that although Rule 1304(a)(2) has not
13 previously been applied to new generating capacity at a
14 different site than the capacity being replaced, the rule
15 itself clearly states that it applies to replacement of
16 generating capacity based on why it contains no limitation
17 to onsite repowering. Both this rule and rule 1135 clearly
18 contemplate replacements on a basin wide basis, irrespective
19 of ownership. Consequently no rule change is needed and
20 Option Number 13 should we delete it from Table II to F-7.

21 The report doesn't explicitly mention the CPUC's
22 least cost, best fit principle for selection of new
23 generation resources, though it may be implied, but it
24 should be reflected on how the study's outline on the work
25 plan are performed. That may come into play in technology

1 or location selection or where generation can cost
2 effectively eliminate the need for transmission investment
3 and thereby -- thereby overall cost to electricity
4 consumers.

5 On page 70 the draft work plan states that
6 existing South Coast PM 10 ERCs could be enough for two new
7 power plants. And my company's experience is that most of
8 the PM 10 ERCs in existence are not made available for sale
9 by their owners such that it is not possible to buy enough
10 for even one 500 megawatt power plant.

11 In Table II-7 on page 74, potential option number
12 1 proposes that ERCs be surrendered at start of operation
13 rather than start of construction. While that may help in
14 some cases, it would be much more beneficial for the CEC to
15 change its practice of requiring ERCs to be secured prior to
16 issuing a power plant license, at least in local capacity
17 areas like this one that are also severely short of ERCs.
18 CEC's current practice in this respect is not required by
19 state or federal law, is commercially infeasible when the
20 ERC package for peaking power plant costs \$50 million to
21 \$100 million and results in the permitting process for new
22 generation resources to be deferred until after the need is
23 apparent. That approach puts grid reliability at risk
24 unless load forecasts are extremely precise and the
25 permitting process is quick, uncomplicated, and free of

1 litigation, which it's not.

2 Thank you for the opportunity to participate
3 today.

4 MS. FELLMAN: Good afternoon. I am Diane Fellman
5 and I am the Director of Regulatory and Governmental Affairs
6 for NRG Energy. And NRG Energy is right at the nexus of
7 these policies that are being examined today in terms of our
8 actual business implementation in California. We own three
9 fossil power plants plus some peakers in Southern
10 California, and we are also in the -- right now in the
11 throes of developing a solar business. We had the first
12 modern PB plant to come online under the RPS or Blythe Plan
13 at 21 megawatts, and we now have 45 megawatts under
14 construction that will come online in the next few months,
15 plus we have over 1,000 megawatts of solar and development.

16 If you look at our fossil fleet we're very much,
17 in my view, the poster child for the developing policies
18 that the agencies want to look at here. We have repowered
19 one of our facilities at Long Beach under a competitive
20 procurement when Edison built the peakers after the energy
21 blackouts that occurred in 2006 -- 2006. And then we are
22 also recipients of the approvals of both our CEC license, as
23 well as our PPA for our El Segundo Unit 3 repowering which
24 is now underway, as well. And in doing El Segundo, we
25 really had to meet the challenges of changing environmental

1 and energy policies and
2 we -- we rode that wave. We started out with one power
3 plant in one configuration and we ended up with a completely
4 different configuration that had air cooling to eliminate
5 once-through cooling and also was permitted under the rules
6 that we are talking about here and Senate Bill 827.

7 Finally, we are in the process and I will not
8 discuss it here but permitting our Encino power plant
9 repowering which is going to be -- it's called the Carlsbad
10 Energy Center that's currently before the commission. And
11 we have some peakers that were used recently when we had the
12 -- the natural gas shortages that came out of Texas. Our
13 peakers were running to supply reliability into San Diego.

14 So with over 2,100 megawatts of fossil growing up
15 to 1,000 megawatts of solar we internally in our company
16 discuss these issues on a regular basis and try to balance
17 how the new fossil looks with what does it mean to have a
18 high degree of renewable penetration, as well as the OTC and
19 air quality policies. And this study is very important.
20 However, we have some concerns with respect to how long it's
21 going to take to get the results because we are going to be
22 in a process before the PUC. As Aram mentioned earlier,
23 we're now in the long term procurement proceeding, as well
24 as the local capacity resource adequacy proceedings at the
25 PUC. Decisions will be made out of that for resource needs

1 where there will be a procurement probably in 2012, and yet
2 we will not have the results of the study until the end of
3 2011.

4 We also want to make sure that although we think
5 their approach works and there's need for this kind of
6 analysis, that there is the key linking to what policies are
7 in real time and what kind of products come out of this. We
8 do support what the PUC said earlier and what the CAISO is
9 doing in looking at not just the idea of incremental new
10 generation but also incremental production out of the
11 existing generation that will provide the support for the 33
12 percent renewables which, by the way, was voted out of the
13 senate committee earlier today without amendments. So we're
14 seeing that move through the special sessions so it won't
15 just be a CARB policy, but as well it will become a statute
16 and apply to both the -- it's on -- it's on the path
17 applying to the IOUs and the public utilities.

18 We also want to look at how capacity is treated.
19 We understand that there's not going to be a capacity market
20 in California, a forward capacity market. The PUC has sent
21 a strong signal. And, in fact, Commissioner Floria was one
22 of the leaders of the bilateral trading groups, so we've --
23 we've kind of given up that hope. However, that does not
24 mean that there should not be value placed on capacity and
25 what it means.

1 I think Mr. White earlier alluded to the fact that
2 the facilities needed to be run differently. Our view is
3 that you can have facilities available for capacity to
4 backstop the renewables integration. And it's a matter of
5 physics and compensation to make sure that the facilities
6 are there when you need them. There has to be adequate
7 compensation.

8 Additionally, if you look at the once-through
9 cooling policies, we've taken a position before the State
10 Water Resources Control Board that there should be
11 alternatives to provide either technology fixes or to allow
12 a facility to run with a repowering proposal rather than be
13 completely shut down. However, in order to make that kind
14 of capital investment, that's not a new capacity addition
15 investment, rather it's a fixed cost investment and right
16 now there are not adequate compensation mechanisms in the
17 market. This study is not the place to analyze what the
18 compensation should be. However, we would recommend that
19 this kind of product be looked at as an approach to -- as an
20 alternative to just saying there needs to be absolutely new
21 generation, that the existing generation be run more
22 efficiently.

23 Finally, one thought that we have is how can the
24 results of this study be linked to our CEC siting cases
25 where there's a prohibition against a need assessment and

1 statute? As Commissioner Douglas alluded to, you're still -
2 - you're doing basically a need assessment in the 2011 IEPR.
3 And one of our challenges as -- I can't say your last name,
4 is Larry -- as Larry said, one of the challenges is how do
5 you move forward so you -- you are getting what -- you're
6 getting the capacity, you're getting the generation in real
7 time? Our El Segundo repowering permit took ten years. And
8 it -- that's -- we -- you know, California is going to -- as
9 we've said earlier, we're in a lull right now in terms of
10 load growth. But once the economy picks up again there's
11 pent up demand there that's just waiting to be served. And
12 we also have our aging fleets.

13 So we would look to the Energy Commission and part
14 -- and maybe this is part of the lessons learned process to
15 link this assessment into the needs so we can -- or into the
16 evaluation on air quality, so there maybe some findings of
17 presumption of compliance. We still have to go through our
18 permitting, obviously, but there would not have to be a
19 second review by the Commission of our activity.

20 The other point that we want to make is that --
21 and looking at offsets, we would ask to look at the
22 electrification of the transportation sector, as well. That
23 this is not just power plant for power plant but is there a
24 way to incorporate some different kinds of approaches on the
25 transportation sector? There hasn't really been a linkage

1 to electric generation but we feel that this is a moment
2 where that can be examined as a scenario in this analysis.

3 In conclusion what I'd like to say is that we
4 implore you to -- again, I want to underscore the need to
5 look at this in real time. There is a statement in this
6 work plan that power plants will be licensed and permitted
7 under the existing rules. But again in the next year
8 decisions will be made for the 2016-2018 timeframe and
9 that's really bumping up against 2020. So before the study
10 would have a chance to be incorporated into the procurement
11 process there may be decisions made out of procurement out
12 of the LPPP and LCRA that foreclose some of the results that
13 you want.

14 And finally, I would like to emphasize that
15 capital, an enormous amount of capital investments are going
16 to be required to realize the objectives of California's
17 energy policies. We have not yet seen the form in shape of
18 what the Governor Brown energy policy looks like. I think,
19 Chair Weisenmiller, you refer to the DG installations and
20 some of those concerns. We can only anticipate that it will
21 be Schwarzenegger plus. And that companies, private
22 companies, the kind of companies that will invest in this
23 who are providing the competitive supply to keep the prices
24 down for the rate payers in exchange would ask for some
25 certainty.

1 So if there is a discussion about what the future
2 of permitting is going to look like or the regulatory scheme
3 or there's some doubts thrown into the mix that only raises
4 questions. You know, for example, the tentative judge's
5 ruling on AB 32 Scoping Plan, failure to meet the
6 environmental -- the CEQA requirements, you know, we're
7 getting -- I'm getting questioned, and that's why I had to
8 leave today actually. I was on a call with our headquarters
9 and our senior vice president was asking me, well, what does
10 this mean? Are we going to have AB 32? So if there's --
11 there's discussion in this that says maybe we don't need
12 certain power plants or maybe we do, that kind of
13 speculation does affect the capital markets in the certainty
14 for going forward.

15 And I'll turn it over to my esteemed colleague,
16 Mr. Davie, whose name I can pronounce, and be available for
17 questions at the end.

18 MR. DAVIE: Thank you. Good afternoon. I greatly
19 appreciate the opportunity to be here with the Energy
20 Commission, Air Board, CARB talking about emissions in the
21 South Coast Basin and the problem of getting new power
22 plants developed down here.

23 As I said, Doug Davie. I'm with Wellhead
24 Electric. I'm here today -- I was invited specifically as a
25 non-incumbent to the basin. We do not have any power plants

1 in the LA Basin. We are a developer of projects, own,
2 operate, maintain, develop. I have about 350 megawatts
3 around California, mostly in Northern California, but we do
4 now have three locations in San Diego service area. And
5 we'll be developing one that would come online next year in
6 Southern California Edison's San Joaquin Valley area.

7 One of the things that is to mention by a number
8 of people today is this uncertainty in -- to my colleagues
9 have talked about that. As a developer of plants we
10 typically develop in the 50 megawatt peaker range or the LMS
11 6000 as the preferred technology, and we are able to do
12 those rather quickly. The last time we built we started
13 permitting and about 15 months later we're commercially
14 operable. So ten years in a permitting process, not even on
15 our radar screen.

16 Do you want developers that can come in and do
17 things? There are a number of things that have to be there.
18 And creating more uncertainty and more risk is not part of
19 the equation of getting new competitors into a market or new
20 ideas or people that can and are willing to move quickly and
21 make commitments to do that. But we have to have certainty
22 we have to know to be able to see a path to the end. And as
23 we've looked at the LA Basin area, to date, we have not seen
24 that path. We're optimistic that it will be there. We
25 continue to keep watching but when we go down a path and

1 there's a problem, we're not going to try and, you know,
2 push a rock up a hill when everybody else is trying to push
3 it down our faces. So there's a reality we have as a
4 developer not in the LA Basin area.

5 With regard to the plan, I think the Committee are
6 at an interesting crossroads where it's a great opportunity
7 through the mandate to prepare this report, to not only look
8 at the needs and the issues but I think the report also
9 opens the door for you to look at some maybe some different
10 ways of addressing the problem.

11 In that regard I think the report and the path
12 you're going down of looking more directly and trying to
13 focus on the long-term and on energy you clearly are
14 focusing on the right thing, that installed capacity does
15 not generate emissions. Producing the energy is what does
16 it. You need to be looking at what are the energy and what
17 are the operating profiles, and your analysis is going to
18 have to go well beyond a pure needs analysis from a capacity
19 standpoint.

20 Just very simply, doing a capacity expansion plan
21 that has some appropriate reserves, by definition you're
22 going to have a chunk of installed capacity that's not
23 expected to operate, unless something else doesn't operate.
24 So when you're doing your planning on a capacity basis and
25 then doing a control -- emissions control based on that

1 installed capacity, you're automatically over-procuring
2 emissions reductions. You're automatically over-incurring
3 costs that are going to go on to rate payers. It's an
4 appropriate time to go back and say, let's look at that.
5 When you could be looking at what is actually emitted not
6 the potential to emit. A cool summer after an extremely wet
7 winter has a hugely different impact on the need for
8 generation from thermal plants that in a hot dry year.

9 One of the things that I do find as a hole in the
10 plan and I want to raise it as an issue is that there's been
11 talk about trying to facilitate and focus on the small
12 distributed generation projects, the two megawatts now,
13 utilities and CAISO looking at maybe trying to increase that
14 to five. The work plan and the rules and the things the air
15 board has looked at, specifically look at greater than 50,
16 that are CEC jurisdictional. We typically fall in between.

17 Do you want us or not? Your rules, the structure,
18 the regulation, be clear. If there's not a mechanism for us
19 to obtain offsets because we fall in that 5 to 50 megawatt
20 category, we won't be there. If you don't want us, that's
21 okay. But be very clear when you make your decisions you
22 write the rules understand who you're including, who you're
23 excluding.

24 The other comment that -- that I want to add a
25 little bit to is just for competition or an open standpoint

1 of being able to see the path to the end. As a developer,
2 if we can't see the path to the end, the risk, the cost
3 starts to make a prohibitive or ultimately it makes it that
4 much more costly for consumers.

5 The process you want to put in place, I think is
6 one that is going to invite people to come in. If you end
7 up with a process where you only allow offsets where it's
8 restricted to existing holders of offsets, then you have
9 pretty well defined who the population is that will be your
10 providers in the future. If you're not an incumbent and you
11 can't obtain offsets in a reasonable manner then you will
12 have all new incumbents. You'll effectively have another
13 set of -- or a service territory for another set of industry
14 participants beyond the existing LSEs. So I think you have
15 to look very carefully at what you're doing to allow new
16 market participants and how that is going be facilitated.

17 And with regard to the controls, I really want to
18 encourage the Commission and the Air Board to look at what
19 needs to be done as part of moving forward with
20 implementation, looking at some kind of a control mechanism
21 that looks at what's actually emitted. The potential to
22 emit metric is focusing on the symptom. It's not the
23 problem. The problem are the emissions that come from the
24 energy. Let's focus on controlling and solving the problem.
25 Doing so should also free up a lot more offsets to make them

1 available for more projects and to allow the system to be
2 operated as an integrated system.

3 When you permit and allow offsets to be acquired,
4 if they go to specific plants, you have no idea whether that
5 plant needs it or doesn't. Is that going to be the plant
6 that needs to operate tomorrow? Will that plant be
7 available? Will it have a forced outage? What about some
8 other plant that may need it?

9 There's a whole host of things I think you should
10 think about with regard to that control structure to ensure
11 that you're addressing and focusing on the problem in a way
12 that's going to facilitate and encourage maximum market
13 participation, which will give the operators of the system
14 the flexibility to say what can I do and how can I operate -
15 - operate the system at least cost, and that will be a
16 combination of thermal, renewable, storage and all of the
17 other load management technologies and options available.
18 But taking away flexibility is not going to be good for the
19 ability to manage the system and optimize and do the best
20 job for consumers.

21 Thank you. From here, we're going to LADWP.

22 MR. DENNIS: Chairman and Board Members, good
23 afternoon. I'm John Dennis. I'm the Director of Power
24 System Planning and Development for the City of Los Angeles
25 Department Water and Power. Some of the earlier statements

1 have been used are words about complicated or complex. And
2 certainly those are key words that fit this -- this
3 situation we're dealing with here today.

4 One of our general managers that used the word
5 that we need to take a steady and sober pace towards
6 wrestling through these big issues. But there's some
7 sizeable issues we do face today with renewable energy
8 standards, with CO2 reduction, air quality improvements,
9 reliability in an aging infrastructure, our transmission
10 needs, and then upcoming challenges of electrification and
11 plug in hybrid electric vehicles. And so all these complex
12 issues have the elements of reliability, environmental
13 stewardship, and competitive rates that we're wrestling
14 through and trying to keep those in balance.

15 As a background, LADWP serves over four million
16 people and it's the nation's largest municipal utility. As
17 a vertically integrated utility, LADWP both owns and
18 operates its generation, transmission, and distribution
19 systems with an installed generation capacity of 7,336
20 megawatts. And we have a service territory that covers 469
21 square miles with annual sales that exceed 26 million
22 megawatt hours. The DWP transmission system consist of a
23 network totaling more than 3,600 miles which are utilized to
24 transport power to and from five western states.

25 We're happy to report that through significant

1 efforts and cooperation with other utilities and other
2 entities, we have been able to dramatically increase our
3 renewable energy mix. Back in 2003, we were at three
4 percent renewable energy. And at the completion of 2010
5 we've achieved a 20 percent renewable energy for the mix for
6 renewable energies delivered to our customers. And that's
7 come through a variety of ownership and wind projects that
8 we see. We own and operate those and various renewable
9 technologies.

10 Additionally, for CO2 reduction we're now at 22
11 percent below our 1990 emission levels. Our knots reduction
12 in the LA Basin has been reduced by 90 percent through major
13 efforts in this region. And we do have four generating
14 stations that are in the Los Angeles Basin Area. Three of
15 those four generating stations do use ocean water for
16 cooling the power plants. In 1990 we had 14 units that
17 were ocean-cooled. And today we currently have nine. And
18 our goal is by 2015 we'll have six that are still ocean
19 cooled. So we're making marked reductions in the use of
20 ocean cooling, but at the same time modernizing our fleet.
21 We're also having major efforts in power reliability and
22 doing major efforts in high voltage DC transmission in order
23 to bring more efficient use to our system.

24 I'd like to take just a moment just to talk about
25 how we got there and some of the efforts that we're doing to

1 get further in our effort with resource planning. The
2 department has taken on a large effort for integrated
3 resource planning, the emphasis being integrated tying in on
4 all of our generation, transmission, distribution, and all
5 these major efforts that have been identified earlier. The
6 draft 2010 integrated resource plan provides a 20 year
7 framework to ensure that current and future energy needs of
8 the city are met, that our regulatory requirements are
9 satisfied and that environmental policy goals are achieved.
10 The draft 2010 IERP, it lays out alternative strategies for
11 increasing our renewable energy and reducing greenhouse gas
12 emissions while maintaining power liability, complying with
13 the state and federal regulations, and minimizing the
14 financial impact on our customers. So it identifies options
15 for a mix of electric resources based on a comprehensive
16 research and analysis that's guided by those key principals,
17 reliability for the power system, regulatory compliance,
18 environmental stewardship including a pursuit of renewable
19 energy resources, and maintaining low and stable rates.

20 And this planning effort was done through a very
21 interactive public process since August. We've had several
22 large workshops throughout the Los Angeles area. Those were
23 professionally facilitated and we recorded all those
24 comments and adopted those. And so the end result is our
25 focus for 2020 is a 33 percent renewable portfolio standard

1 that include also a 7 percent energy efficiency, and we'll
2 have a 500 megawatts of demand-side management, demand
3 response, and along with solar incentive and feed and tariff
4 programs. We'll be moving our units off once-through
5 cooling. And we've undergone some really complex modeling
6 that's consistent with the NERC and WECC standards for
7 meeting our energy capacity and our regulation requirements.

8 Our primary renewable resources are solar and wind
9 at this time. We had an additional for geothermal but we do
10 recognize a need for backup and also for regional diversity
11 to ensure that we have a reliable supply for our customers.
12 And so again, all this requires some complex modeling of our
13 system, as well as our resources, and certainly an
14 integrated approach. As was observed earlier by
15 other utilities and also Los Angeles, we've seen a
16 flattening or a lower load due to the economy, and also from
17 energy efficiency efforts to date. But on September 30th of
18 2010 we also saw an all time system peak demand on our
19 system. So the capacity needs to be available and it almost
20 gives us the impression from the power system planning side
21 that we have a sleeping giant that will come to wake
22 shortly, so we need to prepared for that as well.

23 While LA expects to meet the load growth demands
24 with a combination of renewable energy and energy
25 efficiency, demand-side management and demand response

1 programs, we also expect that there will still be a need for
2 a key generation resources such as those that are existing
3 at our generating stations in Los Angeles. That's based on
4 our -- based on our transmission and the physics that --
5 that are there. We advocate certainly that generation and
6 these same resources be repowered or replaced at those
7 locations.

8 We've just, in this last month, awarded contracts
9 and recently have installed, also, a new fleet that's -- of
10 generators that are dispatchable, they're flexible, they're
11 efficient, they're clean, they're reliable and they're cost
12 effective, that will integrate very well over this next ten
13 years with our current and our future planned renewable
14 resources.

15 So with that, with these effort that are underway,
16 we think we've done it. We are doing it. But certainly we
17 haven't learned everything and we're learning more as we're
18 working together with a variety of agencies or entities in
19 getting the technical help we need to do this. But through
20 these challenges, we just want to encourage the continued
21 effort of excellent technical planning. That's a must for
22 reliability.

23 But we're doing it right now and we're a lead
24 group with the California Transmission Planning Group. The
25 California Transmission Planning Group has come together to

1 identify the transmission needs that are necessary in the
2 state of California to meet the 33 percent renewable
3 portfolio standard. And it's very cooperative, a very pure
4 process in technical planning for California.

5 Secondly, as we just stated, the necessity for
6 continued coordination with the other utilities and
7 agencies, that's a must in order for us to meet the
8 environmental, the efficiency and the economic goals.

9 And then lastly, it's just the integrated approach
10 that's necessary here for generation transmission and
11 distribution that are essential in meeting these overall
12 goals. Thank you.

13 MR. MINICK: Good afternoon, My name is Mark
14 Minnick. I'm the Manager of Resource Planning and Analysis
15 for Southern California Edison Company. I would like to
16 thank the California Energy Commission and the Air Resources
17 Board for working together to hold this workshop and
18 inviting me to be a part of this panel.

19 The SCE is appreciative and supportive of the work
20 that the joint agencies are doing to address the emission
21 offset challenges facing power plants in the South Coast Air
22 Basin. SCE agrees with the joint staff's draft work plan
23 that the more detailed studies being proposed are required
24 to better understand the challenges of balancing electric
25 system reliability needs with environmental goals. SCE

1 realizes that completing these studies is a large
2 undertaking and will likely require the joint staff to
3 expand significant resources -- expand significant resources
4 and time that will likely spend beyond this IEPR cycle.

5 SCE suggests the joint agency staff review the
6 potential of using studies being completed in other state
7 agency proceedings, such as the CPUC's long-term procurement
8 plan, to replace certain portions of this analysis included
9 in the staff work plan. This may help alleviate some of the
10 joint staff's resource -- resource issues and promote the
11 most efficient use of everyone's limited resources. Also,
12 if appropriate, Edison would like to offer its support to
13 the joint staff regarding the technical analysis of these
14 studies. Our recent experience may provide some valuable
15 insights.

16 In our view it seems that the ISO's LA Basin Local
17 Capacity Requirement Area is potentially facing a deficit of
18 resources if the aging plants retire by the time the
19 requirement takes effect and the Water Board's requirements.
20 The ISO's current load and resource tool which has been made
21 available for many parties to use indicates this area in
22 2020 could need from as few as 1,000 megawatts to over 4,500
23 megawatts of plant to meet reliability needs.

24 While meeting the deficit it is likely the system
25 will need some new conventional resourc4es in order to

1 adequately integrate the new intermittent renewables that
2 are expected to be coming on line in the same timeframe.
3 Identifying the local capacity resource need deficit is just
4 the beginning as there are other technical necessities that
5 must also be completed in order to have a full picture of
6 the system reliability requirements.

7 The draft work plan includes the potential for
8 other studies that may need to be fully -- that may be
9 needed to fully demonstrate system reliability requirements.
10 Edison suggests working closely with the ISO on these
11 efforts since the ISO is responsible for the reliable
12 operation of the transmission system. The partnership
13 between the joint agencies shows your willingness to balance
14 system reliability in environmental goals, and Edison
15 appreciates this and supports the state's agencies in
16 choosing this goal. Thank you.

17 MS. LYNCH: Hello. My name is Mary Lynch and I
18 manage the regulatory and legislative affairs for
19 Constellation Energy. Thanks very much for inviting me to
20 participate today. I really appreciate it.

21 I was asked to come here and speak to the issues
22 related to Constellation's position in this state as a
23 retail energy provider. And so that is the perspective that
24 -- that I'm bringing to this discussion today. And -- and I
25 must say that I understand that it's outside the scope of AB

1 1318 but my remarks are going to be targeted towards the
2 competitive market aspects of the studies that are being
3 undertaken here.

4 And perhaps just by way of background, the retail
5 electricity market in California was only recently reopened
6 to competition with the passage of SB 695. And -- and it is
7 allowing commercial and industrial customers for the first
8 time in over ten years to elect a competitive supply.
9 Something that my company as well as several other retail
10 providers who are registered in the state are very eager to
11 provide.

12 The reason that -- and -- and the interest in the
13 reopening has been overwhelmingly positive with every phase
14 of the cap being fully subscribed, if not oversubscribed by
15 customers interesting in taking service under direct access.
16 And we believe in talking with our customers that the reason
17 there's that great interest is not -- not only a search for
18 cost savings over traditional bundled utility service, but
19 because many of our customers have environmental and
20 sustainability goals that they want to achieve that they
21 can't achieve through bundled utility service. And so they
22 look for ways to actively manage their energy and -- and
23 renewable costs in ways that they're not able to do when
24 they're on utility service, that they are able to do with a
25 competitive retail supplier who can contract for supplies in

1 the marketplace to help them meet their specific goals.

2 So there -- there is a lot of interest in the type
3 of service that -- that my company can provide and that
4 other retail suppliers are prepared to supply. But our
5 providing these services requires us to go out into the
6 energy markets whether it be for conventional resources or
7 for renewable resources in order to meet our renewable
8 obligations which are the same obligations that the
9 utilities have, you know, currently to meet an RPS of 20
10 percent by 2010, which Constellation will do and which
11 several other retail providers that are members of our trade
12 association will be doing as well, as well as to meet a 33
13 percent goal as that has been mandated by executive order
14 and will likely be mandated by legislation.

15 But in order to -- to get these supplies, there
16 need to be market price signals out there that support
17 investment in resources that we have access to. And the
18 fact of the matter is right now, just to be somewhat tongue
19 in cheek, it would appear that the only people interested in
20 seeing this renewable resource base and -- and once-through
21 cooling go through would be the people sitting in this room
22 because there's no market price signal out there that's
23 telling people these -- these resources are needed or are
24 desired. But there are a series -- series of mandates out
25 there that make it clear that these things are to come to

1 pass.

2 And so where there are no market price signals, we
3 live with mandates. And from a competitive supply
4 standpoint, without market price signals to support
5 competitive investment that would serve the non utility
6 supply we can not meet the hurdle to make the investment
7 because there's no analysis out there that -- that allows us
8 to see -- to see a clear pathway to earning a reasonable
9 return on that investment.

10 So I -- I -- I understand that the competitive
11 market issues are outside the scope of the AB 1318 issue but
12 I
13 would -- but I would urge you to at least be clear in your
14 recommendations after your studies are completed that you
15 take into account the need for -- for consumers and for
16 businesses in the state to understand the costs and the
17 values and the risks and the benefits of these investments
18 so that we can have a truly vibrant competitive market, and
19 not one that is dominated solely by utility and rate payer
20 backed investment.

21 The risks associated with environmental
22 improvement as -- as we all well know are huge and there are
23 ways to actively manage those risks on -- with market based
24 solutions. And I think that this -- this study should do
25 its best to remain mindful of the fact that California does

1 still operate under a law that says restructuring is good
2 and promoting competition is the pathway to promoting
3 innovation. And so I would hope that -- that we would
4 include a recognition of that in the recommendations from
5 this study. Thank you.

6 CHAIR WEISENMILLER: Thank you. A few follow-up
7 questions maybe here? Okay.

8 For Edison and LADWP, I was wondering in terms of
9 how do we get a handle on inertia requirements in the basin?

10 MR. MINICK: Typically the inertia requirements
11 drive skid limits or importing limits or safe operation of
12 the system. Those particular studies are done by the ISO and
13 so they are the ones that develop the benefits of inertia in
14 the basin and how it runs the grid. Edison helps the ISO in
15 some of these studies but it's typically an ISO function.

16 CHAIR WEISENMILLER: And for LADWP?

17 MR. DENNIS: Our numbers are right in the range of
18 30 to 40 percent is what's needed in our generation capacity
19 to keep that inertia in the system. It's a combination of
20 reliability, but there's a piece as we operate some large
21 high voltage DC lines that bring in power into Los Angeles.
22 We're joint owners with Southern California Edison, as well,
23 on there. So part of that is necessary in the physics to
24 support that inside the basin.

25 CHAIR WEISENMILLER: I think -- I think earlier

1 today we heard that one of the things that South Coast needs
2 to know is where the plants go. And so part of the reason
3 for the inertia question is to make sure that we are
4 modeling exactly, both of you, exactly where the plants need
5 to go.

6 MR. MINICK: Well, location for inertia isn't as
7 critical as possibly the voltage and some other things in
8 our system. Inertia, as long as it is in the geographical
9 LA Basin, is still inertia. There are other issues,
10 voltage, stability, and other operating parameters that need
11 to be assessed also. So I don't think inertia is the most
12 determining factor on where you put up a plant, as long as
13 it's geographically in the basin.

14 MR. DENNIS: Can I add? And that is the other
15 piece is the -- much like California freeways, our
16 transmission system has been built. The last large
17 transmission line in the Los Angeles area there was in 1975.
18 So there's been a lot of development that developed around
19 that. So those then become some of the limiting factors as
20 that generation resource provides and is built up around
21 there as well.

22 So it's not only the inertia that you have but
23 making sure that -- that providing the regional stability is
24 also necessary in that location. So for example, the
25 Westside is necessary or down to the south to have still

1 that generation resource in the system. So it's a
2 combination of position and that inertia that's necessary.

3 MR. WALLERSTEIN: Earlier today John White
4 suggested that LADWP having additional conversation with
5 CAISO and Southern California Edison, along with the staff
6 of the Energy Commission and CPUC, as we look to the future
7 would be fruitful to talk about how we respect the integrity
8 of the two systems but at the same time leverage some of the
9 capabilities of the system to make the partnership better
10 going forward in terms of serving the needs of Southern
11 California.

12 And so I would just like to ask the two of you if
13 your organizations are prepared to engage in that
14 conversation?

15 MR. DENNIS: A few items and that is that John
16 brought up -- John White did earlier and that is already DWP
17 and Edison enjoy a variety of working relationships on some
18 existing transmission capacity. As I mentioned before with
19 our Pacific DC inner tie, Edison has a 60 percent -- 50
20 percent and we have a 40 percent ownership of that
21 particular line, and that brings in some renewable energy
22 into the Southern California area. And so we do have
23 several joint ventures that we work together. It's a very
24 cooperative piece that's there.

25 The second thing is, as I've mentioned, with the

1 California transmission planning group we have the investor-
2 owned utilities and the public-owned utilities that are
3 working together throughout both Northern and Southern
4 California to look at the best fit, least cost, best fit
5 sort of solutions that would work well on the transmission
6 side that would relieve congestion and get the energy to the
7 load centers. And CAISO is in on the group, as well,
8 working together in that process. So there is a very good
9 working relationship.

10 This -- this last year they came out with their
11 final report for 2010 identifying some key projects that
12 would help. But then secondly is this year one of the
13 themes that CTPG has picked up is to study or look closer at
14 the once-through cooling issue and to try to model that in a
15 more complex model that was described earlier as being
16 planned. So there is a very cooperative effort that's
17 happening.

18 MR. WALLERSTEIN: So -- so John, is that a yes?

19 MR. DENNIS: Yes.

20 MR. WALLERSTEIN: Great.

21 CHAIR WEISENMILLER: Well, let me follow up. One
22 -- one of the things I did before, in my case, it was
23 probably at least a decade ago was I was actually a
24 consultant for LADWP and some litigation with Edison. And
25 part of the sum of what came out of that was actually Edison

1 contracting to use Castaic. So again, there -- there are
2 ways to move outside the box to sort of look at how, you
3 know, we can -- you know, look for the benefits of the -- of
4 the basin by cooperation, certainly on a current site.

5 MR. MINICK: Dennis is right. The transmission
6 planning groups work very well together. There hasn't been
7 opportunities that I know of to work much together on
8 certain innovative resource planning, so maybe we could look
9 at some opportunities to do that in the future.

10 CHAIR WEISENMILLER: In terms of the CTPG -- CTPG
11 study of once-through cooling, what's the expected time line
12 on that?

13 MR. MINICK: I haven't been involved with the
14 CTPG, so --

15 MR. DENNIS: John Dennis. Their goal is to work
16 through that in this year. It's -- it's very involved, as
17 the gentlemen were describing earlier on the transmission
18 planning side, but they're going to introduce the -- the
19 topic and I don't have the schedule at this moment.

20 CHAIR WEISENMILLER: I -- I just wanted to make
21 sure that the staff, the interagency working group can
22 benefit from the results of that study too and the analysis.

23 MR. MINICK: Yes. Everything that I know about
24 the CTPG is -- is that the work is going very well. There's
25 some very creative and innovative studies going on, on the

1 transmission side. And we can make that information
2 available, I think. It's a joint working group.

3 CHAIR WEISENMILLER: I think one of the -- the
4 things which we had raised a few years ago at the Energy
5 Commission was looking at the degree of interconnection
6 between the Edison and LA systems. Certainly if they were -
7 - I think that was probably an area where we were more
8 concerned about some of the reliability issues. But
9 certainly, I think going forward certainly CTPG is probably
10 a good way to do that, to see if there's any potential
11 interconnection that might start some of the opportunities
12 again for the two utilities to aid each other at different
13 stages.

14 MR. MINICK: I agree. The -- the linkages we have
15 right now are there and there might be ways to strengthen
16 them and optimize them for both parties. That's something
17 we need to study.

18 MR. DENNIS: Very specifically, we have some
19 projects that are on the books right now that we're
20 proposing or working with them. Some of these are up to the
21 northern part of Los Angeles. Again, these will bring in a
22 lot of transmission end from outside into the LA Basin
23 region. So some specific transformers to go in and beefing
24 up that system for the interchange.

25 MR. FLETCHER: I -- I have more of a comment than

1 a question, I guess, in that as we talked about -- Mike and
2 Dennis talked about this morning, the complexity of the
3 modeling is sort of cutting edge here and these -- the
4 companies represented here have -- have a lot of expertise
5 in this area, have been doing that kind of work. And as we
6 proceed down this path, I think it will be really useful
7 that -- that your resources can -- can be brought to bear on
8 the assumptions and scenarios that are running. Because
9 there's a lot of, as you know, as you've indicated, there's
10 a lot of uncertainty. And I think the challenge is to -- is
11 to capture enough of that, you know, the -- the breadth of -
12 - of the uncertainty and the analysis to allow us to
13 actually make some good decisions about going forward.

14 So my request is just to -- to be prepared to
15 commit some resources to look at the assumptions as we roll
16 them out and the scenarios we're -- we're looking at. That
17 would be very much appreciated.

18 MR. MINICK: Just so you know, on the record,
19 we've been working with the ISO for over a year-and-a-half
20 on the renewable integration studies and -- and we're still
21 working with the ISO, and they'll be a big part of -- of
22 those studies that will be presented in the long-term
23 procurement propositioning later this year. So we're very
24 willing to work with people with state-of-the-art models
25 that -- that we've helped the ISO with and developed some of

1 those templates.

2 CHAIR WEISENMILLER: I think back -- back to
3 probably more of the developers, I mean, we've had back and
4 forth on the need assessment. And I would say probably this
5 whole things came out of the last IEPR. But I think the
6 reality again, people who've had the dialogue and rapport
7 were people who focused on energy commission need assessment
8 more in the 80's and 90's. The reality at this point under
9 CEQA, and it doesn't matter whether it's the Energy
10 Commission or the South Coast, if you're going in for a
11 project, people have to look and see if there's any
12 significant adverse environmental impact that can not be
13 mitigated.

14 And if that's the case -- and for many of these
15 large products, you're going to run into that, at which
16 point they have -- we have to look at either the no project
17 or alternatives, and that can be done either in an
18 individual siting case by us, by the South Coast, or by a
19 local entity, or it can be dealt with much more generically
20 in the IEPR. But there's -- there's no way around that
21 really. And so part of what we're struggling with is the
22 best way to do that type of assessment, as opposed to
23 whether it should or shouldn't be done or, for that matter,
24 how it's labeled.

25 So again, I think -- I think everyone has to roll

1 up their sleeves and figure out how we can do that
2 effectively and efficiently, but I mean it's there. And I
3 think part of certainly Diane's side going on ten years, I
4 think when I went to the Commission I pointed out that some
5 of the developers tended to pick the wall and some of them
6 pick floors. If I remember right, that was a developer that
7 kept running into the wall a lot and that was part of the
8 reason for the time. But again, that was a different
9 management.

10 MS. FELLMAN: Well -- and we learned our lesson
11 and then found the door.

12 MR. O'KANE: Mr. Chairman, if I may ask a question
13 of one of the panelists here, Southern California Edison?

14 Mark, you made a statement there looking at some
15 of your forecasts of for 2020. The 1,000 to 4,500 megawatts
16 is what you're seeing for needed capacity generation on the
17 2020 and when you were examining the OTC plants. So what
18 was the assumption behind that? I mean, were you assuming
19 that all the OTC plants would -- would retire and go
20 offline?

21 MR. MINICK: Well, again, this isn't our
22 calculation. This is a tool that the ISO created, a local
23 capacity requirement tool. And in that tool you have the
24 option of changing loads, changing retirements, changing
25 different factors, energy efficiency, new transmission

1 lines, you -- you could pick a choice of resources,
2 transmission lines and loads, and other forecasts to put in
3 the tool. This is what the tool created. It isn't an
4 Edison study. But -- and when we ran the gamut of sort of
5 the lowest to the highest those were the numbers we were
6 getting out.

7 Now I've looked at the tool. I think there's
8 still some slight deficiencies in the tool, and we're going
9 to work with the ISO to try and identify some of these
10 deficiencies because the tool, it's -- it's created for two
11 different areas, both the Ventura area, as well as the South
12 Coast area. And we weren't -- we don't think the results
13 were quite indicative of some of our internal studies that I
14 can't make public right now. But it's generally in that
15 ballpark.

16 So with the assumptions you can make under load
17 management, load growth, new transmission lines and
18 retirements of some plants, in the worst case it would be
19 all, you get that kind of range of -- of new capacity need.

20 MR. O'KANE: So then can we make the assumption
21 then as the plants were repowered and not retired there
22 would be no need for additional capacity?

23 MR. MINICK: The conclusion you could probably
24 make is if every single megawatt was replaced that now
25 exists there wouldn't be any need for any new capacity in

1 that particular tool. Now there's many other transmission
2 studies we have to run. Okay? This is just a very
3 simplified spreadsheet. Transmission planning is a lot more
4 complicated than that, as most of transmission planners
5 know.

6 So this again is a -- is a preliminary tool. It
7 was supposed to give you a ballpark estimate of the rough
8 order of magnitude that you were looking at. The number
9 isn't zero and the number isn't 20,000, so we are getting it
10 narrowed down to a range that I think with more testing and
11 analysis we can -- we can verify it. And that's what this -
12 - this work plan is about.

13 MR. O'KANE: Thank you.

14 CHAIR WEISENMILLER: Okay. Thank you. Next
15 panel.

16 MS. KOROSEC: Sir, we're going to take a couple
17 minute break while we get the panels shifted here. All
18 right?

19 (Off the Record From 2:20 p.m., Until 2:39 p.m.)

20 MS. KOROSEC: All right. We're going to go ahead
21 and get started again now. Before we start with Panel 2 I
22 just want to remind everybody that we are accepting written
23 comments as well as the public comments that we will be --
24 be taking after the panel today, and those are due by close
25 of business on March 3rd. Thanks.

1 MR. TOLLSTRUP: Okay. Our next -- our next panel
2 is the Environmental Community and Consultant Group. We're
3 going to start with the regulatory perspective. Mr. Mohsen
4 Nazemi will join us again from the district, followed by
5 Gerardo Rios with US EPA. Then we'll move on to the
6 environmental and community perspective. We'll start with
7 Mr. David Pettit with NRDC, followed by Angela Johnson
8 Meszaros Consulting and Law Offices, Angela Johnson
9 Meszaros. And then Jane Williams with the California
10 Communities Against Toxins. And then we'll wrap it up with
11 the air quality consultant perspective with Mr. Gary
12 Rubenstein with Sierra Research.

13 So with that, Mohsen, you can go ahead and start.

14 MR. NAZEMI: Thanks, Mike. Good afternoon.
15 Again, I'm Mohsen Nazemi with South Coast Air Quality
16 Management District. And I'll be very brief. I already
17 gave a presentation this morning. And I just would hit a
18 few points and turn it over to Gerardo. I think it's really
19 important that the electricity needs assessment has been a
20 very high priority and important issue to -- to AQMD and to
21 our board. In fact, as stated by Barry, we had originally
22 sponsored a bill that ultimately became SB 827 by Senator
23 Wright that was called Senate Bill 696. And in that
24 original bill we had actually incorporated needs for needs
25 analysis for power plants prior to being licensed by the

1 CEC.

2 The other point I want to make is that AB 1318
3 specifically requires that the Air Resources Board in
4 consultation with the state agencies, Energy Commission, ISO
5 and State Water Resources Control Board to conduct an
6 evaluation of electricity system reliability needs for South
7 Coast and to recommend most effective and efficient means to
8 meet the needs.

9 I think it's appropriate for the Energy Commission
10 to use the integrated energy policy to couple with the AB
11 1318 program and include California Public Utilities
12 Commission and other agencies to address some of the other
13 issues that were raised today in this discussion. I think AB
14 1318 should focus on the needs assessment that it just
15 mentioned here, quantifying reliability, demand growth,
16 integration of renewables, etcetera. Barry mentioned that
17 generation inside versus outside the basin. And then after
18 that need assessment is completed then look at what's the
19 better way, how to meet that need through an efficient
20 manner or permitting.

21 The next point I want to make that existing Rule
22 1304, which is being implemented through Senate Bill 827 and
23 the just recently adopted Rule 1315, provides for
24 repowering, but in the case there is no increase in the
25 capacity. So it -- it does retain the repowering to

1 existing entities, the power plants. And again, to
2 reiterate what Barry said earlier, that it does not address
3 the issue of whether or not there is an environmental
4 justice need to have the power plants at a different
5 location.

6 We heard a lot about once-through cooling today,
7 as you heard from the State Water Resources Board Control.
8 But it think it's also important to keep in mind that, as I
9 indicated earlier, that a large percentage of our power
10 plants in this basin are more than 40 years old also.
11 They're not all necessarily once-through cooling, but they
12 are very aged and -- and polluting power plants. To there
13 is a need to modernize those plants as well.

14 And finally, I think in the presentation that --
15 that was given earlier by Mike Tollstrup, that he mentioned
16 that, you know, some of the possible means to address offset
17 availability is through policy changes at the local
18 district. And as Barry indicated, South Coast and other
19 districts in California believe that SB 827 did not intend
20 to apply to -- SB 288, sorry, did not intend to apply to
21 offsets. And we would urge ARB to do a policy revisit of
22 that as well. And that's all the comments I had.

23 MR. RIOS: Hi. Thank you for inviting EPA to this
24 -- to this panel. My name is Gerardo Rios. I manage the
25 permits office out of EPA, and I'm her e in -- in place of

1 Deborah Jordan who wasn't able to make it today.

2 I wanted to say that EPA Region 9 has worked with
3 the South Coast Air Quality Management District in the
4 development of many approaches to generate ERCs for many
5 years, and we are very happy to see that this -- that
6 through this effort a more aggressive involvement at the
7 state level and the continued effort.

8 The Clean Air Act is structured such that it makes
9 EPA an oversight agency to ensure that the Clean Air Act
10 requirements are met by state and local agencies in
11 implementing the requirements of the act and its influence
12 in regulations. The Clean Air Act is also structured to
13 allow state and local agencies to have the flexibility to
14 tailor their programs to fit the environmental needs of the
15 area. And thus we encourage the state agencies and the
16 South Coast to sort through the various choices that make
17 the best sense to employ -- to employ and to meet the needs
18 of the South Coast while meeting federal requirements.

19 To that end, EPA Region 9 would be happy to work
20 with the state agencies and the district to sort through
21 those options and to help identify potential federal hurdles
22 and solutions to them where EPA can do something about them.

23 I also want to echo what Dr. Wallerstein said
24 earlier. If we can predict when a project may be needed we
25 should do as soon as possible and look for solutions to it.

1 I encourage you all to look at the timelines that affect the
2 various options. In particular, if a necessary option
3 requires rule changes that meet federal approval we should
4 be looking at what -- at that far in advance and taking into
5 account the federal rule making process timelines, as well
6 as the timelines for rule adoption so that we're not trying
7 to adopt a rule with truncated timelines or in an emergency
8 setting.

9 I also encourage the state and the district to
10 work up and early in any action that may require federal
11 approval to make sure that we do not find a fatal flaw
12 during the federal rule making process, which is usually the
13 last step in the process.

14 So to that end we're -- we'll make ourselves
15 available as necessary to work with you through these
16 options. And as I look through the document that was
17 prepared it looks like many of the options are options that
18 we have discussed in the past. And so we can continue
19 working through that with you. Thank you.

20 MR. PETTIT: Good afternoon. I'm David Pettit,
21 and I'm a lawyer with NRDC in Los Angeles. Excuse me.
22 Thank you for the invitation to come down here and speak.
23 There's two things I want to address. I want to talk a
24 little about AB 1318, how we got here and where we are
25 according to the draft report. Then I want to talk a little

1 about once-through cooling. And then maybe finish with a
2 note of alarm about what I've heard today about SB 288.

3 So let me start with AB 1318. It's a mistake to
4 think that the genesis of this had anything to do with the
5 electrical system or electrical reliability in Southern
6 California or anywhere else. This -- this -- we got rolled
7 on this bill, I think it's fair to say. The legislature of
8 this was enacted at 2:00 or 3:00 in the morning on the last
9 day of the session. And it came about because the speaker
10 wanted to do a favor for an elected who was in a touch
11 district, and this was all about jobs. This was nothing
12 about electricity, it was about jobs.

13 In fact, this last week I got a call from the
14 governor's office about this project. And all they wanted
15 to talk about was jobs. There was not a word said to me
16 about whether the lights were going to go out, you know,
17 puppies will die, the stuff that we hear all the time from
18 people who want to build facilities down here who say this
19 is absolutely necessary and, you know, you people at NRDC
20 need to get out of the way.

21 So the genesis of this whole thing that we're
22 talking about here this afternoon was jobs. This was a one-
23 off project for Sentinel and -- and that's why that was the
24 genesis of 1318.

25 I had hoped that -- I mean, I find myself in

1 strong agreement with what Mohsen just said. I had hoped
2 that what we were going to see was a needs assessment. I
3 mean, we've heard from, you know, every generator, would be
4 generator says we need this project or the lights will go
5 out. I've talked a lot with the good folks at Edison and we
6 talk about spinning metal and momentum and stuff, I'm -- I'm
7 just a lawyer, you know, I'm not an engineer. I can't
8 evaluate that stuff.

9 So I was hoping that this report would do that for
10 us and so we could end the debate about what's needed and
11 where it's needed. But as I read the draft we're not close
12 to getting there. And the draft is all full of, you know,
13 technical things that need to be evaluated, none of which I
14 could possibly have any input about because I just don't
15 know that stuff.

16 And I would just urge that we, you know, keep
17 working as quickly as we can to get to the point that Mohsen
18 mentioned, which is what do we need here and where do we
19 need it? What do we need to keep the lights on? What do we
20 need for renewables, to integrate renewables? What do we
21 need looking out in the future? And I think until we know
22 those things making -- making siting decisions about what --
23 particularly what fossil fuel plans are going to have in and
24 near the basin, it strikes me as premature until we really
25 know what we need to be putting things here that are going

1 to be here for 40 or 50 years and putting out tons and tons
2 of pollution that maybe shouldn't be there.

3 In -- in connection with that, the -- one of the
4 things I'm somewhat alarmed about -- this was in the -- the
5 presentation, the -- the PowerPoint about AB 1318. One of
6 the suggestions is work with US EPA on potential federal
7 reforms. I just want to be -- make our position at NRDC
8 very clear, and that is that the Clean Air Act is working
9 the way it's supposed to. It's not broken and we don't need
10 to fix it. There are -- there was -- there were some
11 meetings with the NSR working group that I attended in 2009,
12 it's also kind of mentioned in the PowerPoint. And, you
13 know, as -- as you would expect there were people in the
14 room who do thing that for their own -- to further their own
15 interest that we need to change the Clean Air Act to make
16 the NSR process easier to build new plants in urban areas.

17 We don't think so. We don't think anything's
18 broken -- excuse me -- particularly when the AB 1318 process
19 has not come to a conclusion and we don't know -- to me, we
20 don't know in a reliable third-party independent way what we
21 knew -- what we need here. It's very premature, also, to
22 talking about running to congress to change the Clean Air
23 Act.

24 So I would just encourage the -- the folks who are
25 working on 1318, you know, you need to listen to industry

1 but you need to keep in mind that they have a point of view,
2 they want to build these things and make money from them,
3 and I understand that. But that doesn't mean we need to
4 reopen the Clean Air Act.

5 Secondly, on once-through cooling, NRDC and many,
6 many people -- there are many stakeholders involved in this
7 as you probably know, and there was a five-year process to
8 come up with the once-through cooling rule that the State
9 Water Board recently enacted. Almost before the ink was dry
10 on that LADWP and -- and some of their friends and similar
11 entities went up to Sacramento. They got their legislators
12 and lobbyists together to try to get the Water Board to cut
13 it, to cut their regulations. We opposed and a lot of
14 people came together and opposed that. And at least so far
15 LADWP's effort was rejected. And we have -- we still have
16 in place the rule that was the consensus after the many year
17 project.

18 And I would -- in that connection I would just
19 urge the people, again, working on AB 1318 to be careful.
20 Basically, in fact to put it bluntly, not to get rolled by
21 the municipal utilities who don't want to do the work to
22 make once-through -- to make the once-through cooling
23 changes that the State Water Board wants them to make.
24 Whatever you folks come up with on AB 1318 I'm afraid is
25 going to be -- be spun or be used by people who basically

1 just don't want to spend the money or are afraid of going to
2 their constituents and saying, you know what, I need to
3 raise your rates because of this and that.

4 And, you know, I understand in part their
5 reluctance to do that, but we need to fix these once-through
6 cooling plants. And I think what the Water Board is a
7 modest compromise. Step in that right direction and
8 compromise again. For many, many years we've been working
9 together and we need to be careful to maintain that.

10 Lastly, I'm not intending to be sabre-rattling,
11 but if people are serious about trying to go to the
12 legislature and getting the backsliding rules on SB 288
13 amended there's going to be a fight on that. Thank you.

14 MS. JOHNSON MESZAROS: Good afternoon. My name is
15 Angela Johnson Meszaros. And I was asked to talk with you
16 all today about a perspective through, I guess broadly the
17 community and environmental perspective. I want to make
18 clear that I -- in serving this council in multiple cases
19 that have been referred to during the course of the day, and
20 I am making comments in my capacity as an environmental
21 justice advocate and not in my capacity as counsel on any of
22 that litigation.

23 So I'm going to talk a little bit about many of
24 the things that we've heard here today, the comments from
25 Mr. Pettit about AB 1318, the comments from Mr. White this

1 morning about really the opportunities that we have lying
2 before us to use this process in a way that's helpful and
3 productive. I want to raise a little bit of concern about
4 the direction that this draft document seems to be taking us
5 in. And I want to close with some comments about certainty
6 and the importance of certainty.

7 So on the AB 13 (sic) process I think that -- that
8 David was exactly right in talking about how it is we got
9 here. And really instead of having conversation that looks
10 back to AB 1318 as something that came into -- came to
11 fruition because there was some overarching desire to make
12 sure we only have energy systems that we needed, it really
13 was an effort at trying to figure out how they were going to
14 get this power plant through the legislature. So that's --
15 that's all well and fine.

16 But I do want to point out something in particular
17 about the language AB 1318 and one of the concerns I have
18 about the draft report. So the draft report talks about AB
19 1318 and what it means in the -- what it means in the
20 introduction. And it says that AB 1318 drafts the AB 1318
21 rule more broadly to come up with alternatives for how to
22 generate new emissions offsets. And I just think that's, as
23 a factual matter, not what it what it says in -- in the
24 legislation. And we can have a conversation about how this
25 legislation should be attributed. I'm going to make some

1 more comments about that later. But I think we should be
2 very careful. We should be very careful because -- because
3 -- let me frame it in terms of my comments about the
4 process.

5 So one of the things that the project -- one of
6 the things that were laid out this morning is how this
7 project is going to go forward and the public process that
8 allows opportunities for review and comment. I guess that's
9 an opportunity like today. I mean, you set up a workshop.
10 People came down here. We've got panels and we're having
11 this quasi conversation.

12 One of the things that's clear from your
13 discussion this morning and those of us who have been
14 working on this for a number of years is these are all very
15 complex and interrelated and intertwined issues. And just
16 like David just said, there are people with different
17 perspectives and different reason for those perspectives.
18 And not having a mix of people at the table for the actual
19 conversations is going to make you produce a project that
20 doesn't truly incorporate the complexities and the ranges of
21 challenges and the ranges -- ranges of opportunities that
22 are before us.

23 I would urge us to not use this opportunity and
24 look at with old eyes. I would urge us to not look at this
25 as something where we're going to have workshops and people

1 at microphones having three to five minutes to say whatever
2 it is they have to say, but instead really thinking about
3 this as an opportunity to come into grips with some
4 fundamental questions that California has troubled with for
5 decades. And this is a new opportunity as we learn more and
6 more, as we become more and more focused on addressing the
7 public health and environmental consequences of our energy
8 system broadly.

9 We are at a place where the decisions that we make
10 with shape the future for the next 50 years. And if we let
11 this moment go by with the proverbial half steps and half
12 measures in place then we will have squandered the
13 opportunity which we won't be coming again until we are in
14 serious and significant crisis, and I urge us not to do
15 that. We need to have a process that includes many more
16 voices in a much sustained and integrated and deep way.

17 So that's critical that I bring to the -- one of
18 the concerns I have about this draft report. This draft
19 report starts off first by, I think, laying out AB 1318 in a
20 way that's not really true to what happened in the AB 1318
21 process. Then it begins immediately to give us a very long
22 and detailed recitation of the district's analysis about
23 what happened and what brought us to the AB 1318 process,
24 the district's story about why we're facing questions that
25 are related to energy in Southern California.

1 The fact of the matter is this problem didn't
2 arise because of our litigation. The problem existed absent
3 our litigation, and it continues to exist. And
4 fundamentally
5 the -- the litigation was not about, you know,
6 environmentalists being environmentalists. But the reason -
7 - the fundamental litigation was about the district's
8 failure to properly manage it's internal offsets and the
9 solution that they tried to put in place to address that.
10 And then they got called on it and it turned out that we won
11 and they didn't. That's -- that's all that happened. But
12 this was not the genesis of the fact that we don't have a
13 handle on energy planning in the State of California. It
14 maybe brought the question more to the fore so it couldn't
15 be skirted, but it was not the genesis of that problem.

16 This report starts us off on a path where the
17 first question is: How many offsets do we need and how do
18 we get a handle on that? That's the question that should be
19 asked. This is supposed to be a question about what's the
20 energy needs and how are we going to meet them and what's
21 going to be the mix of resources we're going to use to meet
22 those things.

23 So in closing I'm just going to say that I thought
24 that John White brought some very sage words based on his
25 perspective as someone who's been involved in these issues

1 for a very long time. And I encourage us to really take the
2 opportunity that's before us and really think about some of
3 the suggestions that he made.

4 And then I'll close by saying there are people up
5 here from the utility's side who talked about the importance
6 of certainty. And I think that certainty is very important.
7 I think that we should have a process that's transparent and
8 clear because a lot of people have to make a lot of
9 decisions based on them. And it -- it -- and just like with
10 the once-through cooling opportunities that were presented,
11 the decision is very clear, we're not going to allow people
12 to continue to use 15 billion gallons of water a day to cool
13 power plants. That's not an option any more. We're going
14 to have to come up with something else.

15 And in the South Coast Air Basin we're -- we don't
16 have -- we're not in an attainment for ozone and have no
17 plan for getting there. We're not in an attainment for PM
18 2.5 and have no plan for getting there. And things can --
19 can either get better or get worse. We need to be very
20 clear that just generating more offsets is not the approach
21 that we're going to take. What we're going to do is look at
22 a comprehensive system that meets the energy needs for the
23 South Coast Air Basin. I may be an environmentalist but I
24 like to flip the light switch and have the lights come on as
25 much as the next guy, and I fully endorse that. But that's

1 doesn't mean that we have to put public health at risk in
2 order to do that.

3 And I'll -- and I'll just in closing, I'll make it
4 quick, I'm often surprised by the fact that I agree most
5 often with people who speak from the perspective of the
6 market. And I was surprised and excited to see that I
7 agreed very much with the comments from the AES
8 representative. Thinking about if we're going to have a
9 market system, what that means for real, and does that mean
10 the South Coast Basin coming in and interfering with that
11 market and choosing winners and losers is the system that
12 we're going to have.

13 And I'll just note that for the Sentinel Power
14 Project, the underlying project for AB 1318, they --
15 Sentinel was the recipient of 2,500 pounds of PM offsets
16 from an AES facility. I'm sure AES would have liked to have
17 had those offsets. They generated the offsets. They did
18 the investment that generated those. And instead the South
19 Coast has shifted those to Sentinel.

20 And the question is: Is that really the way we're
21 going to be participating, we're going to use the district's
22 power to participate in the market, to really literally
23 choose winners and losers? We can't allow the system to
24 continue as it has. And I urge us to -- to take this
25 opportunity and build a process that really serves the air

1 basin. Thank you.

2 MS. WILLIAMS: Thank you. I'm Jane Williams. I'm
3 the Executive Director of California Communities Against
4 Toxics. My organization has 70 members. A number of my
5 members are here in the South Coast Basin. It is a
6 coalition that has existed since 1989. It's now the oldest
7 environmental justice coalition in the country.

8 We brought the litigation along with other
9 partners here in the basin, the original litigation and the
10 ensuing litigation. And before we brought our first
11 litigation I want to let the commissioners know that we had
12 a meeting, as a matter of fact, right here at South Coast, a
13 very similar meeting to this one. We had the CEC. We had
14 CAISO. We had Southern California Edison. And we had the
15 PUC. And we had Mr. Wallerstein and a number of his staff.
16 And Mr. Pettit I believe was at that meeting. And many of
17 the plaintiffs in the lawsuit that was contemplated were at
18 that meeting. And we asked the exact same questions that we
19 are asking here today. What about grid stability? What
20 about demand forecasting? These plans get 50-year permits.
21 You know, do we -- is this -- is this really -- do we really
22 need this much more energy for 50 years? We have 11
23 proposed power plants.

24 We walked away from that meeting with a very, very
25 clear understanding that there was no imminent danger of the

1 lights going out, that this was not about meeting electrical
2 demand. This was about energy speculation, and that is why
3 we brought the lawsuit. And that is why we continue to
4 bring lawsuits about this very issue, the issue of ERCs.

5 And so a couple different things I want to -- my
6 different observations about this lengthy process, now I
7 wanted to -- to say that my original notes from that meeting
8 are actually not here in my hand, they are so old now
9 they're in my archives. My son was not even in school now
10 and he's ten. And I'm not sure how long the commissioners
11 here are committed to being on this commission, but I can
12 imagine five years from now sitting in the same room, having
13 the same questions before us with the same problem. Okay.

14 So I just want to underscore what my counsel said
15 here, Angela said we have this great opportunity. We are
16 not facing any kind of imminent energy crisis because the
17 economy is falling apart. We have an opportunity to look at
18 what's coming at us and actually do some planning. That
19 planning benefits -- it benefits the folks that care about
20 getting in the energy market and staying in the energy
21 market and complying with law. They benefit from certainty.
22 They benefit from knowing what's going on. And in fact,
23 that's the only way that they can truly stay in the market
24 and compete.

25 Public health benefits. Because what's happening

1 right now is we've put all this pressure on the system
2 because we don't know what's going on and because we have
3 speculators, and now you see the outcome. The outcome is
4 let's not find a way to make better investments of your
5 pollution control technology. Let's not find a way to get
6 demand-side management to proliferate. Let's not create new
7 storage technologies and use them in the basin. Let's not
8 put, you know, solar on every public building rooftop. No.
9 Let's take people's property and give it someone else so
10 they can build a power plant. That's the outcome that
11 you're seeing.

12 And when you have the head of the air district
13 here whose job is supposed to be to reduce pollution saying
14 maybe we need to go in and rejigger the Clean Air Act, okay,
15 that's where you know we're in trouble. Because the first
16 value that's being thrown under the bus here is not access
17 to energy, it is not repair protection, and it's not
18 protecting the water. The first guy who's being throw under
19 the bus is public health.

20 And it's very interesting because when you -- when
21 you look at how the report is written it is all written from
22 the agency perspective who's at the table. You've got the
23 Public Utilities Commission that's supposed to have a part
24 in this. You've got the Energy Commission. You know,
25 you've got ISO. You've got the developers. It's about

1 energy. But the constraint that's on the system is public
2 health.

3 This is the dirtiest air basin in the country.
4 Sometime today someone will die from exposure to air
5 pollution. Most likely that person who will die doesn't
6 look like anyone in this room. They're going to be over 65
7 and they're going to be a child. That's what we see from
8 our -- all of our work done in the last few years on
9 cumulative impacts from air pollution. And so we're taking
10 the weakest in our society.

11 And we're not saying, you know what, don't buy
12 that flat screen TV. We're not saying, you know what, let's
13 turn off the lights at night in buildings. We're not saying
14 what can we do to get more combined heat and power from the
15 existing industrial infrastructure in South Coast. We're
16 not doing any of those things to manage energy demand.

17 Instead what we're doing is we are taking on the
18 concerted effort to throw public health protections under
19 the bus. And that is really the reason that we are sitting
20 here, because we don't have a public health agency that is
21 part of this process. And so the burden to that follows on
22 the nongovernmental organizations that are here trying to
23 protect the public.

24 So I was going to start my -- my few minutes of --
25 of talking out by asking you, by asking the two

1 commissioners present: What is the thing that is most
2 precious to you?

3 COMMISSIONER DOUGLAS: Do you want to finish or do
4 you want -- do you have other questions? Why don't we put
5 all the question on the table and we'll -- we're --

6 MS. WILLIAMS: No, that's okay. I just -- I don't
7 need an answer. But you know, were you to ask a person off
8 the street what is the thing that is most precious to them
9 and what would they give up or what would they sacrifice to
10 keep that thing that is most precious to them, you would get
11 an answer that looked a lot different than the answers and
12 the questions that are being asked by the people in this
13 room. You would be my kids, my wife, my grandkids. And if
14 you asked people if they would reduce their energy
15 consumption by two percent a month so that those people
16 could survive everybody would say yes.

17 But -- so I'm trying to say, you know, we're not
18 asking the right questions. And we're putting this huge
19 amount of pressure on the Clean Air Act which was passed 20
20 -- a generation ago, okay, congress said Americans will
21 breathe clean air that is healthful. An entire generation
22 of children, an entire generation of people have grown up
23 without the protections of the act here in the South Coast,
24 and entire generation.

25 And you know, I -- I work in -- in the federal --

1 federal arena to try to implement these rules. Congress is
2 now going to go after some of these rules that are going to
3 get, you know, all these reductions. And you know, my son
4 is ten. I've got the power plant and I've got the gold
5 line. I've got offsets that are 20 years old. I've got
6 offsets that I swear somebody tap danced out of some
7 basement someplace to say that the air quality is going to
8 get cleaner, just trust us.

9 And so what I -- what we're saying here is that we
10 need rational energy planning. Whether it comes from the
11 energy commission or whether it comes from the PUC, whether
12 it comes from the ISO, at this point I don't care if it
13 comes from the developers themselves, we need something that
14 tells us how much combustion do we really need in the
15 dirtiest air basin in the country where we know thousands of
16 people are dying. The proposed plants that would have been
17 built had we not filed our lawsuit would have collectively
18 emitted more pollution than the entire port complex in Los
19 Angeles. That's the kind of emissions we're talking about,
20 huge, super-sized, biggy-sized emissions, built essentially
21 with what we claim are counterfeit credits, so that there is
22 no air pollution benefit from building those plants.

23 So this process that we're in is critical. We
24 wish it would have occurred five years ago. But I certainly
25 hope we're not sitting five years from now saying, gees, we

1 had a new administration, we had these new great PUC
2 commissioners, we had these new great CEC commissioners, we
3 had an opportunity to put California on a clean energy path
4 and give tremendous benefits to the air basins and have a
5 whole other generation of kids grow up not with asthma and
6 not missing school, not dying of asthma, and we missed it,
7 we missed the opportunity.

8 So those are my comments. And I would like to say
9 that I'm a very nice person. But when I'm in this building
10 on this topic my job is to put public health first. I was
11 here before you guys got here and I imagine I'll be here
12 when you guys leave. And I certainly hope as you guys are
13 leaving we're waving a nice goodbye and saying all right,
14 great job, now we've got an energy plan and we -- we can --
15 you know, we know what we're doing and why we're going it
16 and it's defensible. So please let us know how we can help.
17 Thank you.

18 MR. RUBENSTEIN: I'm not sure how to follow that.
19 I'm Gary Rubenstein with Sierra Research. By way of
20 background I am one of perhaps a half a dozen people sitting
21 in the room at the moment who was present at the birth of
22 the Emission Offset Program in California. And I know that
23 there are some people who have never forgiven me for that.

24 I have to say that when I reviewed the draft AB 13
25 -- AB 1318 draft work plan I thought it was the first

1 really articulate discussion of what is going to be needed
2 and when in terms of resources and generation in Southern
3 California to address the issues that we've got. But then
4 again, I'm just an engineer, so what do I know.

5 The title for this workshop is Emission Offset
6 Challenges for Fossil Power Plants in Southern California.
7 And I thought that I would actually talk about some options
8 for addressing the emission offset challenges for fossil
9 power plants in Southern California because I -- I frankly
10 haven't heard much about it today.

11 In the short term -- I'm going to be talking about
12 short-term options and long-term options. In the short term
13 I think it's important to focus on options that don't
14 require legislation or regulatory changes for very obvious
15 reasons, and for the various obvious reasons you've just
16 heard about, people are going to sue. There are going to be
17 challenges, and your short-term solution is not going to be
18 a short-term solution. So I think that you need to look at
19 this issue in the short term without regulatory or
20 legislative changes, and to my mind there are three
21 principle candidates.

22 First, it's important to remember, we talk a lot
23 about particulates and particulate offsets and the shortage
24 of particulate offsets. Particulates are not a molecule
25 like nitrogen dioxide. It's not a chemical compounds. It's

1 a regulatory construct. Particulates are defined by the
2 test methods. And there are some very different test
3 methods that are used to measure particulates.

4 There are two basic groups of particular test
5 methods that are used. One is the test method that's used
6 in varying forms to measure what we breathe in the ambient
7 air. It's also the test method that's used to measure
8 particulate emissions from motor vehicles, cars, trucks,
9 trains, all of that stuff. That test method is essentially
10 an ambient or a dilution based test method. It's a dry test
11 method. It involves simply preconditioning a sample of air,
12 running it through a filter, and weighing the filter and
13 measuring it. And it goes by different names and a lot of
14 different -- different designations.

15 But that's not what we use to measure particulate
16 emissions from gas fired power plants. Instead we use
17 what's generally referred to as a wet test method which is a
18 test method that was designed in the 1950s or the 1960s to
19 measure particular emissions from coal fired power plants.
20 It is not a test method designed to measure emissions at the
21 low levels that we have for today's gas fired power plants.
22 It is the errors inherent in that test method that is
23 driving this whole discussion about the shortage of
24 particulates offsets in Southern California. We're not
25 talking about uncertainty of 10 percent of 20 percent.

1 We're talking about over estimate of a factor of five or a
2 factor of ten. We're talking about big numbers.

3 And -- and while there's some question about,
4 well, how can we just change the test method, well, for
5 starters if you take a look at the emissions inventory for
6 directly emitted PM 2.5 in Southern California you will see
7 that already over 85 percent of that inventory is based on
8 measurements using the dry method. It's only a very small
9 category of sources for historical reasons that are no
10 longer relevant that are using this archaic testing.

11 When you also take a look at which sources those
12 are that are using this archaic test method they're
13 principally combustion sources like fossil fired power
14 plants, gas fired power plants. Those are not sources that
15 are principle contributors to ambient PM 2.5 levels in
16 Southern California. You can see that by taking a walk at
17 the district's air quality plant.

18 Well, you might go, well, what is the EPA going to
19 say about this? Well, the answer is four years ago the EPA
20 sent a letter to the South Coast District, recommended that
21 they switch to use the more modern dry test methods. The
22 South Coast District has chosen not to do that so far. And
23 there are some logistical issues they'll have to go through.
24 I mean, you're creating, if you will, a different currency.
25 The -- the old PM 10 offsets aren't the same as the new PM

1 10 offsets and you've got to be very careful about how you
2 do the transition. The important thing is though that it
3 could immediately change the requirements for offsets by a
4 fact of two-to-five, and change the availability of offsets
5 by a factor of two-to-five just by making this kind of a
6 correction. And you can do it without changing any rules.
7 And you can do it without changing any laws. To my mind
8 that makes it a short-term option.

9 The second option is to find a way to facilitate
10 lowering the PM 10 emission rates from existing operating
11 power plants based on historical source test results. If
12 you'll remember from one of the grants that Mr. Nazemi
13 presented way back in the morning showing a sharp decrease
14 between 2000 -- from 2001 of about, I think it was 1,000
15 pounds per day in PM offsets, that was one power plant that
16 gobbled up almost all of the available offsets, one 1,000
17 megawatt power plant. It was the first new power plant
18 built in Southern California, major new power plant built in
19 30 years. It gobbled up just about all of the offsets. And
20 it consumed offsets based on the old test method and
21 consequently has used a large quantity much higher than it's
22 actual emissions are.

23 If there is a mechanism which could be done, I
24 think under the existing rules for straightening out the
25 test method and getting them to be able to sell back to the

1 market some of the credits that they surrendered, then I
2 think there's a mechanism to jumpstart the supply as well.

3 And then the third short-term option is one that's
4 been discussed a couple of times before, and that has to do
5 with the Rule 1404 exemption for the replacement of in-basin
6 generation, and in particular the old steam boilers. A
7 clarification by the district, not a rule change, nothing
8 else, just a clarification by the district that that
9 exemption applies to repowers that are done anywhere in the
10 air basin would mean that you've got essentially 7,000
11 megawatts of offsets. Because those 7,000 megawatts of
12 existing boiler capacity could be replaced with more
13 efficient, quicker starting, better -- better suited to
14 managing the loads with increased renewables than just using
15 the existing steam boilers. That doesn't take a rule change
16 either.

17 So those are the three short-term.

18 Long term I think there are a couple of things
19 that the agencies will have to look at, and these will
20 require rule changes, which is why I think they're longer
21 because you have to factor in the length of time for dealing
22 with the inevitable lawsuits.

23 First is to change the power plant offset
24 requirement for one that requires offsets on a monthly basis
25 to an annual basis. This is something that was actually

1 discussed in the draft work plan. The South Coast Air
2 District is unique in California and perhaps in the country
3 in how it determines offset requirements. And while there
4 may have been good reasons for some pollutants for setting
5 up this structure 30 years ago, which is when it was set up,
6 when it comes to power plants in particular cycling peaking
7 power plants designed to match loads with the needs of a
8 system that's increasingly receiving renewable energy, that
9 system doesn't make any sense. It is fully consistent with
10 state law and fully consistent with federal law to deal with
11 offsets on an annual basis. That's the way it's done
12 virtually in every other part of the country. And it would
13 require a rule change, but it's one that I think ought to be
14 considered.

15 The second option that I'm just going to toss out
16 because it's been brought up several times is to look at an
17 option that doesn't require the construction of new fossil
18 fuel power plants in Southern California, period. What
19 we're dealing with here is not the first time that Southern
20 California through its representatives, and I mean that in a
21 very broad sense, have said we don't want any new power
22 plants. In the late 1960s there was a series of rules
23 adopted by the Los Angeles County, Orange County, Riverside
24 County, San Bernardino County Air Pollution Control
25 Districts before there was a South Coast AQMD, and they

1 collectively adopted rules that prohibited, effectively
2 prohibited the construction of any new utility scale boilers
3 in Southern California, and they did that because they
4 didn't want any more.

5 At the time, you my recall, we were building over
6 500 or 750 megawatt oil fired boilers. It was before gas
7 was
8 the -- the -- the -- it was readily available in California
9 as it is today. And the agencies just said we don't want
10 it. And that ban lasted very clearly for at least ten
11 years. And as I said, until the Mountain View Plant came
12 online in 2000 or it was permitted in 2000 there had not
13 been a single major fossil plant developed in Southern
14 California since the late 1960s.

15 So maybe the answer is, okay, we hear you. And
16 one of the things that was laid out in the draft work plan
17 was a \$5 billion dollar transmission option to just figure
18 out what to do to stabilize the system and make it reliable
19 with improved renewables coming in and not build any more
20 new generation capacity in Southern California. And based
21 on everything I've heard today I think that's an option you
22 at least need to keep on the table long term, because maybe
23 you're going to get tied up in litigation to the point where
24 you can't do anything else.

25 And then the third long-range option is one that

1 really comes from my thinking that in some respects the
2 offset program has done what it was intended to do
3 originally and it's run its course. And we have already in
4 Southern California a program that is an alternative to an
5 offset program that to my mind, and maybe I'm a minority,
6 certainly at this panel, in terms of repeating, but I think
7 it's been a tremendous success, which is the reclaim
8 program. The reclaim program has resulted in reductions of
9 NOx emissions of over 70 percent from the universe being
10 controlled. And I think that with what we know today it
11 would be quite possible to add particulate emissions to the
12 reclaim program.

13 The things you need to do to do that are to
14 develop fuel tracking and reporting systems that are
15 comparable to what you have for current reclaim sources,
16 establish particulate emissions factors that are based on
17 good science, not vendor guarantees, and assign those
18 emission factors to different source categories so that
19 people can't gain the emission factors. And in that case
20 you also will better match the PM needs of the region to
21 what actual emissions are as opposed to the potential to
22 emit, because reclaimed, like the Federal Acid Rain Program,
23 is based on actual emissions, not potential emissions. But
24 again, that's a long term, and that's at least two
25 legislations and three lawsuits down the road, but I still

1 think it's something that is not too soon to be thinking
2 about doing. But then again, I'm just an engineer so what
3 do I know?

4 And that concludes my comments.

5 COMMISSIONER DOUGLAS: So I'd like to thank this
6 panel, and appreciated hearing from -- from all of you.

7 One -- one thing that I have picked up over the
8 course of the day is that there actually is a lot of
9 agreement about the nature of the question that we need to
10 ask in this analysis. And, you know, I heard Jane ask how
11 many new power plants do we absolutely need in the world's -
12 - or the nation's most polluted air basin. I heard Barry
13 this morning say to the technical staff doing this work, you
14 know, you've got to answer two questions for me, they're the
15 two questions we always hear, can't we just do this all with
16 renewables, and if we can't -- and if we demonstrate that we
17 can't, so how much of the power really, really needs to be
18 generated from within the South Coast and -- and it does it
19 matter where?

20 And so those are the questions that we saw in the
21 language of AB 1318. And they're definitely questions that
22 we've heard throughout the day and from people coming from
23 very diverse perspectives. There's no question that it's
24 difficult at this time to -- to a new proposed power plant
25 from conception through the permitting process, through the

1 contracting process, and -- and to construction. There are
2 a lot of proposed projects in this area that have been
3 suspended and are continuing at the moment to be in a
4 suspended status in our own licensing process. Questions
5 like this are being asked in other regions of the state, as
6 well as in the South Coast. But AB 1318 was really aimed at
7 this region. One of my hopes is that we will develop a
8 methodology and a way of analyzing and looking at system
9 need in this way which is a very new way or looking at
10 system need.

11 The -- the one thing that I take some issue with
12 that Jane said, and -- and I think that Jane was coming from
13 the perspective of hearing us today in this room and not
14 from a perspective of what all the Energy Commission and ARB
15 are doing in the world of energy efficiency, renewables, and
16 so on.

17 But, you know, I -- I can't resist mentioning that
18 we are rolling out the first statewide energy efficiency
19 retrofit program that we've had. It's called Energy Upgrade
20 California. We're fresh off of regulating TVs, so your flat
21 screens will be much more efficient. And the dregs of the
22 world's production lines will not be sent to California
23 which is a very good thing for us, especially since many
24 other major regions of the world, Asia and Europe, have
25 really beat us to regulating efficiency from TVs. We have

1 permitted, if you take Energy Commission permitted renewable
2 projects and photovoltaic permitted projects, we've
3 permitted enough renewable energy to just about actually
4 just about fill the wedge that nuclear power provides in
5 California, and they're not built. And some of these
6 projects have obstacles. But -- but it's -- there's a
7 tremendous amount of movement and change.

8 And so we're working fast on efficiency. We're
9 working fast on renewables. There's a lot of potential in
10 smart grid storage, distributed generation. So I want to
11 assure you that this is at the forefront of what we're
12 working on. And these perspectives will be reflected in
13 this analysis. So we're really not looking at the kind of
14 need analysis that has been on before. We're looking at a
15 need analysis that is informed by our sense of different
16 opportunities for efficiency, renewable, smart grid, but
17 also on the other side for electrification which might
18 actually contributed to driving demand up.

19 So -- so we'll -- we'll work together and we'll
20 see where we can go with this.

21 MS. WILLIAMS: You know, to respond to that I want
22 Angela to remind me to send you the original comments that
23 we did now half a decade ago on these rules when they were
24 proposed.

25 COMMISSIONER DOUGLAS: That would be nice.

1 MS. WILLIAMS: Because these comments that we --
2 that we put in the record just mirror everything you just
3 said. Like how -- how much energy do we actually need? How
4 much reduction can we get from inside management?

5 My -- my adopted mother has this little thing on
6 her air conditioner that SCE put on there, you know, 15
7 years ago, right, and they get a little thing on their bill
8 that says, you know, they get a certain percent off because
9 -- right?

10 And I asked her, okay -- she's -- she -- she just
11 turned 74 -- "Have they ever turned your air conditioner
12 off, you know.

13 And she said, "No. No."

14 It's been on there for 15 years and they've never
15 turned her air conditioner off.

16 And I'm like, "Well, why not, you know what I
17 mean?"

18 And she says, "Yeah. We even put this swamp
19 cooler in so if they turn the air conditioner off we could
20 use this swamp cooler; right?"

21 So you can not imagine the frustration that we had
22 five years ago to hear that we needed to build 11 new power
23 plants when demand-side management was -- when -- energy
24 commissioners would look at us like what, what are you
25 talking about? So we of all people know how far we have

1 come in that five years. And I actually want to give credit
2 to some of the energy commissioners that hung in there and
3 didn't just say let's just build 25 new gas fired power
4 plants in California. No. Let's look at storage. Let's
5 look at energy efficiency. Let's look at fuel cells. Let's
6 look at CHP.

7 And so we're -- like we said back then, California
8 needs a new energy future. We desperately need it for a
9 bunch of reasons. The folks that came here today need a new
10 energy future. They need to have certainty. We need to
11 send a signal to the investors on where to put your money.
12 Which pony are you going to bet on? And it shouldn't be 25
13 new fossil fuel fired power plants in California, not with
14 the two worst air quality basins in the country. We've got
15 to do better. And I'm so looking forward to the next four
16 years and working on this with you guys.

17 COMMISSIONER WEISENMILLER: We were just checking
18 whether you said 4 or 40, though I wasn't --

19 MS. WILLIAMS: I'd -- I'd like 40.

20 COMMISSIONER WEISENMILLER: Well --

21 MS. WILLIAMS: But --

22 COMMISSIONER WEISENMILLER: -- I -- I think --

23 MS. WILLIAMS: -- four is good.

24 COMMISSIONER WEISENMILLER: Well, I hate -- I hate
25 to tell you but, I mean, my -- my roots in this area are

1 from the first Brown Administration, so '77 to '82. And
2 certainly some of the literature at the time that you may
3 want to look at is David Roe's *Dynamos and Virgins* --

4 MS. WILLIAMS: Uh-huh.

5 COMMISSIONER WEISENMILLER: -- (inaudible), I
6 mean, certainly the grant study --

7 MS. WILLIAMS: Uh-huh.

8 COMMISSIONER WEISENMILLER: -- of Charlie Warren's
9 (phonetic) in the middle of the '70s that Ron Doctor
10 (phonetic), a commissioner I first worked with at the
11 commission, was -- was responsible for providing critical
12 masses, a book out of Cal.

13 But anyway, it gets to the spirit of essentially
14 we know what we need to look at to compare some investment
15 choices. But I think, you know, at the end of the day as we
16 go into these, I mean, there's -- there's probably -- so I
17 mean, basically, we -- we certainly have pushed the nation
18 under the Brown first administration, under this
19 administration we're going to push the energy efficiency of
20 renewables very hard. But at the same time the question is:
21 What -- what's the actual need here in the basin? And as
22 you know you've -- you haven't heard as much as we did last
23 time about people's nervousness of us looking at need. But
24 again, I think we're -- we're trying to struggle through
25 this.

1 I think it's interesting if you -- if you -- if
2 you frame the issue in the simplest fashion there's about
3 7,600 megawatts of once-through cooling that we need to
4 retire, replace or we probably do something with. I mean,
5 that much is pretty clear. And that would enhance the
6 environmental quality here, not the air but certainly the
7 water quality. And these are old plants that certainly we
8 could do better.

9 Now I think the developers would probably say that
10 you need to replace 100 percent of those. I think you might
11 prefer more like zero. And so as the first cut if we said
12 50, I guess probably the question is: Which are the worst
13 plants? From you -- you know, we've heard the utilities
14 talk about where they want to see plants from a system
15 reliability perspective. But part of -- part of the thing
16 for you to think about is: Where don't you want to see
17 plants, assuming we need some in the basin just to deal with
18 transmission lines going down? You know, if we have the
19 Santa Ana winds and the lines go down we've got to have
20 something in this basin to preserve power. So, I mean,
21 that's --

22 MS. WILLIAMS: You know, and it's interesting --

23 COMMISSIONER WEISENMILLER: -- that's what is
24 coming.

25 MS. WILLIAMS: -- because Angela and I have had

1 this conversation so many times about, you know, we're the
2 first ones to say we're -- we're not shutting off the
3 incubators in the hospitals. Okay. People that -- that we
4 represent,
5 they -- they turn their lights on. They use electricity.
6 We understand we need electricity. We got that. We
7 understand that we may need in-basin fossil. But we want to
8 know before we put more people's lives at risk than we need
9 to how much of that. And it doesn't pass the laugh test for
10 us to say we need, you know, 10,000 megawatts of in-basin
11 fossil when we don't just need fossil. I mean, you could
12 get -- you could get in-basin reliability with demand-side
13 management. You could get in-basin reliability using fuel
14 cells and CHP. You could get it with using storage.

15 You know, we were told by the ISO, and I have
16 retold this story many times, that the grid here is like a
17 giant Rube Goldberg machine. It was built up over 100 years
18 and stuck together with baling wire and bubble gum. We got
19 that. We know that there's like -- like basically one of
20 those long orange extension cords between here and the San
21 Joaquin, you know, so power that's generated there can't
22 come here, and stuff that's generated here in excess can't
23 go there. I mean, we've got all that.

24 So, you know, when Lockyer came in he was
25 treasurer, he talked about putting a -- what is it -- \$8

1 billion or \$9 billion bond forward to -- to redo the
2 transmission system. Well, I don't think that's going to
3 happen now. I mean, as much as I wish it would I just don't
4 think it's going to happen now.

5 So given the fact that we're not going to be able
6 to do massive upgrades to transmission, that's the question
7 we're asking here in the 1318 report: What are the
8 constraints? And don't come to us and say we're just going
9 to change the Clean Air Act so we can kill more people,
10 okay, because we don't want to deal with these other
11 constraints. No. We've got to find ways to keep the grid
12 operational, to keep grid stability and get in-basin
13 generation so that you can do that, and minimize the air
14 pollution impact because that is a huge impact. And there's
15 ways to do that. And, you know, it just doesn't --
16 it -- it didn't fly with us to say we're not going to look
17 at any of that, we're not going to plan for any of that, but
18 we are going to twist and turn the laws that protect public
19 health to site 11 new power plants -- actually, it was 10
20 new power plants in the basin. That's why we're having this
21 conversation.

22 So I really appreciate you -- we -- you know, we
23 get painted or I get painted as, you know, no in-basin
24 generation. No. We're not saying that the lights should go
25 out because public health, it should be primogenitor; right?

1 We understand that there is a balancing going on here.

2 COMMISSIONER WEISENMILLER: Yeah. I mean -- I
3 mean, I think fundamentally as regulators we have to make
4 sure public health and safety is dealt with, liability is
5 dealt with, and sustainability is dealt with.

6 MS. WILLIAMS: Uh-huh.

7 COMMISSIONER WEISENMILLER: And then look at the
8 cost of that and how to allocate those costs. But we really
9 have to deal with the fundamental purposes of regulation.

10 MR. PETTIT: Well, in terms of getting back to
11 your earlier question, I think it's -- not meaning to be
12 insulting -- but a little unfair to ask us, where do you
13 want stuff, before we know how much stuff are we talking
14 about and when. And that, again, to get -- as I tried to
15 say earlier, that's what I thought we were getting, hope we
16 will be getting out of the AB 1318 study, sooner rather than
17 later. So we know these things.

18 COMMISSIONER WEISENMILLER: I think so. Though,
19 again, I think generally we want to take the once-through
20 cooling plants and, again, given reliability and other --
21 other factors we want to move them out as soon as we can.
22 You know, I mean, I think -- I think we start with that as a
23 given. And I think then you get to the question of you just
24 can't turn them off today, you know, what do you need, you
25 know, in terms of a full range of options, what do you need

1 to move forward? And certainly if there is some no-touch
2 areas, you know,
3 let's -- let's get that into the planning process earlier
4 than later.

5 MS. WILLIAMS: You know, one thing I do want to
6 say is that early in this process -- it's so long now that -
7 - that, you know, we had a workshop. And, you know,
8 basically they tried to pit the folks that won the lawsuit
9 on once-through cooling against us. And we got together and
10 we said, no, you're not going to do this; you know what I
11 mean? Now come on. And, you know, we were -- we're both
12 pushing as hard and as diplomatically as we can to get this
13 planning process.

14 And, you know, being ruled on 1318, at least this
15 was the bone that was thrown us after five years of working
16 on this, like we actually might get a process by which not
17 only does it benefit public health but it benefits everybody
18 else here. It benefits the regulators. It benefits the
19 developers. It benefits people who want to invest in
20 energy. You know,
21 the -- the better signals we can give people, you know --
22 this is what I say about my groups is, you know, if they
23 want to stop something they -- you know, why is nothing
24 foolproof? Because we fools are so damned ingenious.
25 That's why nothing's foolproof. And, you know, I've seen my

1 members stop -- stop things in the strangest possible ways
2 you can imagine. So, you know, let's not get into that.

3 Let's get into a process that people can be
4 committed to where everyone wants to keep the lights on.
5 The people who don't want to keep the lights on, they don't
6 live in the basin. They move out in the middle of the
7 desert where I live and they, you know, they do their thing
8 out there. So everyone wants to keep the lights on. How
9 are we going to do it together?

10 COMMISSIONER WEISENMILLER: I guess the -- the
11 last question for the three of you is that, obviously, the
12 interagency working group is -- is very much very good
13 technical analysts talking among themselves about how to
14 deal with the problem.

15 The one question is: What's the best way moving
16 forward to have the right type of stakeholder participation
17 process in that activity? And again, you -- you can
18 certainly think about it and comment later in your written
19 comments. But, you know, again, how do we -- you know,
20 obviously, we came down today. We're happy to come down,
21 you know, as we move further along. But what's the best way
22 to build in that stakeholder participation process?

23 MS. JOHNSON MESZAROS: Well, I think that we
24 should do some -- some -- some thinking about that. I think
25 that with all our technology we don't have to really have

1 you guys racking up those frequent flyer miles to physically
2 be here for every conversation, and that shouldn't preclude
3 us from having more consistent conversations; right? We're
4 all trying to manage this in the context of everything else
5 we have to do. And I just want to make, you know, really,
6 really clear, and I think it's -- and I want to point out
7 the following.

8 So you said that you're already clear that you
9 want to get those once-through cooling facilities offline,
10 not for the air but for the water. And what I'm suggesting
11 is that is that we ought to be taking a similar approach
12 regarding the air. Now that doesn't mean zero fossil in the
13 basin. That's just not what it needs. And I think that it
14 does us all a disservice to -- to not hear us say we're not
15 saying zero fossil in the basin. That's not what we're
16 saying.

17 And I think that David is exactly right. And
18 what's really critical to this process is that if there's an
19 overarching energy system that we can come to consensus
20 about that is the most efficient, least emitting system
21 that's going to have a broad mix, right, it's going to have
22 the storage, it's going to have DT, it's going to have all
23 those energy sources that we have -- you know, technology
24 has brought to us, when you come up with a new working
25 system that makes sense then it's easier for people to say,

1 okay, we need 100,000 megawatts of fossil. All right. I
2 understand how that fits into a system that really does get
3 us to the place where we're trying to go.

4 And I think we actually all really do share --
5 overall we share the same goal. We want to have the most
6 efficient, lowest emitting, lowest cost system that's
7 possible. And that system has to allow room for our
8 overarching values about protecting the ocean, about
9 protecting the air, and about generally supporting public
10 health that is a wrapper for our decisions about what our
11 energy system looks like.

12 And to the extent that we are now -- we now find
13 our place in my -- find ourselves in a place, in my view, we
14 have divorced things that used to be core values for us from
15 how we construct our energy system, we find that people who
16 really are our natural allies fighting with each other.
17 It's -- it's a waste of time, it's a waste of energy, and it
18 does a disservice to the broader population of the basin,
19 that those of us who do this pretty much as our full-time
20 gigs are fighting with each other about things that we
21 really fundamentally ought to be agreeing about. And we
22 have to be able to develop a system where we can come to
23 consensus.

24 And please don't allow -- allow the neat fiction
25 about community groups digging in our heels and saying no to

1 everything mean that you don't have to listen carefully to
2 the issues that we're raising, and they don't get similar
3 standing in the conversation to issues that other people are
4 raising.

5 And really, if we can do that I think we can come
6 out of this in a reasonable timeframe with a system that
7 really does work and allows us to actually move the air
8 basin forward, not only to clean air here, but to, really,
9 as people have said today create the model for how looking
10 at the 21st century gives us a new energy system that's
11 integrated with core values, and not just all -- not only
12 here, but across the state, across the country, and in
13 developing nations where they're being challenged with these
14 same kinds of issues we can all have access to clean,
15 effective, affordable energy. And that's really all we're
16 trying -- that -- that's all we're trying to do, but it's
17 intimately -- infinitely doable if we just let ourselves do
18 that.

19 So I would very much like to think about and help
20 to craft this -- this system that allows true participation
21 in a way that gets us to a system. Because as much as I
22 love litigating I would really rather be doing something
23 else, frankly.

24 COMMISSIONER WEISENMILLER: Okay. I think -- I
25 think Gary wanted to raise a comment, although I -- I was

1 also going to ask Gary the basic question of given the
2 concerns on public health, I mean, if there were three
3 things we could really do down here what would the -- what
4 would you suggest those major initiatives would be to -- to
5 address public health concerns?

6 MR. RUBENSTEIN: Well, the -- the -- the time for
7 comment has passed. But in terms of the -- the --
8 addressing the concerns about public health, I think
9 education is the most important. I think that statements
10 about gas fired power plants killing people are untrue and
11 tend to get people upset needlessly and distract from what
12 the real issues are. I think that educating people, and I
13 know the South Coast District attempts to do this, what PM
14 2.5 air quality is all about, what it means, what the
15 sources are, the answer is, by the way, we have met the
16 enemy and he is us, getting that kind of message out is
17 very, very challenging.

18 And I think that if we had the cooperation of the
19 agencies and air districts and the environmental
20 organizations it will enable us to see past the hysteria
21 towards the real issues and address them. And, frankly, I
22 can't think of issues two and three.

23 COMMISSIONER WEISENMILLER: We'd like to thank the
24 panel, and see if there's anyone online that wants to
25 contribute today. In terms of public comment does -- do we

1 have any -- any going on the -- any -- or let's start with
2 anyone here who wants to provide public comment at this
3 moment.

4 MS. KOROSEC: And we don't have anybody on the --
5 I'm sorry.

6 COMMISSIONER WEISENMILLER: Okay.

7 MS. KORESEC: We don't have anybody on the phone
8 who's -- who's wanting to comment.

9 COMMISSIONER WEISENMILLER: Okay. No comment.

10 MS. KORESEC: Okay. This -- this mike is not on
11 for some reason, so --

12 MR. SHUMAVON: So this is Aram Shumavon with the
13 PUC. And I was speaking earlier, in case there is anybody
14 that showed up later and didn't get my introduction.

15 I just -- this has been very helpful for me to
16 hear, just as we think about our long-term planning process.
17 I -- I will caution that we have been spending a lot of time
18 and energy thinking about this. There's, you know, there's
19 only so many technocrats you can fit into a conference call
20 before you start thinking about a lot of hypotheticals.

21 But one thing I -- I have noticed in the afternoon
22 that I think is -- is important to keep in mind as you're
23 thinking about written comments is -- is that there's a lot
24 of conversation about end state that happened in the
25 afternoon, and that we definitely need to be cognizant of

1 the fact that there are both water and air issues that will
2 take place over time. So that when you are thinking about
3 an end state that is a desirable end state it's very
4 important in your comments to us, I think, if you can be
5 sure that you are addressing in some context that there may
6 be a path to that end state that has a unique set of -- of
7 needs relative to, you know, water and air issues over time
8 that we need to keep reliability in -- in focus, as -- as
9 well, during that time period.

10 So -- so please, when you are thinking about your
11 comments keep in mind that if -- if we have 2020 as a
12 horizon that we also need to be aware of the fact that -- on
13 the path to 2020, 2016 may have us -- a particular balance
14 of reliability of water issues and air issues that may not
15 be -- and I -- what you would hope for the ideal end state,
16 but a necessary path to get to that. So I just ask for you
17 to be cognizant of that in your comments. Thank you.

18 COMMISSIONER DOUGLAS: Thank you. Thanks to
19 everybody for participating.

20 COMMISSIONER WEISENMILLER: Yeah. Again, I'd like
21 to thank everyone for the participation today. I think it's
22 been a productive, albeit long day. And I think we've made
23 some progress. I certainly encourage people to file their
24 written comments. And, again, you've certainly given us a
25 lot to think about, so thanks again.

[Adjourned at 3:53 p.m.]

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REPORTERS'S CERTIFICATE

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I, Martha L. Nelson, attest that the foregoing proceedings were recorded digitally and were transcribed to the best of my ability.

I further certify that I am not a relative or employee of any attorney of the parties, nor financially interested in the action.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Dated this 22nd day of February, 2011.
