JOINT WORKSHOP

OF THE

CALIFORNIA ENERGY COMMISSION

CALIFORNIA PUBLIC UTILITIES COMMISSION

In the Matter of:)
)
GREENHOUSE GAS EMISSION ALLOCATION)
FOR THE ELECTRICITY SECTOR (AB-32))
)

CALIFORNIA ENERGY COMMISSION

HEARING ROOM A

1516 NINTH STREET

SACRAMENTO, CALIFORNIA

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CALIFORNIA ENERGY COMMISSION

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Presiding Member, Electricity Committee

James D. Boyd, Vice Chairperson

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Susan Brown, Advisor

Laurie ten Hope, Advisor

Karen Griffin

Dave Vidaver

Marc Pryor

CALIFORNIA PUBLIC UTILITIES COMMISSION

Charlotte TerKeurst, Administrative Law Judge

STAFF

Stephen C. Roscow

Scott Murtishaw

Christine Tam
Office of Ratepayer Advocates

Wade McCartney

ALSO PRESENT

Kevin Kennedy
Air Resources Board

Jane Luckhardt, Attorney
Downey Brand, LLP
on behalf of Sacramento Municipal Utility District

H.I. Bud Beebe
Sacramento Municipal Utility District

ALSO PRESENT

Leilani Johnson Kowal
Los Angeles Department of Water and Power

Devra Wang
Natural Resources Defense Council

Norman Pedersen, Attorney
Hanna and Morton, LLP
Southern California Public Power Authority

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Southern California Edison Company

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Ray Williams
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Christopher B. Busch
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on behalf of Energy Producers and Users Coalition

Lenny Goldberg
Lenny Goldberg and Associates
on behalf of The Utility Reform Network

Steven Kelly
Independent Energy Producers

Vitaly Lee
AES Southland, LLC

Steven S. Michel, Attorney
Western Resource Advocates

Jim Lazar, Consulting Economist
Microdesign Northwest

ALSO PRESENT

Frank Harrison
Southern California Edison Company

Jeffrey G. Reed
San Diego Gas and Electric

Jill Whynot
South Coast Air Quality Management District

C. Susie Berlin, Attorney
McCarthy & Berlin, LLP

Greg Morris
Green Power Institute

Joy A. Warren
Modesto Irrigation District

Michael Sandler (via teleconference)
Climate Protection Campaign

I N D E X

P R O C E E D I N G S

10:03 a.m.

CHAIRPERSON PFANNENSTIEL: This is a joint workshop between the Energy Commission and the Public Utilities Commission under AB-32. I'm Jackie Pfannenstiel; I'm the Chair of the Energy Commission and the Presiding Commissioner on the Committee that was set up to coordinate these efforts with the PUC.

We have a busy agenda and a full day, and clearly a full hearing room, so it's going to take some time to get through.

But let me start with introductions. To my right on the dais is Charlotte TerKeurst, who is the Administrative Law Judge from the PUC, who is responsible for this proceeding.

To Charlotte's right is the Senior Advisor to Commissioner Byron, who joins me on this Committee and was not able to be here, Laurie tenHope. To my left is my Advisor, Panama Bartholomy. And to his left is Commissioner Jim Boyd.

I think that we have an agenda that people have picked up and we'll go on to that. Let me just make a couple comments about this proceeding, and specifically today.

I think everybody here knows that AB-32 directs the California Air Resources Board to develop a scoping plan to achieve what it says is maximally technologically feasible and cost effective reductions in greenhouse gases from the sources that emit greenhouse gases.

The legislation requires the Air Resources Board to work with the Energy Commission and the PUC to develop the scoping plan for the electricity sector.

These two Commissions have held prior workshops and hearings on reporting and verification. And we submitted a report to the Air Resources Board on that.

But we're now in the phase of the proceeding where we're looking at how to set up an emission reduction regulatory scheme for the electricity sector. We're planning to approve joint recommendations from the two Commissions to the Air Resources Board in the first quarter of next year.

We held a joint workshop on the point of regulation. Today we're going to look at the regulatory approaches to emission allowance allocation.

Many parties here offered responses to the 28 questions proposed by the ALJ ruling of October 15th. I read most of those responses, I think virtually all of them, and I think many of the rest of us.

Today's an opportunity to move beyond, I think, the individual positions that were reflected in those responses towards a consensus, or at least a compromise position on emission allowances.

So this morning we've asked a number of parties to offer specific design proposals, and then there will be an opportunity to comment on those proposals. Karen Griffin of the Energy Commission Staff will moderate that discussion.

Later we'll have a presentation by Steve Roscow of the PUC on different emission allocation options.

We would really like this workshop to lead to solutions rather than controversy. We hope that this can help us clarify the recommendations that the two Commissions make to the Air Resources Board.

There will be plenty of opportunity in

the course of the day for input on the various aspects of this proceeding. The workshop is being transcribed, and will be entered into the record of the joint proceeding.

With that, Commissioner TerKeurst, do you have comment?

ADMINISTRATIVE LAW JUDGE TerKEURST: Just briefly. And I wish I were a Commissioner, but --

CHAIRPERSON PFANNENSTIEL: Sorry, Judge.

ADMINISTRATIVE LAW JUDGE TerKEURST: -- but I'm not. I just get to prepare a proposed recommendation, not vote on it.

I do want to welcome everyone here. We do have a full agenda and I'll keep my comments very brief. Mainly to just take this opportunity to warn you that we have a full agenda beyond this workshop for the fall. We will be seeing a lot of you and talking with a lot of you over the next few months.

We expect to issue the amendments to the scoping memo later this week that will incorporate formally the two amendments to the order instituting rulemaking that the PUC passed earlier this summer. And we will be asking for comments similar to the ones that we asked for on the allocation issue. We're asking for additional comments on the point of regulation and the type of regulation issues. So that will be coming at you later this week, probably with comments due later this month.

So you will be busy; we will be busy. And I look forward to this workshop today. Thank you.

CHAIRPERSON PFANNENSTIEL: Thank you. Any other? Commissioner Boyd, comments?

VICE CHAIRPERSON BOYD: No. I'd just say I'm delighted to have the opportunity to sit in on this workshop, having shed myself of the burden of the alternative fuels plan and return to my passion for climate change for awhile. Thank you.

CHAIRPERSON PFANNENSTIEL: Well, I'm glad you were able to join us.

I think before we start on the panel I'll ask Kevin Kennedy, who is here representing the Air Resources Board, having cut his teeth on climate change work here, on this very proceeding, in fact. And now having moved over to the Air Resources Board, we'd appreciate your comments and perspective, Kevin.

DR. KENNEDY: Thank you, Chairman Pfannenstiel and others. As she said, I'm Kevin Kennedy; and though it still sounds a bit odd to me to say this, I'm with the Air Resources Board in the Office of Climate Change.

And I just wanted to briefly say that we at the Air Board are extremely interested in what's going on in this proceeding. We greatly appreciate the work that the two Commissions and all the stakeholders are doing in this proceeding to wrestle through the questions of how to deal with AB-32 in the context of the electricity sector.

We are also very much working with the staff of the two Commissions, our staff. We have a number of staff here today listening in on these proceedings.

One of the things that we are working very strongly to do is to try to make sure that as the thinking progresses in this proceeding, and as we at the Air Board wade through very similar issues in terms of how to deal with AB-32 in the context of the broader economy, that the thinking in the two venues remains on parallel and consistent and that sort of we're able to work with the recommendation; the recommendation coming out of this proceeding is something that will work very well in the context of what we do in the larger economy for AB-32.

So, again, I just want to thank everyone who is here today for the hard work that's going on here. We're extremely interested and we are very much looking forward to getting the recommendations from the two Commissions; and very much hopeful and expecting that we'll be able to incorporate those into the overall scoping plan that we're working on at ARB.

Thank you.

CHAIRPERSON PFANNENSTIEL: Thank you, Kevin. With that I will hand it off to Karen Griffin.

MS. GRIFFIN: Thank you. As we start today I want to issue a small apology to those of you who truly support an auction process. I kept looking for an auction speaker; this was before I got your comments, and I'd say like you're a very shy lot. I felt like a hostess inviting people to a party and they would accept and then turn me down. So that's why there's no auction speaker on the panel today.

But I'm lucky, and we're all lucky that the four people who did agree to talk are here to help us understand their particular views. They represent a variety of positions that are important in this proceeding, including -- and I don't want to say yours are any less, but I knew they were important and they agreed to speak. So I'm glad to have them here today.

Also want to introduce some of the staff team who is working, assisting the Commissioners at both Commissions, and the ALJs, in putting this together.

Over here we have Scott Murtishaw from the PUC. And I think Kristin Rolf-Douglas is in the audience. Is Steve coming?

MR. ROSCOW: I'm here.

MS. GRIFFIN: You're here, okay. Well, you know, I can't see. You're supposed to be up on the podium, Steve.

MR. SPEAKER: Yeah, there's a spot for you, Steve.

MR. ROSCOW: Oh.

MS. GRIFFIN: Okay. No hiding in the audience. And for the Energy Commission we have

Dave Vidaver, who's the senior technical person supervising the staff who work in this. Marc Pryor is around somewhere. You're over there. Is Adrienne here, Kandel, another one of our staff people. Thanks, Adrienne. Our attorney is not here right now, is Lisa DeCarlo. So these are the people that you will be hearing more from as we work to help the Commissioners put together their proposed decision.

So, let's turn directly to our panel. We're going to go just in the order that they're in the agenda. And we'd have loved you to sit over there. We knew you were going to stand at the podium, so you're either welcome to sit there or stay where you are, and then go to the podium.

MR. SPEAKER: I'll stay over here for now.

MS. GRIFFIN: But we're going to start with Leilani Johnson from LADWP. Thank you very much.

MS. JOHNSON KOWAL: Can you hear me? Good. Good morning, Chairman Pfannenstiel, Commissioner Boyd, Judge TerKeurst and Staff. I'm Leilani Johnson Kowal with Los Angeles Department of Water and Power; and I appreciate the opportunity to be the first speaker today on this very important topic of allowance allocations.

Perhaps I can also reserve five minutes at the end of this panel to respond to any comments made by other presenters.

As we all know this is likely the most contentious and difficult part of AB-32, the challenge we face today is determining how best to achieve the primary goal of AB-32, which is to reduce emissions in a way that remains true to the intent of the legislation; to design regulations, including distribution of emission allowances in a manner that is equitable, seeks to minimize costs and maximize the total benefits to California; and encourages early action to reduce greenhouse gas emissions.

In terms of LADWP's commitment to direct greenhouse gas reductions it is no surprise that our overall carbon intensity is approximately 1300 pounds per megawatt hour, while the average of large utilities in California are much lower, and in some cases less than half of our carbon intensity.

The LADWP, along with the City of Los Angeles, supported AB-32 during the 2006 legislative session and recognizing our electric portfolio poses one of the greatest challenges and one of the greatest opportunities for reducing emissions. We are glad to be here to help make this work.

LADWP, through its Board and in concert with the Mayor, made commitments to targets under the Los Angeles climate change plan, which is also known as the Green L.A. Plan, and AB-32 and took immediate steps to steer our public utility investments towards greenhouse gas reductions.

This year we have committed nearly $2 billion in investments over the next five years to programs that will result in direct and permanent greenhouse gas reductions.

LADWP increased our commitments to renewable energy and the related transmission. We tripled our funding for our solar installation program, doubled our investments in energy efficiency and demand side management. We also created a lead development office to provide assistance for energy and water-efficient construction.

We redesigned our rate structure and continue to make infrastructure improvements to the Port of Los Angeles to help shift them from bunker fuel to electricity.

In addition to that we've also increased our purchases of alternative fuel vehicles and supporting fueling infrastructure.

I bring these up because I want to express to you the variety of different positions that all of the retail providers have. And I wanted to paint the picture for you of where LADWP is coming from in terms of the challenges that we have, going forward.

In terms of our position on allowance allocations we continue to support and maintain that a direct regulation program, which includes emission reduction targets, is the most cost effective and efficient method to achieve AB-32 goals for the electric sector.

However, today I do present recommendations for market-based allowance allocation based on our experience with the reclaim program in the South Coast, as well as the acid rain program. And I reserve my comments about auction and other allocation approaches for later this morning and this afternoon.

At the center of our position on

allowance allocations is our goal to partner with the state to achieve real environmental benefits through direct greenhouse gas reductions, protect customers from unfair cost burdens and rate spikes, and preserve electric system reliability.

We do not support a wealth transfer between regulated entities in the state, or among regulated entities. And, second, we do not support creating windfall profits for any regulated entity or entities allowed to participate in a greenhouse gas market trading program.

This is more likely -- these two outcomes are more likely to occur under other proposals that ignore retail providers starting point.

An equitable allocation formula must be fair to all entities and direct those with higher compliance burden to concentrate their investments in low- and zero-emitting resources.

From that perspective, LADWP's proposal is to support an administrative allocation of allowances at the program's inception in 2012, based on current and accurate emission levels, with an annual declining cap that ultimately brings each regulated entity in the electric sector to an emission level that reflects best industry practices in 2020. And for it to address low growth, LADWP supports a new entrant reserve for new capacity that meets those best industry practices.

We recognize that this would result in overall greater burden for those retail providers that have high carbon footprints in comparison to those that are relatively cleaner. That is one of the challenges that we have going forward.

They would be required to reduce a greater percentage in comparison to retail providers with low carbon footprints; and that's a distinct difference between our proposal and one of traditional grandfathering.

To be clear, LADWP is not advocating that entities return to their 1990 entity-specific emission levels, nor are we advocating for all regulated entities to reduce emissions by the same proportional amount, something along the order of say 25 percent for everyone.

However, in order for high carbon retail providers to transition to benchmark goal in 2020 it is reasonable for us to have a glide path in the early years to provide an adequate planning horizon for new investments in renewable energy and transmission. And this would be followed by a steeper curve in the later years towards 2020, reaching the required emission reduction levels in 2020.

This approach maintains appropriate sensitivity to the challenges faced by high carbon retail providers in the early years. And yet, it also provides us with the most level playing field possible by 2020. And I believe that this is consistent with the guiding design principles affirmed by the MAC.

It also promotes early action to invest in renewables, energy efficiency and provide a reward in terms of surplus allowances for reductions made beyond the annual cap, and a penalty for no action in which allowances would have to be surrendered for compliance if reductions are not made.

The first guiding principle of a MAC is to avoid localized and disproportionate impacts to low income and disadvantaged communities. And we believe that an allowance allocation based on current emissions provides the least-cost approach to reducing emissions to meet the 2020 emission reduction goals.

Distributing allowances based on any other criteria other than emissions, whether by auction or retail sales, that ignores the starting point for retail providers that do have high carbon emissions, will increase the costs for the program overall.

In closing, at LADWP we understand what our role is in implementing AB-32, and remain committed to making direct emission reductions in our portfolio. We adamantly oppose 100 percent auctioning. We feel that that approach, or any other allocation that ignores retail providers' starting point, is a mistake.

We encourage the PUC and the CEC to remain focused on the goal of AB-32, which is to reduce emissions. The Commission must steer clear of proposals that lose sight of this end goal, and that distract us from learning the lessons of our recent past when markets didn't behave as planned.

The proposal presented by LADWP reduces the risk of windfall profits, market manipulation, gaming, rate shock, and most importantly, protects the electric system reliability.

Thank you.

CHAIRPERSON PFANNENSTIEL: May I just make sure that I'm clear. So you would have us allocate based on 2012 emissions?

MS. JOHNSON KOWAL: Allocate based on the most current emissions that you know in terms of accurate emissions data. We understand that the Air Resources Board is collecting data on emissions, and we believe that perhaps maybe 2008, 2009 timeframe is when that data would become available.

CHAIRPERSON PFANNENSTIEL: I see.

MS. GRIFFIN: Okay, the way we're going to proceed is that we're going to take clarifying comments from the podium and the panel; ask if the audience has any clarifying questions; and then move to the next speaker. Go all the way through them, and then we're going to ask the audience to come up and discuss points of view brought up by any of the speakers.

We do have a roving mic, but it seems to work better if people come to the podium. However, the people in the front row here, we may be engaged in musical chairs in terms of people lining up to speak if we get a lot of speakers.

So, I do have -- I get to go first --

(Laughter.)

MS. GRIFFIN: You suggested that you thought LADWP could be on a glide path to achieve a 2020 target, which is similar to those that would be obtained by other California load-based retail providers?

MS. JOHNSON KOWAL: Correct. We believe that a benchmark that everyone has to meet in 2020 that is the same as -- that's what our goal is.

MS. GRIFFIN: Okay, so --

MS. JOHNSON KOWAL: Is to be on the same level playing field as everybody else.

MS. GRIFFIN: You think it's feasible for you to do this?

MS. JOHNSON KOWAL: If there is a glide path in the early years in terms of the allowances being available to us, instead of a straight-line curve -- or a straight line from 2012 to 2020, it would probably be more of a glide in the early years, with a steeper reduction towards the later years.

MS. GRIFFIN: Okay, thank you. From the podium?

ADMINISTRATIVE LAW JUDGE TerKEURST: I

guess my one question about you saying that you could reach a benchmark by 2020, how would you contemplate dealing with your high carbon resources by 2020 to allow you to reach an industrywide benchmark?

MS. JOHNSON KOWAL: We are currently engaged in displacing our high carbon resources by building new renewable energy projects, as well as increasing our investments in energy efficiency.

ADMINISTRATIVE LAW JUDGE TerKEURST: And would the high carbon resources just be sold to someone else, or would they be shut down?

MS. JOHNSON KOWAL: I'm not in a position to answer that question. I don't -- I think the intent is that they would not be imported and consumed in California. As for our contracts with our out-of-state coal resources, that's something beyond what I can speak to today.

VICE CHAIRPERSON BOYD: A question. Just to drive the point home even more solidly, you feel you can with, as you said efficiency and renewable resources, meet your 2020 benchmark. Therefore, I assume you believe that the California infrastructure is capable of delivering those renewable resources to your customers sufficiently by 2020, meaning transmission and distribution in particular.

MS. JOHNSON KOWAL: We sure hope that it does. I think that is one of the biggest challenges that we face here in California is the fact that with renewables you do have to have that supporting transmission. And all of our investments are focused on those very types of projects.

VICE CHAIRPERSON BOYD: So we can expect your support on all infrastructure needs that are identified?

MS. JOHNSON KOWAL: I -- I don't know that I'm in that position of saying that, but I would say that we are consistent with those policies.

VICE CHAIRPERSON BOYD: Thank you.

MS. GRIFFIN: From the panel or staff? No, okay. Are there questions from the audience on this, verifying questions on LADWP's opening position?

Please just come to the podium.

MS. LUCKHARDT: This is Jane Luckhardt for the Sacramento Municipal Utility District. Leilani, I just have one question. You were saying that everyone should reach a common benchmark. Did you have a rough calculation of what you thought that could be -- that would be?

MS. JOHNSON KOWAL: I do not. And that is because of a number of things. One is the 1990 inventory has not been adopted; plus we have to still go through economic modeling to understand what is feasible from electric sector.

But the intent is -- or our goal is to come to this same ultimate benchmark goal for everyone in the electric sector.

MS. LUCKHARDT: And how would you calculate that? Or do you know, yet?

MS. JOHNSON KOWAL: It's -- I don't --

MS. LUCKHARDT: You wouldn't?

MS. JOHNSON KOWAL: Not at this point.

MR. MURTISHAW: Actually, Karen, I do have one question.

MS. GRIFFIN: Okay.

MR. MURTISHAW: So, I'm sorry I haven't had time to read all of the comments that came in yet, so this may be answered in the comments that you filed.

Does the allocation mechanism that you're talking about start with some percentage that would be allocated based on historic emissions, which -- and then another percentage that's allocated based on the common benchmark? And then those two percentages change over time? How do you transition from the historic emissions as a common benchmark from 2012 to 2020?

MS. JOHNSON KOWAL: I don't think we're at a point of knowing what the details are in terms of that level is something to continue evolving as this process goes forward.

But one thing I do say is that in 2012 we believe that allocations should be done based on 100 percent -- 100 percent based on emissions, actual emissions.

MS. GRIFFIN: Okay. Then we will turn to NRDC, thank you for coming.

MR. PRYOR: Karen, may I interject here?

MS. GRIFFIN: Please.

MR. PRYOR: Would the speakers please provide a business card or some other form for our reporter.

MS. WANG: Thank you. I'm Devra Wang with the Natural Resources Defense Council. Thank you for the invitation to join you at this very important workshop today.

We submitted joint comments with NRDC and the Union of Concerned Scientists. And not to disappoint you, Karen, I will be talking about auctioning. But before I get to that, wanted to raise some important considerations, I think, threshold issues before we delve into the details.

My remarks today apply equally to the electricity and to the natural gas sectors, and largely to any point of regulation, though I'll highlight where we think differences would appear.

So there's a couple of threshold issues that I think it's important to discuss. First is that allowances are basically equal to money. And when we talk about auctioning and using the revenue, or distributing the allowances, themselves, it's basically the same thing. The allowance is something of value.

And so we need to be talking about how to distribute the value of those allowances, regardless of what mechanism we actually use to distribute that value.

In our view an auction is a more transparent means of distributing that value, to auction the allowances, and then to, in a more transparent manner, decide who gets the benefit of those allowances, of that money that they represent.

The second key point I want to make is that the point of regulation does not need to be the same as the point of allocation or the point where someone gets the benefit of the allowance value.

Many parties are implicitly or explicitly advocating that the entities that are the point of regulation also receive the allowances. But they don't need to be one and the same. This is something that has value. And I think the Commissions and the Air Resources Board need to look at who should get the benefit of the value of those allowances.

In our view, under any point of regulation, consumers, the customers of the utilities should get the benefit of that value. So, regardless of what decision gets made about the point of regulation, the customers of the utilities should be the ones who receive the value of the allowances.

The third point I want to make is that with regard to this decision in particular, it's very important that California look at what precedent we're setting for the federal system.

As we talk about how to distribute the value of the allowances within California, we need to adopt something that's in California's best interests, but it's very important to keep an eye on the fact that the federal system is just down the road; and that it's going to be in all of California's utility customers best interests to have allowances distributed in a way that benefits cleaner regions, cleaner utilities and recognizes those that have taken early action.

Because, of course, as a state, California has taken early action. And it's very important; I think it's one area where we all have common cause here in this room, that under a federal system we'd like to see California recognized for the early action that our state has taken.

Now, as we discuss what would be the best way to distribute allowances, I think it's important to start by looking at the principles that should be used. And the Administrative Law Judge's ruling, I think rightly, started by asking parties what the key principles are for distributing allowances.

We looked both to the market advisory committee report, and also to the guidance that was provided in AB-32, itself, in terms of the principles.

So, let me just briefly describe the principles that we think are important in judging any allowance distribution proposal against.

And that includes a system that is equitable. AB-32 requires that. Preventing the creation of windfall profits. Reducing the cost of the program to consumers, and especially low income consumers.

Insuring fair treatment for early actors. Promoting investments in low emission technologies, including energy efficiency. Contributing to the state's efforts to improve air quality and reduce toxic emissions.

Contributing to the development of innovative technologies. Minimize the costs and maximizing the benefits of the program to California. Helping to improve and modernize the energy infrastructure.

Maximizing the additional environmental and economic benefits that can be achieved. And directing investment toward the most disadvantaged communities in California.

So those are a lot of principles. AB-32 contained a lot of guidance on this issue, but I think it's very important as we look at the different proposals that are on the table, to assess how they stack up relative to the principles that the Legislature and the Governor put forward.

So, turning to the methods that should be used. From our perspective it's very important that the state not grandfather allowances. I want to start with what we think should not be the mechanism used.

It doesn't meet those principles that I just described. And it's also very important that the state send a very early signal that the state will not grandfather, to enable early action between now and the time that this program starts. We have a lot of time to start making investments, and it's important to send that signal early that you will not be rewarded for increasing emissions.

This is also very important because any system that grandfathers allowances in California and sets a precedent for a federal system that grandfathers allowances will hurt all of

California's utility customers.

And that's very important because a few years down the road that's the system, in all likelihood, that we will be faced with. And we will be disadvantaging ourselves if we set that precedent. We can't, ourselves, grandfather, and then turn around and ask the federal government not to. I think it's important that we present the principles and stick with those in our design, as well.

Now there are many ways that we could design an allowance distribution system that would meet the principles that I just discussed. So I'm going to describe three systems that we think would meet those principles. And in doing so, stress that I think there's many different options that could be viable here. And that, from our perspective, this workshop is just the beginning of the discussion about how to meet those principles.

So the first system would be a full auction with the revenues used for public purposes and to further the goals of AB-32. This system would meet the principles that I described. And the auction revenues, I want to stress, would come back to the sectors that are contributing -- so in this case the electricity and the natural gas sectors -- to do things like support investments in technologies that reduce greenhouse gas emissions, to reduce costs to consumers, especially low income consumers. For example, through additional investments and end use efficiency beyond our current programs.

Supplementing the low income energy efficiency, the bill payment assistance programs. Investing in research and development to advance technologies. Supporting air and toxic pollution reduction efforts. Supporting the development of green collar jobs. And providing economic opportunities in low income and disadvantaged communities.

In particular, we think a full auction is very important under a first-seller point of regulation to insure that we avoid windfall profits in the system.

The second proposal I'd like to put on the table is for a system that would work under a loadbase points of regulation, for either electricity or natural gas. And it would be an auction with partial utility-directed investments.

Some people are calling it a refunded auction.

But basically it would allow the utilities to keep a portion of the amount that they spend in the auction to invest in specified ways, subject to oversight from the state.

So, for example, the utilities could be allowed to keep some percent, maybe 75 percent, of the amount that they are spending in the auction, to make long-term investments in technologies that reduce greenhouse gas emissions, research and development, reducing costs for low income consumers, et cetera.

This is the sort of use-it-or-lose-it type of approach. And any amount that a utility doesn't use, to invest in its own system and to reduce its own emissions, could go to the more general statewide purposes that I just talked about, general statewide research and development, reducing pollution in local communities, et cetera.

The third system that I'll put on the table is something that could work under either sector, under either point of regulation, and that's to distribute at least a portion of the allowances to utilities using an updating per-customer allocation methodology.

The basic principle behind this is that each of us, each Californian, should have an equal right to use the atmosphere. I think many would agree that that would be the most fair way to look at this issue.

And, of course, it's a little bit difficult to identify the population and verify the population served by each utility; and the number of customers can serve as a close proxy for that.

So, under this system, the allowances, themselves, or the auction revenue, since they represent the same thing, could be distributed to utility customers on a per-customer basis, through the utility. And to be used, again, to reduce emissions and to meet the other principles that I described.

From our perspective, these types of systems are important because they reward early action. They're also a progressive way to do this that benefits low income customers more than some of the other distribution methods.

So, again, those are illustrative of the types of systems that we think would meet the principles. There are other systems that have been proposed by parties, including an output-based or a benchmarking system that is adjusted for verified energy efficiency savings.

But as we look at this, I would urge all of the parties here to look towards agreement as much as we can on the principles, and keep in mind that we need to set ourselves up with a good precedent for the federal system that will be in all of our best interests.

So I look forward to the ongoing discussion on this, and thank you again for the opportunity to share our initial thoughts.

CHAIRPERSON PFANNENSTIEL: Devra, may I ask, on your second model, the auction with the utility holding back some of the revenues, I want to make sure I understand this. This would be, normally the credits would be auctioned. But instead of the utility purchasing those credits, it would take the dollars that it would spend in an auction and use those for investment within its own system?

MS. WANG: Right. I think the mechanics could go either way. As you just described, or the auction could take place and the state would know how much each utility had spent in the auction.

And then if they want to invest that money in something that meets the criteria, for example, efficiency, renewables investments, low emission technologies, could authorize them to use up to the amount of money that they had spent in the auction.

CHAIRPERSON PFANNENSTIEL: Because I think most auction concepts would have some entity, the state, for example, collecting the money and using some portion of it for that kind of investment. But this would only be a slight variation in that you would just give it to the utilities to do that, rather than the state doing it?

MS. WANG: Right. And it would mean that the utilities who are spending the most on the allowances have the most money to spend to clean up their own system. And so that's one of the appeals of it is that they can invest that money into their system to lower their emissions over time.

CHAIRPERSON PFANNENSTIEL: Thank you.

MS. GRIFFIN: Other questions from the

audience?

VICE CHAIRPERSON BOYD: Maybe a quick one. Devra, your reference to being careful about setting precedents and our need to work with the federal government, and the fact that they'll be behind us in line designing a nationwide system. I trust you'll continue to work with us on the dilemma of a lowest common denominator system that tends to get developed at the national level on so many issues vis-a-vis where California feels it needs to be. Because that's always a headache for us.

MS. WANG: Absolutely.

MS. GRIFFIN: I have two clarifying questions. When you speak about rewarding early action do you mean investments that happened as far back as 1990? Investments that happened, say, at the adoption of AB-32? Or from going forward now to 2012?

MS. WANG: I think both time periods are important. We need to both recognize those who have taken action in the past. And encourage and reward early action between now and the time that the program starts. We want to begin reducing emissions as soon as possible.

MS. GRIFFIN: And does early action include investment in nuclear and large hydro?

MS. WANG: I think that's one of the key issues that we're going to need to discuss. The motivations behind that certainly some would question.

I think the key is really the investments that have been made in energy efficiency and renewables and for reducing emissions.

MS. GRIFFIN: Okay. And then the other question was you mentioned that the principles should be based on each consumer breathing the atmosphere. I'm never quite sure in NRDC's comments when you say consumer if you mean individual retail consumers or if you mean all the consumers. So do you include industrial and commercial customers as part of the whatever allocation and rights system that would be developed in, you know, what would be the principle that we're --

MS. WANG: I think the principle should be every individual in California. But from a practical perspective, moving to a per-customer method makes sense to us.

It probably would need to be adjusted to account for commercial customers, industrial customers. We haven't developed all of the details. We're interested in talking with other parties to work through some of those issues.

MS. GRIFFIN: Other clarifying questions from the dais? No. Okay. Audience, pop up.

MR. BEEBE: Make it quick. Hi, I'm Bud Beebe with the Sacramento Municipal Utility District. Devra, a question about hundred percent auctions. All of this is contexted within the PUC/CEC's regulatory authority.

But I'd like to have some idea of how extensive you think an auction really ought to be. Should it include refineries, other large stacks, such as the ARB has suggested? Should it include transportation? Should it include all of the economy of California?

How far do we really suggest this ought to go? And, if you don't mind, I'd also like to have some idea of the size of the revenue stream that we'd be looking at with these different programs and scope, if you've got some of that just available.

MS. WANG: In terms of the broader

system in California, we support, if the cap-and-trade or cap-and-auction program is well designed, including within the cap not just the utility sectors, but also the large stationary sources including the refineries, as you mentioned. And potentially, over time, transitioning to include the transportation sector.

Auctioning is a good way to distribute allowances. Particularly in some of the sectors where the opportunity for windfall profits is even more prevalent.

And so we certainly would support an auction in a system that includes those other sectors. I don't think the discussion has progressed as far in terms of what the system would be like and what would be done with the auction revenue in those other sectors. But that's something that we're here to continue discussing.

MR. BEEBE: And any idea as to how large the revenue streams would be for these different scoping programs?

MS. WANG: On the order of a billion, in that range, the electricity --

MR. BEEBE: Well, that would be for the

utility industry.

MS. WANG: Right.

MR. BEEBE: Yeah.

MS. WANG: Well, so yeah, it certainly depends on the scope of how many sectors you include. And then how tight you set the cap. So, it's a little bit difficult to answer that question without more details about the system overall.

MR. BEEBE: Well, we know that the tonnage emissions in California are something like 400- or 500-million, right? And the utility sector is a tenth to one-fifth of the total, depending on whether you're just talking about in California or the whole thing.

So, maybe 5 billion revenue stream is what we're talking about? Just so that people can begin to understand --

MS. WANG: Order of magnitude --

MR. BEEBE: Order of magnitude.

MS. WANG: -- the utility sectors together are 35 percent of the overall emissions.

MR. BEEBE: A large amount of money, but not really large by California standards, I'd sort of say.

MS. GRIFFIN: Yes.

MR. PEDERSEN: Norman Pedersen for Southern California Public Power Authority. Your comments were a little bit different from what I recall from what you said in the written comments.

Am I correct in understanding that your option two is probably your NRDC's preferred option? And if so, can you tell us something about where the rest of the revenue would go, beyond the part that would be returned to -- for example, LADWP, if LADWP were buying the allowances through the auction.

MS. WANG: At this point we don't have a preferred option. I presented all of these because I think that there are many different ways up this hill.

In terms of the remainder of the auction revenue, the way we've been thinking about it is that some of the purposes that we described are perhaps more appropriately managed at the statewide level.

For example, research and development. Today the Energy Commission manages research and development on a statewide basis. So the money that isn't being invested by the utilities, themselves, could be invested to further the goals of AB-32, but some of these statewide type programs, so whether it's research and development, or green collar jobs or some of the other types and purposes that I described.

MR. DAGLI: Dhaval Dagli from Southern California Edison. I have one quick clarifying question. In the very early part of your comments you seem to imply that you don't think there should be a connection between point of regulation and allowance distribution method.

But while describing your three models you appear to suggest that the full auction would be preferable if it's first seller; and then your second option would be more consistent with the load base.

Can you kind of explain? I mean, do you believe that there is a need to be, you know, preferring one distribution method if the point of regulation is one way versus the other?

MS. WANG: I think how you meet the principles that we described will differ to some extent under the different points of regulation. My point was that we think that customers should get the benefit of the value of the allowances under any system, regardless of the point of regulation.

It's much more of a concern under a first seller type approach because there is more of a potential for windfall profits to unregulate economically regulated entities than there is under a load based approach.

MR. DAGLI: Thank you.

MS. JOHNSON KOWAL: Karen, I have a question. Just in terms of the structure of this, is there going to be an open discussion after this?

MS. GRIFFIN: Yes, --

MS. JOHNSON KOWAL: These are just clarifying questions?

MS. GRIFFIN: -- a few clarifying questions now and then we'll have a discussion later. But we wanted to get so people think they understand what each party's opposed to.

MS. TAM: Christine Tam, DRA. Devra, you mentioned that you support, you have three types of systems that NRDC would support. Two of them are auctions and one of them's allocation. Does NRDC support a partial auction/partial allocation methodology?

MS. WANG: Well, this comes back to what I said at the beginning, that the allowances are basically the same thing as money. So whether you're auctioning and distributing the money, or distributing allowances, it's basically the same thing.

So we're not really differentiating between the two. For a per-customer distribution you could do that either by giving out the allowances, or by giving out the auction revenue.

We prefer an auction because it's a more transparent means of doing so.

MS. TAM: But a combination of auction and distribution would also be considered by NRDC?

MS. JOHNSON KOWAL: Right. If it meets the principles and the consumers are getting the benefit of the allowance values is what we're focused on.

MS. TAM: Okay. I have a second question; this is a quick one. The auction revenue, you stated earlier that you want to see the auction revenue go back to the electricity and natural gas sectors. What about distributing some of these auction revenues to other sectors such as transportation? Would that be also considered appropriate?

MS. JOHNSON KOWAL: I think that's going to be part of the broader discussion that ARB is going to have to look at. Our view is that every sector should contribute to meeting the AB-32 goal. And so we'd like to make sure that there's programs and regulations in the transportation sector and all of the sectors to make sure that they're contributing.

MS. TAM: Okay, thanks.

MR. DI CAPO: Hello; I'm Bill Di Capo with the Cal-ISO. I had a question about your point that the point of allocation and the point of regulation don't need to be the same. And I was wondering if you were aware of any examples of a regime where that is the case, and what the experience has been.

MS. JOHNSON KOWAL: I think most of the experience to date has been using an auction when the point of allocation is not the same as the point of regulation.

However, there are bills pending before Congress that would separate the two. So, I'm not aware of an existing system that does that.

Most of the systems to date have

grandfathered or auctioned.

MR. DI CAPO: Thank you.

MS. GRIFFIN: Okay. Moving right -- whoops.

MR. WILLIAMS: This is Ray Williams from PG&E. I'm actually not going to ask you a question, I just wanted to help answer Bill's question. That RGGI, just in the last week, distributed a very detailed auction design. And, you know, there's an example where they have the point of regulation in one place and the allocation of benefits, as Devra very aptly described, whether it's, you know, value or revenues. They very much talked about having the revenues be in a different place than the point of regulation.

So that's something maybe, Bill, you might look at, and we all might take a look at.

MS. GRIFFIN: Okay, we're now turning to Scott Tomashefsky from NCPA.

MR. TOMASHEFSKY: Thank you, Karen. Good morning, Chairman Pfannenstiel, Commissioners, and as always, it's a pleasure to be in this room. As Kevin has, I've also spent a lot of time in here.

Going third actually is helpful in the sense that for your benefit I won't speak as long as I might otherwise. As those of you who know me well know I have no problem speaking for quite awhile.

But in this particular instance the issue, itself, is really different from any other issue we've dealt with before. And it has a different type of feel; it's not a public power IOU issue. It's really not a north/south issue. It is an issue that deals with high carbon utilities and low carbon utilities.

And as you look through these proposals you really have to balance those type of things. And I think there'll be a point at which, from a program implementation perspective, you're going to have to make that tough choice. And there will be winners and losers in that, depending on what your perspectives are and how to resolve the issue.

But I will say, as a starting point, though, all of us in this room take this very seriously. And there is a very firm commitment towards dealing with greenhouse gas issue in the most productive and cost effective way.

And one of the challenges that the state has is really taking AB-32 and then trying to bring the policies together that have been orchestrated over the past ten years, starting with AB-1890 and public benefits, and dealing with SB-1 and 1078 and 2021, and SB-1037 and SB-1368. So there is a plethora of regulation and mandates and program designs that have come forth from those actions.

And sometimes it requires you to kind of step back and say, okay, let's see how those are all connected. Because sometimes they're not quite as connected as well as we'd like to think.

In this particular area you've got lots of moving parts. And so when you look at an allowance allocation mechanism, and fortunately we have some discussion on auction, we've had a fair amount of discussion on allocation mechanisms. We've had the first en banc; we've talked amongst ourselves within our organizations, and there is a lot of precedent in terms of dealing with the auction issue.

And the northeast has done us a favor. Ray's reference to this report that was issued last week, it was 130 pages of pretty interesting stuff in there that probably most of us haven't looked at too closely.

And as we look at the auction mechanism it's great to have a series of proposals. And I do agree with Devra's comment, this is the beginning of the dialogue on auction. But whatever you do in terms of auction will have an impact on what you do on allowances. And so you always have to kind of step back and say, okay, now I've made one decision here, how does it affect the five or six other moving parts that we have.

So, in that sense let me tell you just a moment or two in terms of NCPA and where it fits in. We feel privileged to be able to speak here today, because we do, I guess in terms of our morning panel, we're the only ones at the table that represent a multiple of utilities. We represent 17 member utilities. And so when you look at basic comments that say we are a clean group of utilities, there's a lot more behind that than making a clear statement that we are clean.

We are clean. And what you look at in that sense is we have utilities that have carbon footprints that are 100 pounds CO2 per megawatt hour. And we have utilities that are significantly higher than that.

So, one of our objectives in dealing with our membership is trying to balance those interests. And in many respects when you look at the interests that we're balancing, we're getting direction from our local elected officials, which represent our Commission that provides our policy direction.

So we have to deal with it at the local level from day one; and we have to recognize those concerns. So, I think it's important to understand that.

Two elements I just want to talk about today, and then we can go on to the next speaker. In terms of auction, again there's a lot more that we need to discuss. And as much as ARB's schedule is really constrained in terms of next year we're going to be spending a lot of our time down the street at ARB dealing with the scoping plan, the debate of auctions has to be part of that equation.

And I think from my perspective we are much further along in making those determinations on the allowance side of the equation than we are on the auction side.

For those of us that are a little squeamish in terms of market manipulation, there's probably many of us in the room that do not want to go through any semblance of what happened in 2000, we get very nervous about markets. And so safeguards are really important. And those are recognized in many comments that talk about auctions, although detail how you deal with safeguards are extremely important.

We don't like the idea of collusion; we don't like the idea of market volatility; we certainly don't want to repeat, and we know we have the ability to look at what at least is being put in play in the northeast to serve as sort of -- to use that as a proxy for going forward.

I think the Public Utilities Commission and the Energy Commission have a big opportunity to provide that educational process. And to the extent that you offer those workshops and forums, you'll have many of the same people in the room debating the issues. And it does benefit for all of us. So, thanks for putting those comments up, at least in terms of proposals.

In terms of the allowance positions that we take, basically what it comes down to is this, and again, we are generally representing utilities with cleaner profiles. So it would not be surprising that we would feel it allows -- it should be freely distributed using an approach based on sales, not emissions.

What that does is if you have a test year that's as close to 2012 as possible, using that data that's most recently available, I think Leilani made that comment, too, that allows for early action. Because we do have a six-year window between when the statute was signed and when things have gone into effect.

And you will see a significant amount of activity that is occurring throughout the utility industry to move towards greener and cleaner resources. There's a lot on the table; there's a lot of local boards that have adopted policies that will move us much closer to not only meeting the objectives of our RPS mandates, but doing it for more than just meeting the RPS mandates. It's cleaner and it helps the greenhouse gas situation.

So what you're really coming down to is acknowledging early volunteer reductions; recognizing clean portfolios. And it's taking into consideration population and growth trends.

Because as you move forward, when you have new market entrants that maybe weren't part of the equation before, we have to find a role for them in this place.

Also that test year that we ended up developing still needs to make some -- you have to have some consideration for hydroelectric conditions. Because, as we know, that fluctuates significantly.

The use of a test year that falls anywhere prior to the passage of AB-32 may create the unintended consequence for low carbon utilities to the advantage of the utilities with higher carbon footprints. So basically we don't want to get in a situation where you have to have a clean utility that's forced to deal with purchasing allowances to become cleaner when they really can't in practicality without a market condition. And there really is no reason for them to get cleaner when they're that clean. And, again, that's a debatable issue, as all of these are.

The allocation process should be updated annually based on the most recent verifiable information that's available. When we talked about this issue in, I guess it was July or August, I know it was the 21st, I don't remember which month it was, but I know the date.

There were numbers being thrown around, 2004, 2005, 2004/5, some combination to deal with normalization hydro. But in essence, if you lock it at a position that's too far in the past you're not taking into consideration the things that we've done between the passage of AB-32 and the implementation of the regulations.

And, again, we do not favor an auction. But if we're going to choose it to be one, it should be something that's gradually implemented and designed so the proceeds are returned to the customers that bore the costs of obtaining the credit. It goes back to the utilities. And, again, we need to have specific revisions in there to prevent market manipulation.

With that in mind, I will take questions.

MS. GRIFFIN: Scott, you seem to differentiate between two different things in terms of early action. I thought I heard you define early action as actions between the adoption of AB-32 and the compliance year and another thing called clean portfolio. Are those different?

MR. TOMASHEFSKY: It's in that -- you've actually hit on the problem with a lot of the terms that are in here. You've got early actions, which are different tracks that ARB is dealing with in terms of their low-hanging fruit, the low-hanging fruit, early volunteer reductions.

You can look at that a couple of ways. If you are looking at it based on your resource mix, for example, you will have a situation where your resource mix will reflect the things that you have done in the past.

So, by definition, if you have made a significant shift to go from a lower RPS to a higher RPS, your carbon content will come down accordingly.

So when you're looking at early action it's things before 2012, in essence. But the statute, itself, allows you this opportunity to, you need to get your action in here to reduce your carbon footprint as early as you can.

MS. GRIFFIN: Okay. And then you gave an example of you have some members who are below any conceivable statewide target if it were done in terms of intensity. And you recommend that they get a proportional share based on retail sales.

Is it then your expectation that they would be in the market in selling allowances?

MR. TOMASHEFSKY: You could look at it that way. From one perspective you may have a situation where those investments that are being made are done at a higher rate. If you've got a larger investment in renewable resources, then you could argue that some of those costs that you have incurred to make those investments should offset some of those higher costs. So that's one way of looking at it.

There's somewhat of a misnomer in terms of some hydroelectric investments, that it is a cheap resource. It's a cheap resource once the debt's paid off. It is not a cheap resource when you are paying off the debt.

And so when you have commitments of 20 and 30 years, you do have a significant share of costs that you have to incur.

MS. GRIFFIN: Other questions from the panel? Okay. Audience? Just stunned by the brilliance and coherence of his comments.

(Laughter.)

MR. TOMASHEFSKY: I'll take that as a compliment.

MS. GRIFFIN: Okay.

ADMINISTRATIVE LAW JUDGE TerKEURST: I'll ask a question. You advocate distributing allowances on the basis of sales. But my concern with that is how do you incorporate or reflect utilities that have put money into energy efficiency?

MR. TOMASHEFSKY: That's an excellent question, actually. I'm glad you raised that. There needs to be some accommodation for that because it certainly can provide, on its face, a disincentive if you reduce your sales based on energy efficiency, the allowances are not there. So that's something that needs to be part of the equation.

VICE CHAIRPERSON BOYD: Madam Chair, maybe I'll make a comment more than a question, Scott. Welcome back in the building.

MR. TOMASHEFSKY: Thank you.

VICE CHAIRPERSON BOYD: Good to see you. It really seems obvious, I'm sure, to both you and

I and your membership that this low carbon footprint that benefits you so much, in turn makes you real fans for solving this problem of climate change, because victim number one is going to be water and precipitation in this state. And that will really affect your carbon footprint. So hopefully we can work together to solve that problem.

And I'm just a little interested in the position on not having to be penalized by buying credits in a situation that might not recognize your position. But it does sound to me like you're in a good market position to sell credits. So, we'll have to take that into account in figuring this all out.

MR. TOMASHEFSKY: Yeah, I think it's balancing the interests of all stakeholders that is the challenge. Thank you for the comment.

MR. MURTISHAW: Scott, I'm curious with these proposals that advance allocating on the basis of either sales or customers, and so this could also be directed to NRDC, have you put much thought into how you differentiate between the degree to which the carbon rate is low because of active decisions made, proactive programs to reduce it, versus what was Norm's phrase, geographic and historical coincidence or happiness or something along those lines.

(Laughter.)

MR. MURTISHAW: So that you are truly rewarding early action investment in energy efficiency, aggressive energy efficiency and renewables programs versus rewarding having a utility located in northern California that benefits from hydro availability.

MR. TOMASHEFSKY: I think that's an excellent question. And I almost have to answer it by half-answering it, in a sense, that when you have regulatory schemes that change over time, there needs to be opportunities to make the transition. And the transition for AB-32 is really, as we look at it, it's this six-year window of between when the statute was signed, getting these things in play.

So, whether you're geographically advantaged or disadvantaged in terms of what your profile is, the regulatory scheme and the statutory scheme is changing. And so whether some benefit from the perspective of being in a certain area or not is something that you'll have less control over.

What you have control of, as a regulatory body, or series of regulatory bodies, is to find a way that makes that work best, that minimizes the impact on consumers across California.

And so we can sit there and debate that issue all day long in terms of well, we happen to be cleaner as far as where we're starting as opposed to maybe some utilities that don't have access to that.

But you need to understand that perspective so that you can make an informed decision. And so I'm not going to take the bait in terms of what you want me to say and what you think I might say, but just put it out there as these are the things that we need to consider. And there are impacts, positive and negative, in terms of whatever action you take.

MS. GRIFFIN: You get a point for honesty.

MS. WANG: I just want to add briefly to Scott's point about the transition period, because I think a lot of parties are arguing that they need a transition now.

I think, from our perspective, the transition started back in 1990. And all parties have known that greenhouse gas emissions were a very significant risk since 1990.

I think in our view, 15 years, more than that, has been a fairly long transition period. And entities that willingly took on that risk should bear the risk.

So I think that's an important part of the discussion that we need to have about when should that transition period start.

MS. GRIFFIN: And you select 1990 because of Kyoto?

MS. WANG: Right, the IGCC assessment, consumer advocates. NRDC, for example, put out a letter in early 1991 putting the utility sector on notice that we expected them to manage this risk or to bear the risk.

There's been, you know, numerous dates that you could select along the way. But certainly the formation of the UNFCCC and all of the scientific consensus around climate change started many many years ago.

MR. TOMASHEFSKY: Just to give you one practical example of one of our members who I'll leave for you to figure out who that is, but in terms of what they have done over the last year, they have gone from basically -- well, between now and 2011 they will go from 100 percent coal to 40 percent renewable. And it'll still be 60 percent coal, but in terms of taking what you understand to be the changing direction of policy and accommodating the needs of statewide objectives, that's what we're all -- you know, our membership is in that business of dealing with.

And so when you look at the call for a transition, there's very clear action there. You'll see clear action in terms of mandates that have been updated. DWP is a good example in terms of dealing with RPS. They've been extremely aggressive and are moving in the right direction.

And those are the type of things that are happening, not only in anticipation of the statute being signed, but in terms of dealing with a lot of these other policies that are pushing green and clean resources.

MS. GRIFFIN: Thanks, Scott. We're now going to turn to the last of our initial speakers, Gary Stern from Southern California Edison.

DR. STERN: Good morning. There's a

brief presentation that I guess is going to be brought up associated with my discussion this morning.

I wanted to first thank the Commission and the Staff and the ALJ for providing the opportunity --

CHAIRPERSON PFANNENSTIEL: Can you dim the lights by the screen so we can see it better? Thank you very much.

DR. STERN: And for those of you on the phone you're not really going to miss that much by not being able to see the materials. I hope to just be verbally explaining what's going on here anyway.

I think Commissioner Pfannenstiel sort of got this off on the right foot by using an important work in her initial remarks: compromise. We are talking about, as Devra noted, essentially an allocation of dollars here when we're talking about distributing allowances.

And, in fact, in that regard there really is no right answer. So while I'm going to be getting up here and giving you a proposal as to one way I think it should be done, and we've heard several already, I don't think any of us can say that we are right and the other is wrong. Because this is the type of problem that really doesn't have a right answer.

Can we move to the next page. You also see, from this discussion, that, in fact, there are a variety of viewpoints, since this, our view, doesn't actually match any of the prior speakers.

We look at what's happened here as a new set of rules that is being developed that is going to be implemented that simply changes the game, changes the economic perspective with which we have been operating under several years, and with which investments and decisions have been made.

And we think that what we would like to do during this transition, and here I'm defining transition as basically the period from 2012 through 2020, as we go through AB-32 process of reducing emissions. What we're going to be doing is causing some economic dislocation to many in the electricity sector. I'm focusing on that, but these points go beyond the electricity sector.

And that one way in which we can try and mitigate that economic dislocation is through appropriately allocating allowances. And we believe to those who are going to suffer the harm that's caused by this change in rules. And there are various types that I'm going to describe as to how these rule changes are going to cause economic harm.

I think by doing so what we will provide is a smoother transition that doesn't have the adverse impact on the economy that it might otherwise have. I think if we are trying to set an example for others to follow, I think it is of paramount importance that that example doesn't destroy parts of the economy, or seriously impact sections of that economy. And so trying to mitigate those that are going to be harmed seems like the best way to do that.

So our proposal would have some impact on customers to mitigate the harm that they're going to feel. In fact, I think in California they may be, by far, the largest sector on the electricity side that is experiencing harm. But they're not the only one.

We want to also mitigate the harm that comes to other entities that are participating in the electricity sector. And I think that we must recognize that we want investment in the electricity sector in California. And we have to be very careful not to set up rules that say please invest in our sector, but by the way, when we change the rules we're going to ignore the value of the investment that we asked you to make, and simply take that away through changing the rules. And hope that you'll invest again as we go forward.

Basically we cannot be the Lucy Brown -- I'm sorry, the Lucy to Charlie Brown with the football and expect that Charlie Brown's going to keep coming and trying to kick that football.

If we want to continue to invest in California, and in this case now we're saying we want investment in clean technologies in California that are going to help reduce GHG. We can't tell people that, you know what, invest today because, you know, you will see a return on your investment, if we're going to change the rules and punish people who made investments yesterday. So we have to keep that in mind.

Also, there's been a lot of concern associated with creating windfall profits through the use of these allocations. And some people say, well, you know what, some generators are actually going to benefit as a result of putting these programs, the GHG reduction program in place, because wholesale prices will be higher.

Or they're going to be able to capture the value of their low GHG-emitting resource through bilateral contracts with LSEs under a load-based approach.

The idea that some may benefit as a result of putting this program in place, therefore we should not give any allowances to the generation sector, even if there are others who may be harmed, I think is taking a sledge hammer to the problem.

I think all we have to do is be able to effectively differentiate those that might receive a windfall if we gave them allowances from those that won't. And I think that's not very difficult to do, as I'll describe.

Okay, moving on to the next page. There's another couple of fundamental principles that are important for us to recognize. And we've heard this one already. The point of regulation is independent of the allocation mechanism. And if you think of it as I'm trying to describe it in terms of economic harm, I can tell you that I've done a fairly extensive analysis showing that the economic harm doesn't depend on the point of regulation. And if you are going to focus on economic harm as a means of allocation then this point becomes particularly clear.

But I think we've also heard others who are not talking about economic harm who also recognize that the point of regulation need not have any relationship to the allocation mechanism.

There's another important point here that we need to note, as well, though, which is that the incentive to reduce emissions is coming from putting the cap-and-trade program in place in the first instance, basically resulting in a price of carbon emissions. Such that if I have a carbon emitting process I'm going to have to pay for it going forward. And that's going to provide me an incentive to reduce my carbon emissions.

That doesn't come from the allocation process. That's separate. The allocation process is handing out these dollars. And we have to recognize that those things are separate from one another.

Okay, so I talked about economic harm being a reasonable basis for performing this allocation. Let me just sort of describe the three primary ways in which, in the electricity sector, economic harm will be felt.

Some customer economic harm will be felt from the -- as the result of higher prices. Now, I'm describing this as if the point of regulation was a source-based approach. The answer doesn't change, but it's easier to describe it this way, so accept that for the moment.

So you might want to think of this, for instance, as the simplest case being say an energy service provider, and ESP, through direct access, that doesn't have any owned portfolio resources, that simply buys from the wholesale market.

Well, the customers of that ESP are going to be facing higher prices in the market of putting this program in place. And they're going to suffer some economic harm, because as a result of emissions being reflected in the wholesale price, the price the customers pay will change.

So the degree of economic harm is going to be a function of how much purchasing in the market is being done, and how much emissions is reflected in emissions costs in that market price.

The second example of economic harm could be considered from the perspective of a merchant generator. So, now let's take the side of a generator that's not really connected to any load, that's simply selling into the market.

A generator that's clean, cleaner than the market, basically the marginal unit that is setting the price in the market has emissions associated with it typically. In California it's almost always natural gas. Natural gas has carbon emissions; natural gas will be more costly under a cap-and-trade program. And so that market price is going to be reflected in the natural gas bidder into the market, and ultimately in the clearing price.

But if you're cleaner than that marginal unit, then, in fact, you're not going to be suffering economic harm selling into that market. In fact, you may be making higher net revenues than you were before because you're not having to incur as high a cost for your emissions as the one that's setting the market clearing price.

But, if your emissions are greater than that unit which is setting the clearing price, even though, again, you've made an investment in California based on what we wanted you to do. We wanted investment in generation to insure reliability of our system.

Now, it turns out that we're judging the value of energy not just based on its cost for basic production, but its GHG profile. And you are higher than that marginal unit. Well, now your emissions costs, under the GHG program, cap-and-trade program, will be greater than the additional revenue you will see from these higher prices in the market, and you're going to suffer some economic harm.

The final example here would be a load-serving entity, such as a utility, that actually has some generation in its portfolio. In this case the utility might also be purchasing from the market. If you're purchasing from the market we've described how that economic harm comes about.

But if you have generation in your portfolio that emits GHG, then there will be a cost associated with that under a cap-and-trade program. And you, on behalf of you customers, will be suffering the economic harm associated with all of those emissions from your own portfolio of generation.

So what we've seen is that a load that

purchases from the wholesale market is going to suffer some economic harm. Load that is served directly by owned generation that is emitting GHG will suffer economic harm. And merchant generation selling into the market whose emissions is greater than that unit which is setting the market clearing price will also suffer economic harm.

And we think it makes sense to recognize who is suffering the harm and try and establish a program that attempts to mitigate that.

And so, in this I've tried to sort of illustrate how one could try and do that. You could try and -- it doesn't have to be, but you could try and mitigate this economic harm proportionately as I've shown here.

In other words if you can establish some measurement, and it's not really that hard to do, of these types of economic harm, recognize there will not be enough emissions allowances to fully mitigate the economic harm that is going to occur here.

In part, that's because we're going to be reducing emissions from historic levels, and we could not possibly have sufficient allowances to deal with the economic harm that comes and reduce emissions at the same time.

And it's also true that if, in fact, as I described earlier, there are going to be some who are selling into the market who are now making more money than they were before because they're cleaner than that market. Well, if they're making more money as the result of putting this program in place, you have to recognize that somebody's paying for it. And it's essentially those that are suffering the economic harm.

So there's also going to be a shortage of enough allowances to fully mitigate the economic harm as a result of those that are actually benefitting.

And I realize that this is coming at you kind of fast, and I've got math to show all this that you don't really want to see today.

In any case, one way then we believe, in addition to those that you've heard before, that we think makes sense as an allocation approach, and really does fall into perhaps the category of compromise between the historical emissions that LADWP discussed and the customer-only approach that NRDC advocated, along those lines our proposal that focuses on well, who is really going to be suffering some economic dislocation as a result of this program, that can form the basis for an allocation approach.

And for the reasons that I've described we think that that should be considered as an alternative to solve this problem that, again, doesn't have a right answer. There are a lot of important factors that we can and should consider. And we believe that economic harm is paramount among those.

Thanks. And I can answer clarifying questions. I think I'll move back to the table, so people can ask from up here, to answer those.

CHAIRPERSON PFANNENSTIEL: Well, may I ask, why would you not advocate an auction to accomplish what you're looking at here? It seems like the auction revenues then can flow back to -- if it turns out that that's the social benefit that government regulators decide, to mitigate the impact of what you call economic harm on customers.

DR. STERN: Actually I'm not saying that there should not be an auction. Effectively, I agree with Devra from the NRDC that really we are talking about dollars. And an auction is a mechanism by which we can establish the value associated with the allowances.

I guess, to be completely frank about all of this, I think establishing the allocation rules up front so that the proceeds, the dollars associated with these allowances, makes us a lot more comfortable than the notion that we will first have an auction by the government associated with all the values of these allowances. And then we will hope that there will be a distribution of the funds that makes sense.

I think, in a sense, once you put those dollars in the hands of the government, the several billion dollars a year, there's a risk that things that are completely unrelated to what we're trying to do on the GHG program, the pressures will be to take some dollars and use it for those purposes.

So the real reason why we're talking about allocating the allowances, when we do understand it's the value of the allowances, is that establishing these rules for what happens with that value up front makes sense.

At that point in time, once the

allowances -- the allocation of the allowances is determined, I think the means by which people have access to acquire allowances, an auction is probably the best way to do it.

So, we sort of view this as perhaps a two-step process. First, you allocate the allowances so that people have the rights associated with those. Then you gather them all up and auction them off to turn them into dollars in a nondiscriminatory transparent way. But the value of those dollars has been established through the allocation process.

CHAIRPERSON PFANNENSTIEL: If I might, it seems then there are two principles that you're espousing. One is that the principal beneficiary or not beneficiary, but the first goal is to provide that your ratepayers do not get harmed. It seems like that's your first principle that you're looking for.

DR. STERN: Well, again, I'm looking as basically no entity involved in the electricity sector would be harmed, doesn't get some degree of mitigation through the value of these allowances. So it's not -- I'm not limiting it to ratepayers.

In other words I gave merchant

generation as an example, to the extent there is merchant generation investment that took place in California that is now going to suffer harm as a result of this program, I don't think we can simply turn our back on that without potentially sending a chilling signal, you know what, we, in California, can change the rules anytime we want and take away the value of your investment. But, by the way, we still hope that you're going to invest in the future in our state. I think that's a real danger.

CHAIRPERSON PFANNENSTIEL: I understand, thank you. The other point I think that you're espousing is that you think that to the extent there's any cash that actually flows through this, rather than just the value on the allowances, that cash should be essentially at the utility level to distribute, as opposed to the government level?

DR. STERN: Yeah, I think that -- and really what it should be is when we talk about LSEs receiving the value of the allowances, be they utilities or ESPs, I think the expectation, if not the rules, are that that's on behalf of their customers. And that that value is flowed back to customers.

CHAIRPERSON PFANNENSTIEL: Thank you. Other questions from the dais? Karen.

MS. GRIFFIN: By the panel?

MS. WANG: Can you clarify how you would expect your proposal, in practice, to be different from a grandfathering approach?

DR. STERN: I think in establishing the economic harm, looking at emissions at some point in time, such as 2005, I wouldn't go back to 1990, but I'd look at sort of before AB-32 came into place. And looking at the status at that point in time is a key element to measuring the economic harm.

And that for that element I think, you know, that would fall into what you call grandfathering. In other words, if you had generation in your portfolio that had GHG emissions that were causing you economic harm at that point in time that would cause -- that would be the basis for the determination of the harm for which you would receive allowances.

So, in that sense I'm not saying that this completely eliminates what you would call grandfathering. I think that is an element of the economic harm.

MS. GRIFFIN: Audience?

MR. McCARTNEY: Hi. Wade McCartney, CPUC Division of Strategic Planning. Enjoyed your presentation, Gary. Could you comment on the math examples, or you have additional slides in your presentation? That would be informative to hear.

DR. STERN: Yeah, I think the specific math that I referred to in my discussion had to do with the fact that the harm that is faced doesn't depend on the point of regulation.

I've written a paper about that that I'd be happy to provide. I think I've actually provided it to others at the CPUC before. And I also have a presentation that goes to that.

The other element of the math, if you want, is when I talk about the economic harm that I showed in the graph here, again the calculation of that can be shown in equation form. I think that is actually in an appendix to the presentation that I didn't show, but that should be available now at the CEC. But I'd be happy to make that available otherwise.

So, there's math for both elements of it.

MR. McCARTNEY: Thanks.

DR. BUSCH: Hi. Chris Busch, Union of Concerned Scientists. I think you said the incentive to reduce emissions is independent of the allocation method, is that right?

DR. STERN: Yeah, and I should probably clarify that. Under normal circumstances. In other words, it's possible to develop allocation mechanisms that do impact the incentive. But -- I talked about you're sort of establishing this harm basis prior to, and you're not changing it as you go over time, then, yes, then your actions to reduce emissions are going to be affected by the prices in the market and not by the check you get each year associated with the value of your allowance allocation.

DR. BUSCH: I see. I just wanted to make clear that so grandfathering based on 2011 isn't going to be the same as an auction.

DR. STERN: That's right. And I wouldn't suggest doing that for some of the reasons we described earlier. You certainly would not want to create an incentive for people to try and increase their portfolio now in expectation that somehow they're going to be rewarded for it.

I think the date that you use for this

determination has to have already passed. And I'd suggest something like, you know, recent history prior to passage of AB-32 as an example.

MS. KAHL: Hi, I'm Evelyn Kahl on behalf of the Energy Producers and Users Coalition. And, Gary, you made an assumption in your presentation that merchant generators who have lower than marginal emissions won't experience harm.

And I'd like to explore whether that's true in all cases. And I guess I'd like to begin by saying in my observation academics, first of all, don't agree on the extent to which carbon value will be reflected in market price ultimately. And acknowledge that there might be some transition period when that value won't be fully reflected.

In addition, they comment on the fact that there are differences among generators. Even if the market price perfectly reflects carbon value, there will be some generators situated different from others.

And then we will have existing contracts which may or may not recover those costs. And finally, we will have generators who recover their costs under administratively determined prices.

So, it seems to me that it may be an overstatement that those types of generators won't experience harm.

DR. STERN: I think that's a fair clarification. I tried, although pretty subtly, without getting into those details, to say that the merchant generators would, in general, experience harm, or that, in fact, these were the three general categories.

But there are exceptions. For example, a merchant generator that is not selling to the market, but actually is under a long-term contract that goes into the AB-32 compliance period; and does not have any means through that contract to recover its emissions costs, would suffer economic harm associated with all of its emissions without any offsetting revenue from the market, because in this case, the generator isn't selling to the market. They're selling otherwise, through contract.

So, there are potential exceptions. Now I don't really accept the notion that we shouldn't be assuming that the cost of emissions isn't going to be reflected in the market.

I think we actually have experience in

what happened in the Economic Union, experience that actually is perhaps the primary cause of a lot of the windfall concern. Because they did not fully anticipate the degree to which the emissions costs would be reflected in higher wholesale prices. And therefore, allowances were given to some who benefitted as a result of the higher wholesale prices, as well as the value of the allowances. And were better off after the program was implemented than before.

So I don't think we should be assuming otherwise here.

MS. KAHL: And, Gary, if you'd go one step further with me. Let's assume --

MS. GRIFFIN: I want to make sure that we have enough time in this session to talk about auction issues. And I --

(Parties speaking simultaneously.)

MS. KAHL: And that's where I'm going right now.

MS. GRIFFIN: Okay, thank you.

MS. KAHL: Let's assume that the state does establish an auction, and let's assume that you are wrong and that marginal generators aren't, or generators who have emissions lower than the marginal emissions, aren't able to recover their costs.

What could the consequences be for California for reliability purposes if generators aren't able to fully recover their carbon costs under an auction?

DR. STERN: In either case I think what we should see is the action of generators competing in the market is going to be based on their rate of emissions, not based on their allowances.

The problem we face is that if, in fact, there are generators, as you've postulated here, who are suffering economic harm, who cannot recover it in the market, then at some point, in fact, we may be driving these generators out of business when we shouldn't. So, you know, there's a risk there that we are destroying the value of these investments to certainly a greater degree than we would want.

Now, recognize -- maybe I wasn't and I wanted to be clear -- there's not going to be enough allocation to go around, which means that this mitigation of economic harm would not be complete. In other words, if you get some allowances it's not going to be enough to fully mitigate the economic harm that you're suffering.

So I'm not expecting that anybody's going to have their harm completely offset; only partially.

MS. KAHL: Thank you.

MS. GRIFFIN: Okay, one more.

MR. WILLIAMS: I have just a couple of questions, and maybe I'll save an observation for later. I think that's probably how you want to go.

On the LSE front you talk about economic harm. So how would you set that dividing line between an LSE's portfolio that does not suffer economic harm and one that does?

DR. STERN: In an LSE's portfolio, say the resources that they own, the economic harm comes from the GHG associated with those. So if you have resources in your portfolio that are non-emitting like nuclear or hydro, some renewable resources, you're not going to suffer any economic harm associated with those.

But if there are resources in your portfolio that do result in emissions you'll be suffering economic harm. And if you have a short position in the market and you're buying at higher wholesale prices, you'll suffer economic harm from that.

So you can look at the historical emissions in the portfolio and the short position in the market to determine the economic harm of an LSE.

MR. WILLIAMS: So you'd have to determine some sort of marginal emissions rate which is the dividing line. And then somehow work in the default emissions rate to make that determination, as well?

DR. STERN: In order to understand the degree to which wholesale prices would be expected to rise causing economic harm, you do have to come up with some sort of an estimate of the marginal emissions rate.

Now, the final allocation results aren't real sensitive to did I get that number exactly right. But it is true that there's an additional assumption, or rather, you know, historical evaluation of emissions that's necessary to implement this as I've described.

MR. WILLIAMS: And then my second question. You had those two pie charts that were up there. And the one on the right was lower, was smaller than the one on the left.

DR. STERN: Yes.

MR. WILLIAMS: And that reflects, if I have it right, that reflects just the fact that there's fewer allowances in the market generally over time, and not a phase-out of your proposal over time.

DR. STERN: That wasn't meant to represent a phase-out. That was meant to represent the fact that there are not going to be enough economic -- enough allowances to fully mitigate the economic harm.

So, I'm not suggesting that we can identify everybody that's harmed and give them enough allowances to make them as well off as they were before. In fact, everybody who is suffering economic harm is still going to suffer some. We would simply be mitigating it to some degree through this proposal.

MR. WILLIAMS: But no phase-out?

DR. STERN: I wasn't suggesting a phase-out. I imagine that's going to be contemplated as part of the process, and I'm not recommending it at this stage.

MS. GRIFFIN: Thank you. We did get a number of very thoughtful comments about auction design. And also some comments which said, oh, start our with whatever you have to start out with in terms of allowances. But transition to an auction quickly because that's really the way to do it. And then distribute the money.

And then people who said, well, start out with a little bit of auctions and go slow because you're bound to get it wrong in the first stages. And it's so important that you pilot and take it softly.

So, I'd like to hear from people who believe that an auction design is actually auction more sooner is a better design for California. And those who think -- what are the reasons for an auction later kind of design.

Audience? Come on.

MR. GOLDBERG: I won't be shy. Lenny Goldberg on behalf of TURN. We participated in the MAC process and I think, if you followed that process, I believe that the Market Advisory Committee came pretty much by a process of elimination, and I believe that this process will do the same. Which is that we really cannot find satisfactory principles by which to give away allowances.

We had people there participating in the European system who saw that it was all basically -- every time you asked how were these allowances given out, the answer was, it was political. We decided on a political basis.

The issue of early action becomes one, how do you reward early action. In an auction system early action is its own reward. That is to say, to the extent that you have energy efficiency and lower sales, to pick up on the comment with regard to do we allocate by sales, to the extent that we have lowered our emissions over any number of years, whether it's 1990 or whether it's 2005.

When you go to the market and have to buy permits, that basically says we are rewarded for having to buy fewer permits. Those who have not made the transition have to pay more money.

Now, the question for TURN, as consumer advocates who support 100 percent auction, really gets down to, and I appreciate the comment from Gary from Edison, with regard to understanding how revenues from auction will be allocated, right in the beginning, as part of the process.

Because we've argued, and you'll see it in our briefs, that, in fact, ratepayers have already take a number of early actions. We fund an enormous number of energy efficiency, conservation, solar, -- potential research through our rates already.

So the question becomes what is the impact on rates of auction design, certainly one that we care about. And I think there are -- I'm going to speak in broad-brush because there are some questions about market clearing prices and what happens to the last unit in, and the extent to which that last unit in determines a price that actually leads to a number of windfalls.

But, as I said, a little more broad-brush here. We believe that the revenues from auction, to use the phrase who owns the sky, or Devra's comment about all citizens owning the sky, the question becomes how are those revenues returned.

They can be returned to make ratepayers whole. They must be, I think, in the context of AB-32, must be returned for the purposes of the program.

Now, that may be mitigation of economic

harm; certainly mitigation for low income people who have the lowest carbon footprint but are harmed the most by the inelasticity of certain kinds of energy use.

So the revenue piece is of a major piece. But I believe that this process will go through a process of elimination, as the MAC did, which is to say we can't figure out an equitable way to give away allowances. I want to say everybody talks about the market, but nobody wants it if you don't, you know, a market is where you buy and sell something of value. You buy the allowances as one of value.

The benefit of the market is that people are making, not in a regulatory context, but millions of individual changes. You can change your processes; you can change your decisionmaking; you can change your planning horizon knowing that you're going to face a price structure that incents you to make a variety of changes.

I should also say that some of the comments in the -- we spoke to this in our comments, but you do want a deep market, you do want transportation fuels. I commend you to market program four in the Market Advisory Committee process in which they speak to not just a sectoral market in electricity, a sectoral market in transportation fuels, but a broad based market which is upstream where you're essentially buying permits, allocations, as fossil fuels enter the stream of commerce.

And if you move significantly upstream you have far fewer regulatory issues. And what you're really doing is you're changing relative prices so that downstream people can make all the adjustments that they can make to avoid those price penalties, to let the market work, in fact. And to lower your reductions. And of course, with the cap in a cap-and-auction system, that continues to come down.

I should also say the State of California has already said to the feds in their statement that any other distribution allows for windfall profits, unfair allocations that they have recommended to the feds, and this is a policy statement of the State of California, that we should provide substantial auctioning. There's a footnote that then says well, there may be a transition of 20 to 40 percent of the allowances.

I'm not sure where the 40 percent came from. The MAC discussed the 20 percent.

But I really do want to commend you to this, both the policy statement of the state, which TURN references in its comments, which basically says you want to avoid the European system and not create the kinds of windfalls.

And the process that the MAC went through by which I think people who started that process thinking there would be allowances in a cap-and-trade system, came to a fairly strong and compelling conclusion that the only answer you're going to get is auctioning.

That said, I'm sorry to go on so long. We look extensively in our comments on the question of the allocation of revenues, which really becomes the issue of economic harm, the issue of who pays and who benefits, and what happens after, you know, not after the auction, but that has to be addressed right upfront.

Thank you.

MR. KELLY: This is Steven Kelly with Independent Energy Producers. And I would like to talk quickly about some design keys. This issue about windfall profits and the nomenclature in which that's applied. And then the issue about where revenues -- where they're collected and where they go, because I think that's critical here.

First of all, two things strike me as being missing in the debate about the design of this program. One is sending price signals to consumers. I continually hear that we're trying to design a market where we're somehow shielding the price to consumers. And if we are going to endeavor on trying to reform this electric sector in California to the tune of potentially billions of dollars, I think it is a gross error to try to hide that impact from consumers.

Now, I'm not saying that they don't need to be mitigated, but the price signals need to be there. Otherwise, we are going to be designing a program that is going to force us to do loops to hide that price, and it would be undermining the overall goals of achieving greater efficiency.

Secondly, the issue that I think is missing in the debate is the importance of grid reliability. We are talking about potentially designing a program that would impose significant costs on electric generators located throughout the state.

And to the extent that generators are not able to recover the costs of greenhouse gas emission allowances, if they have to buy them, or acquire them, we are, in my view, potentially undermining grid reliability. And that's an issue that needs to be top and center, because whatever you do, you need to be thinking about grid reliability.

While greenhouse gas emission reduction is an important public policy goal, ultimately so is keeping on the lights. And we have to keep those in context to recognize that whoever has to acquire allowances, whether it's through auction or allowance allocations, there needs to be a mechanism, a reasonable means for them to recover those costs.

That essentially means passing those costs probably on to consumers in one form or the other. And that's why that transparency is so important.

Now, regarding the concept of windfall profits, I've heard this term used time and time again in this debate about the importance of mitigating windfall profits. The problem is, in my view, is that we don't really have any standards or guidelines to define what that exactly is.

Windfall profits are not the profits that are generated through market power. Those are distinct. We know market power has, the issues associated with market power are well defined. We have many regulatory agencies that pursue that and prosecute that. But this concept of windfall profits is almost as if you are going to make a dime more than you would have otherwise made, we don't like that.

And that's a concept that I think is problematic for implementation of this program. It gets us down a road of trying to figure out who made more than they should have otherwise.

Now, for example, for 30 years we have tried to develop a program to foster renewables in California. Standard offer contracts were one means that were used 25 years ago. We've moved to a market now. The only way to really get renewables into the market is to increase the market clearing price.

And one of the biggest catalysts to that recently has been the passage of AB-32. But what

I'm hearing in the context of windfall profits is that if a generator is going to make an additional dime out of that new market price signal that is reflecting greenhouse gas emissions, that's a bad thing. And I think that's a problematic approach to take to the design of this whole program.

But when you recognize that early action items or greenhouse gas are potentially means to realize additional profits above and beyond what you would have otherwise, you get into the problem of looking at two similarly situated generators, wind and some nonwind guy, who are doing exactly the same thing in the market, behaving exactly the same way, probably price takers benefitting from a higher greenhouse gas emissions price revealed in the marketplace, and we're going to somehow design a program around windfall profits to remove that from them.

I don't think we can get down to that path and get a suitable outcome in the time that we have, or ever, to make this work in that regard.

I've heard the concept that we ought to allocate allowances based on sales. I think Scott mentioned this. And certainly for an entity that has low greenhouse gas emissions as his members do. that would be a good thing. But I don't, for the life of me, see how that is any different if they benefit from the sale of allowances as a generator. It's still in the context it's being used today, a windfall profit. They are going to make a little bit more than they would have otherwise under operations as usual. That's okay. That's what a market is supposed to do. To incent people to move toward more efficient units. And we can do that through market signals.

That raises the -- importantly, in light of that, you should think -- I think you should think of these greenhouse gas allowances as essentially a fuel cost, particularly if we go down the path of a first seller.

These are things that first sellers are going to have to acquire, just like fuel. And they're going to have to have a reasonable means to recover those costs for purchasing that entity.

it's either going to be in the marketplace; it's either going to be through a PPA; or some other mechanism. But we can't foreclose the opportunity for people to do that. Or else we are going to, again, undermine grid reliability because people will back off from their investments.

That raises the question in my mind about revenues. Where do they come from and where do they go. It's going to be critical but to the extent significant revenues are being raised in this program, that we have a third-party independent entity be the master of the implementation and control of those revenues.

California today is characterized by a hybrid market structure, particularly in the IOU sector governed by the PUC. We have hybrid market design which has independent generators competing head-to-head with utility-owned generation. It will be a disaster if we have a situation where the utilities are controlling the administration of the allowances and the revenues collected.

That's not to say that utility customers might not benefit on a reallocation of revenues if they come to a third-party entity. But it is to say that the utilities cannot be involved in that decision if they are going to remain in the generation-development business.

So those are my comments. And I hope they are food for thought, and controversial, as well, as we go through the rest of the day.

Thank you.

MR. WILLIAMS: Steve got me up on that last one.

(Laughter.)

MR. WILLIAMS: I'm looking at the agenda and --

MS. GRIFFIN: Please restate your name --

MR. WILLIAMS: I'm sorry, my name is Ray Williams, and I am the Director of Long-Term Energy Policy at Pacific Gas and Electric.

And I'm going to just -- my comments will only be about auctions, because I see on the agenda you've got a full afternoon on allowance allocations. So I'll try to keep this focused.

We generally support auction, at least as a means to distribute allowance revenues for the benefits of LSEs' customers. We do not have a detailed proposal at this time, but we provide some initial observations for your consideration.

First, that any auctioning of allowances should be nondiscriminatory; there should be equal access for all generators, whether it's an IOU generator, a POU generator or a merchant generator.

Secondly we think the prices resulting from these auctions should be transparent. Third, an independent entity in terms of administering an auction is probably the way to go. And fourth, it should be designed to minimize market manipulation.

PG&E proposes that the model rules set out what we want to accomplish through an auction, in other words this part of the process. Once set, the details of the auction can be worked out over time. And, Karen, I thought your idea of getting an auction expert here is a great idea. It's a commercial process. As we move forward, you know, I would really encourage that we get some commercial expertise. People who know about these sorts of auctions.

Thank you.

MR. LEE: My name is Vitaly Lee; I represent -- we have about 4400 megawatts in southern California. AES does not support 100 percent auction from the beginning. We support initial grandfathering with a small portion of allowances being auctioned. We recommend 10, 15 percent.

We can gradually move to 100 percent auction over a span of 15 years, we recommend. And that transition would allow for two things. First, it would allow existing generators to recover investments that have been made in the old regime without any carbon profile. Because otherwise we'll get into reliability issues, as has been addressed.

But also importantly this would allow time to develop a full carbon technology that will be feasible for the sector. The worst thing that we can do now is to rush everyone into the state of the art technology today, the low carbon technology, let's say CCGT. This would not be sufficient to meet the long-term goals for the state.

We keep talking about 2020, but I think the long-term goal is 2015. And the technology that exists today will not allow us to get there.

MR. MICHEL: Thank you. My name is Steven Michel. I'm with Western Resource Advocates. WRA is an environmental law and policy center that works in the interior west, particularly among the WCI or Western Climate Initiative states. We do work in Utah, Arizona and New Mexico.

Just a couple comments on the auction issue. One thing that we'd like you to keep in mind is that an auction does have different impacts on different profiles of carbon footprint.

And when you start going to states like Utah and New Mexico you're talking about very significant costs associated with their carbon footprints versus some of the other states.

And, you know, while one commenter suggested that an auction is the best way to resolve the equity issues, well, in that step that may be true, but then you have the next step of what do you do with all this money.

And if it's not going to ease the impacts on the customers associated with the different carbon footprint, then you do have some serious equity issues. Particularly in a regulated electric industry.

The other gentleman here mentioned windfall profits, and there's such a concern with somebody, you know, earning a dime more than they might otherwise earn. Well, from our concern it's not windfall profits. You know, we don't care; we want to see carbon reduction. It doesn't matter to us if somebody makes money off that. The issue is who's paying for those windfall profits. And if they are unjustified or unnecessary then you do want to deal with that issue. But, as I said, the issue is who's paying for it, and should they be paying for it, not whether somebody's making money or not off this.

We filed some comments earlier, or a couple days ago, I guess, about this whole issue of allowance allocations. And we at WRA have been struggling with how to simplify and solve a lot of these issues, a lot of these equity issues that are out there that are admittedly very difficult.

And what we have tried to do is develop a different allowance scheme that's somewhat radical, but we think actually does advance us forward quite a bit in a load-based type system.

And what it is, it kind of requires almost a complete change in mind set, because you don't issue allowances under this system. You don't issue allowances at all. Instead what you issue are credits for pollution reduction.

So instead of giving allowances to generators or to pollute, you end up giving credits to generators for not polluting. And, you know, obviously the question is well, how do you measure how much somebody didn't pollute.

Well, in the electric industry there is a standard that you can use to do that. The highest emitting resources out there right now will emit about 1000 tons per gigawatt hour. That's an old subcritical pulverized coal plant.

And if you measure the amount of credits from that standard and award credits based on how much cleaner per gigawatt hour, in other words how many tons less than 1000 per gigawatt hour that generator emits, then you have a quantifiable way of assigning these credits to generators and keeping a handle on your carbon reduction.

Now, the next step then is well, what do you do with all these credits. What we're calling them are CORCs, for carbon dioxide reduction credits. And what you do is you require your LSEs, your load-serving entities, to then acquire sufficient CORCs to give you the emission reductions targets that you're trying to achieve.

And we did file a paper a couple days ago with the Commission that specifies a formula, where you plug in what your rate of reduction is, and it'll basically tell you how many CORCs your

LSEs need to acquire.

And one of the advantages is each LSE can be put on a path of reducing their particular carbon reductions by a particular percent, so that LSEs with higher carbon footprints, you know, don't have to get down to the same level of carbon footprint that LSEs with lower carbon footprints. Which we think, at the end of the day, there's going to have to be some recognition that some folks are starting this in a much more difficult position than others.

You know, I know you all are probably at the saturation point of information and how many papers you've got in front of you, and how much to read, but you know, what we did file was 15 pages, and it's big print.

(Laughter.)

MR. MICHEL: And so, you know, if you get a chance to even at least maybe look at the summary or the abstract of it, we think it really does have some advantages. And it has advantages just beyond the allowance allocation issue.

For one thing it provides incentives and rewards directly the behavior that you're trying to get folks to do. In other words, it's rewarding carbon reduction.

You don't have the windfall issue, or the potential windfalls going to folks based on how much they pollute. It's going to folks, if there is a windfall at all, going to folks based on how effective they've been in reducing their carbon footprint.

You know, the point of regulation is your load-serving entity, which is something within your jurisdictions, so you do tend to avoid a lot of the commerce issues that arise in some of these other mechanisms.

One of the real advantages of this is there's no tracking of electricity required. These credits trade similar to how RECs could trade in a renewable energy regime. So that it avoids a lot of the issues of having to figure out where your electricity is coming from, and what that particular generator is that's serving a particular load.

The other advantage is it avoids some uneconomic outcomes whereby a particular generation has to find a transmission path for its emission attribute, which, you know, there's no reason to do that. Carbon dioxide is a global pollutant. There's no reason why that pollutant needs to follow a particular energy path or have a transmission path. As long as it's going to some load somewhere and reducing carbon somewhere, we should be satisfied.

And then, you know, just two other quick points. One is the formula that we've got in our paper lays out is it does reward efficiency fully with 1000 credits per gigawatt hour. So there's a big incentive for efficiency, which it does warrant.

And then finally, and this may not be intuitive, but this system would link perfectly with other sectors or other cap-and-trade regimes. Even though here we're talking about a CORC equaling a ton reduction of CO_2, and in other sectors or source-based systems you're talking about an allowance representing allowance to pollute, or to put, emit a ton of CO_2.

You can take a CORC in this system and sell it into an allowance-based system, and convert it to an allowance, and it'll give you the same carbon reduction as you would by just buying another allowance. And vice-a-versa. In a CORC system you can buy allowances from other sectors or other systems, use those as CORCs, and achieve your carbon reduction by the same token in your CORC regime.

So, we think it links real well with other market mechanisms. I guess that's all I'll say right now. Again, you know, it's something -- it's a part of a load-based system, or a modification of a load-based system that we think holds a lot of promise to maybe simplify things and simplify your job, and give a more transparent and clean-looking system that we think, at least, you know, our thinking so far is this really can work pretty well.

So, thank you.

CHAIRPERSON PFANNENSTIEL: Thank you. I did read your paper, and found it interesting. I think that I would like -- my first thought was that you were conceptualizing the same problem somewhat differently. And I think we're really open for some different way of helping us through this, because you're obviously trying to get to the same point that everybody else is at.

So I'd really appreciate other people's comments on your concept and your paper. You say it was simpler. I think at some level it is, but there still is a computational sense of it that might not be so.

MR. MICHEL: Yeah, the way it works is simple. Why it works and how it works takes some thinking.

CHAIRPERSON PFANNENSTIEL: Thank you.

MR. VIDAVER: Mr. Pedersen, are you going to address auctions?

MR. PEDERSEN: Thank you. My name is Norman Pedersen; I'm here for the Southern California Public Power Authority.

And actually I'd like to go back to what Steve Kelly was saying and maybe Lenny Goldberg, as well, about having an auction and embedding the cost of carbon in the price of electricity.

You know, we understand the theory, the economic theory. The economic theory is very simple. You charge more for the price of electricity, you send the price signal to the consumer about the cost of carbon, and you start to evoke a reaction from the consumer.

We're not so sure, however, that the Legislature was dead set on embedding the cost of carbon, as you would through an auction, in the price of electricity. We have, in AB-32, repeatedly the Legislature talked about minimizing the cost of the program. The Legislature was dead set that they wanted to get GHG reductions. And that's the goal of the state. And that's the policy of the state.

But to our mind they were equally clear that they wanted to minimize the impacts of this program as much as possible. If they just simply wanted to embed the cost of carbon in the price of electricity, the California Legislature could have adopted a carbon tax. And I don't find that anywhere in the legislation.

And I don't find anywhere in the legislation something about an auction, or sending a price signal. It's simply not there.

In our view, the Legislature wanted to minimize the cost of the program, fully achieve the AB-32 reduction goal, but minimize the cost of the program.

In our view what they had in mind was something like what the CPUC first talked about in its 2006 decision where it talked about its load-based program for the LSEs. A program where there would be administrative allocations of allowances; where the points of regulation would have to ratchet down. And if they didn't they would be subject to penalties. It was a traditional air quality program that the PUC was proposing. One aimed at keeping costs down while achieving the reduction goals.

Now, of course, a second problem for us with auctions -- the first problem is that you are going to end up driving up the cost of electricity. You're going to drive up the entire wholesale market. And we're very concerned about that cost of this program.

But, you know, second problem for us, we are southern California utilities. Yes, Scott, as a result of geographic and historical circumstance, we are where we are, you know. In the '70s we did have to turn to coal. We couldn't turn to nuclear for a variety of political reasons. We didn't have hydroelectric available to us. We had the burgeoning load. We were forbidden by the Fuel Use Act from turning to new gas facilities. The national policy was use coal, which we did.

Now, of course, things have changed. We have come to some realizations that people didn't have in mind back in the 1970s. They were concerned about other things in the '70s.

For us, yes, a major concern about having to turn to an auction is these utilities situated, you know, like LADWP, 1200, 1300 pounds per megawatt hour. They are going to have to incur the cost of retooling their entire generation system while going out to buy auctions.

Now, Ms. Wang, you had an interesting comment, your option two. We heard your option two. My ears did perk up because I did not recall that from your comments. I saw something more about allocating, administrative allocation of allowances on the basis of population or retail sales. That's perhaps something to explore.

If we were to have an auction, have a return of revenues to the party that -- at least the retail provider that was buying the credits, with, of course, that ratcheting down over time. So as to cushion, you know, an LADWP or a Burbank or an Anaheim from the double impact of having to retool from, you know, what happened back in the 1970s to where we are today. Not have to incur the double costs.

And I'd just like to say one last word about allowances. You know, we think that a lot of people here seem to be making a category mistake about allowances. The allowances, Gary, you said that they're dollars, just dollars. Well, maybe.

But we're going to ultimately talk about a regulatory program with penalties. I haven't heard a single party talk about penalties. The PUC talked about it in its very first decision, there's going to be a mandatory program with penalties attached to it. No one's talked about penalties.

Well, if you don't achieve, if you're a point of regulation and you aren't where you need to be at the end of the compliance period, there is going to be a penalty. There's going to be an enforcement mechanism. And you're going to have to have -- all the allowances are is a vehicle to provide you with the ability to meet your objective of compliance with the regulation, so as to avoid a penalty.

So, you know, we don't review these things, and I was very concerned about Mr. Tomashefsky's comments. You know, these are not rewards, brownie points to be given, merit badges to be given for past action. You know, 1990, or some other time.

These are not rewards for past actions that we now see as being meritorious. These are something that a party is going to have to get in order to avoid paying a regulatorily imposed penalty, which is going to be steep, in order to elicit the required compliance.

And so we believe that the way to see allowances is as part of an overall enforcement mechanism. And we are -- Commissioner Boyd, I was certainly very happy to hear your observation about how, yes, you know, if you were to see them, if you were to make belief, see as being a category -- we're to see allowances of rewards to be given out to those who have done what we now deem to be meritorious, you know, if you do have a utility that is at 100 pounds per megawatt hour right now. You know, DWP at $1200 or $1300 is going to have to go and buy those allowances from that utility. That's going to be a massive wealth transfer in the state.

And, you know, from our standpoint as being potentially the ones who are going to have to be paying the money, it's going to be an additional cost over and above what we're already going to have to do to do the retooling that Leilani was talking about.

Thank you, Chairman Pfannenstiel.

MS. JOHNSON KOWAL: Karen, I --

MS. GRIFFIN: I think it's time for lunch?

MS. JOHNSON KOWAL: -- I wasn't sure when I was going to have an opportunity to speak again about auction, because I --

MS. GRIFFIN: Right after lunch.

MS. JOHNSON KOWAL: Okay.

CHAIRPERSON PFANNENSTIEL: Karen, well, maybe we should see, though, if we can finish this piece of the discussion --

MS. GRIFFIN: Okay.

CHAIRPERSON PFANNENSTIEL: -- before we break for lunch because I think coming back after lunch we're going to try a whole new program, or whole new way of looking at this same stuff.

So, Leilani, why don't you --

MS. JOHNSON KOWAL: I'll try to be brief.

CHAIRPERSON PFANNENSTIEL: -- offer your comments, recognizing that we're going to break.

MS. JOHNSON KOWAL: I do really

appreciate the discussion that we've had this morning. I think it really does illustrate the challenges that we have going forward with this whole issue of allowance allocations versus auction.

I think what we have to do, though, is take a step back and take a look at the legislation. And I think Norman Pedersen is correct. There's not a single mention of auction in AB-32 when you look at the legislation.

And if you are going to look at an auction that is an appropriation of funds, AB-32 doesn't authorize any appropriation. And there is case law that makes it evident that a clear statement of legislative intent is required to make that appropriation.

So, when we start talking about auction we have to be really really careful that even though it might be something that's contemplated in other programs, it was not contemplated under AB-32. And I don't know that anyone in the Legislature ever had any discussions about auction when they were designing AB-32. That's one thing.

The other thing is that when we talk about the cost of the auction, itself, LADWP is in a position where we are taking this very seriously. We are looking at direct emission reductions. We are putting our investments where they are supposed to be in order to make those reductions happen by 2012, 2020 compliance period.

We've seen auction as draining those resources away from those direct reductions. That's clear and simple. That's all it comes down to.

And when I hear all the panelists today talking about auction and making sure that those revenues come back to the ratepayers, to me I see LADWP in a position of placing our funds in an auction and perhaps maybe not coming back to our ratepayers.

And there is also case law and commerce clause issues that do arise when we start talking about first seller and whether or not auction proceeds can come back to instate retail providers.

NRDC recognizes this also because they're talking about a 75 percent refund auction. In LADWP's view we wonder what's the point of even refunding it. Why not allow us to spend those resources directly on emission reductions that are required of our portfolio.

To me, the whole exercise of going through an auction, whether it's 100 percent auction, 75 percent refund auction, a two-step auction where it's allocated first to the retail providers and then go to an auction for everybody, and then redistribute it back, is just an exercise that is ripe for market manipulation, impacts on reliability, impacts on our ability to buy credits.

LADWP does remember very recently, under the AQMD reclaim program, what it was like to not be able to buy allowances no matter what price. Even if we wanted to, we couldn't purchase it.

And so, to me, I think I have a lot of concerns. LADWP is very concerned about the path that this discussion is going where auction is something that seems to have been created in this discussion.

And I think that we have to take a step back and think about what is the most cost effective way of reaching these emission reductions that are associated with AB-32. And I think auction is absolutely the wrong way to go.

I'm just going to end it at that.

CHAIRPERSON PFANNENSTIEL: Thank you. One last comment in this section.

MR. BEEBE: Bud Beebe with SMUD. Just a second to say, first of all, SMUD believes that this has much to do with the scope of the program you intend, and your expectations of success or the results.

We would like to point out that the great majority of greenhouse gas reductions in the electric utility industry will come from the statutes, laws, regulations, rules that are already in place.

RPS is a very big driver in this. Energy efficiency is a very big driver in this. Reducing the ability of Californians to invest in coal anywhere is a big driver in this. Those are already statute; those are already regulations.

So, the big ones are already there. So what do we expect from this? Well, we're going to have to reduce it from the electric utility industry, something like 20 percent of our total emissions from where we are today. Maybe that's a little bit more, maybe a little less, but that's about what it is.

We would like to point out that you

don't have to start with 100 percent auction. You don't have to start with a 50 percent auction. You don't have to start with 25 percent auction. You can start where you can actually manage the dang thing. Start with 2 or 3 percent. That's already 20,000, 30,000 tons that could be out there for people to use in their communities, to people find those little places where we know there is low-hanging fruit.

Let's start with a small auction, 2 to 3, maybe 5 percent. And find out how the heck to do this if we're really just going after electric utility industry reductions. And when we grow into 2020 how far would you want to grow the auction. Well, you don't need more than 20 or 30 percent in the end, in play, in order to realize what we need to get to.

So, again, in our view, if this is about the electric utility industry, then the big reductions come from the statutes that are already in place, and policy drivers that we know we can meet and we will meet.

But if you want to try an auction to find that low-hanging fruit, let's try something that's reasonable and work it out. Two, 3 percent to start with in 2012, going to maybe 20 or 30 percent max in 2020. That's our suggestion.

Thank you.

CHAIRPERSON PFANNENSTIEL: Thank you. I think with that we'll break for lunch. Let's give it about an hour and ten minutes, so we'll be back at 1:30.

(Whereupon, at 12:21 p.m., the workshop was adjourned, to reconvene at 1:30 p.m., this same day.)

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AFTERNOON SESSION

1:32 p.m.

MS. GRIFFIN: Okay, our first speaker this afternoon is Steve Roscow from the PUC, who has reviewed the various allocation options that are being thought about, and is going to provide an overview to start us out with today's discussion. Take it away, Steve.

MR. ROSCOW: I'm not going to -- I thought I would do a bit of an overview, but more, I guess it's called stirring the pot a little bit, and then get out of the way and let all of you talk.

First of all, I want to commend you all for doing such a great job on these comments. I'm going to say something that harkens back to my days in graduate school, and then I'm going to explain to you why your comments don't fit that model. And try to compliment you in the course of that.

There was a phrase when I was in policy school, it's called where you stand depends on where you sit. And I think it was used in reference to the Cuban missile crisis or something like that. And it is that basically where people come out on policy questions depends a lot on their own self interest.

And that isn't what I saw in these comments in organizing where everybody comes out on their allocation proposals.

At first glance there's some of that. Most of the advocates for grandfathering are the utilities in the southern part of the state that are more challenged in terms of the current resource mix.

And if you go across the spectrum from grandfathering to benchmarking to a sales-based allocation, at the sales-based end of things you have the quote-unquote, cleaner utilities. And so that would sort of be consistent with this idea of where you stand depends on where you sit.

But a lot of the proposals were a lot more nuanced than that. A lot of the parties that propose grandfathering proposed it only as a starting point, and basically kind of a recognition of reality of where many of the utilities in the state are today.

And that it would be basically punitive to start out with something that wasn't grandfathering. But then, even if you start with grandfathering, move quickly to more of a benchmarking type of allocation or sales-based or something like that. And so that's what I meant by I was impressed by the nuancing in what you all had proposed.

So what we thought we'd ask you to do, we talked about this a bit at lunchtime. What we thought might be a good idea is if folks, rather than just defending your proposal, if you could explain and defend your proposal in the context of how it gets the state where the state needs to be in terms of reductions by 2020, or at 2050 if you prefer that timeframe. In terms of creating the right incentives or avoiding the reverse incentives that would prevent us from achieving the goals of the greenhouse gas reduction program.

And with that I thought I'd try to open it up to people right away. Are people comfortable with that? Or do you -- is there still a feeling that you need to hear more about what each option looks like?

I didn't see a lot of disagreement over the definitions that we included in the comments from the MAC report. But if folks feel there's some clarity needed, I'd like to hear that first, I guess.

DR. STERN: Gary Stern, Southern California Edison. I think some of the points that may have already come out to a degree in the panel discussion this morning explain how we think we'd be sort of transitioning to meet the goals by 2020.

I mean under a cap-and-trade program by 2020 the number of allowances that would be out there, assuming that we're following the program, insures that we're actually going to meet the 1990 levels by that time.

But how do we get from here to there? I think, as Leilani described, some sort of a glide path probably makes sense. I think, as some others described, the real changes in GHG we anticipate occurring through bringing in new and cleaner technologies to the mix to displace some of the existing stuff, whether that's energy efficiency or new clean generation technologies. And some of that technological development isn't going to happen overnight. It's going to take a little bit of time.

So, consistent with our own proposal of mitigating the economic harm, we really have to allow a certain amount of time for the technology that's going to allow us to clean up the system to come through before we just kind of sock everybody with all of the costs without any mitigation.

So, I think as long as we recognize that, and that we do try and, especially up front, allow some time without substantial economic dislocation occurring, that we can get there.

And the fear is if we do the alternative, if right off of the bat we basically say, you know, we're going to auction everything and just, you know, let the prices go where they may, there may be too much of a backlash to allow us to get to where we need to go.

Technology is coming. People are working on it now. And we need to continue to push in that regards, but it can't happen overnight. And we can't replace the existing system overnight because we don't have sufficient resources to keep a reliable system. We need to do it gradually between now and 2020.

MR. ROSCOW: So, if I put you on a spectrum, are you somewhat close to LADWP in terms of setting a starting point that looks a lot like where all the load-serving entities are today?

DR. STERN: Actually, if you put us on a spectrum you'd probably find that we support, especially in the beginning, as much of an allocation as we can reasonably do. But who gets that allocation is probably somewhere in between a load-based -- shouldn't call it load-based -- a magnitude of retail load approach similar to what PG&E is saying, and a historical generation perspective, as Leilani described for LADWP. Since we're focusing on harm that tends to fall sort of somewhere in between those two.

MR. ROSCOW: I guess, and I was going to make notes while people are talking this morning, you know, I'll confess, I come at this from a not-greenhouse gas background, other than as of a year ago is when I started on all this.

And the questions that kind of occur to me are why should any entity at the outset of the program receive more allowances than they need to comply. And the flip side of that, why should any entity receive less allowances than they need to comply in the first year, for example.

And I still struggle with that. And the more I read the more I can see some theoretical reasons as to why you wouldn't want to do that;

but on a basic kind of fairness metric and simplicity metric, the L.A. approach I have a lot of sympathy for. Meaning, start us out where we need to be; set our glide path and leave us alone. And you don't need to do a market, you don't need to do any of that.

And as I think more about it, some of the comments that have resonated with me, SMUD, for example, in their comments, I think, said something similar to that. Is do an initial allocation and then let a secondary market develop on its own basically.

And I won't put -- SMUD, of course, can hop up and correct me --

MR. BEEBE: You got it right.

MR. ROSCOW: Okay, good. And if you harken back to the MAC process, I think it was Cantor Fitzgerald had some very provocative comments I thought that said something similar, which was basically do an historical allocation and then step back and let the market take care of sorting out adjustments at the margin. And the government shouldn't do any more than that.

And I still, in an allocation context I still have some -- a lot of sympathy for that.

And I'm very open to hearing why that's not a good idea. But in terms of stirring the pot a little bit today, I thought I would just kind of throw some of these things out there, and be the one that gets knocked down. And, Chris, did you have something?

DR. BUSCH: Chris Busch with the Union of Concerned Scientists, thanks. I mean I guess there's the issue of price discovery and contributing to a stable price over the long term in terms of having some auctioning. And so that's been a problem, I think, in the European system in terms of when people receive the allowances they treat them differently, and they may hold onto them just in case. And so that's led to some of the -- that's contributed to some of the instability in the European price.

There's also just a generating liquidity in the market is another reason to have auctioning. And while I have some other comments about auctioning that I wasn't able to deliver this morning, maybe I could at this time?

I guess I would just say that with respect to the arguments that have been presented today, I think the MAC had it right when they said simplicity, fairness and cost effectiveness all argue in favor of 100 percent auctioning. And there may be some other factors in the interim that lead to a path other than immediate 100 percent auctioning. In the long run I think that's the direction we should be going.

And as an economist I also see the price signal argument as much as I also see the need to give attention to the costs that the system will impose due to these new obligations.

I guess I'd also point to Devra's comments about, you know, regulatory foresight would have probably called for giving attention to this in the long run.

Just let me echo Lenny's comments in terms of auctioning really being a strong way to reward early action, sort of the cleanest way. One thing that wasn't mentioned this morning is that in terms of new entrants, auctioning is definitely the cleanest way to handle new entrants in the market, which may not be such an issue in the load-based system, but for a seller it would be.

I guess one other point that it occurs to me to mention, just in terms of why not to just hand them out at a level of compliance in the first year, I think getting back to the point of California's position in the federal debate, that that would not be a good precedent for the state in terms of the national allocation battle that would follow.

Just on the question of what to do with the value generated by the allowances, I would just say in addition to mitigating the economic costs, I think we have to look at ability to pay. Some people are going to be more or less able to pay. And also using the revenue or directing it in ways that are going to set us up for not only our 2020 goals, but the long run beyond that.

Thanks.

MS. GRIFFIN: Don't go away. When you talk about liquidity in the auction market are you contemplating participation of nonregulated entities in the auction market?

DR. BUSCH: By that I'm just referring to the number of allowances that are up for sale and are circulating. I wasn't necessarily referring to who would be buying or selling.

MS. GRIFFIN: Okay. Because it seems like almost all the parties, in their comments, said to limit even an auction to regulated entities. And I wasn't clear, there seemed to be a mix of people who said auction only within the electricity sector; and others who said auction is part of the multi-sector way to go. And were you providing comments on either of those choices?

DR. BUSCH: Devra, do we have a position on that? I'm not sure, I don't know offhand. I think there are arguments that could go both ways.

MS. GRIFFIN: Thank you.

DR. BUSCH: Thank you.

MS. JOHNSON KOWAL: This is Leilani Johnson Kowal with LADWP. On that particular issue of nonregulated entities participating in an auction I think the concern that comes up is the potential for market power to be exercised.

And that's not necessarily limited to just auction. That can be something that can be found in almost any cap-and-trade program. And if you look at our filing, we did provide some specific details regarding a preliminary draft report on the AQMD reclaim program -- and I believe we have somebody here in the audience from AQMD -- about the participation of investors in that program.

And although maybe there has not been any exercise of market power there is a potential for that to happen. And although investors can provide liquidity, they can also exercise that at the harm of the electric sector. So I think that's one of the concerns that we have.

And it's not, like I said, just for the auction. That is for a market-based program in general. And that's part of the reason why LADWP does not necessarily support a market-based program as a way to comply.

I'll leave it at that for right now.

MS. GRIFFIN: Oh, we seem to have group consensus. Go with Steve's idea and we all go home.

(Laughter.)

MS. GRIFFIN: Ah, here they come.

MR. LAZAR: Jim Lazar, a consultant to Burbank. And, Marc, if I could have my -- I've got two slides to share with you. And I'll try and be quite brief on them.

I'm consultant to the City of Burbank. Burbank has adopted a 33 percent renewable portfolio standard by the year 2020. We're already below our 1990 emissions level. And if, on an economic dispatch basis, Burbank emissions would decline approximately another 25 percent, from about 1400 pounds a megawatt hour down to 1000 pounds a megawatt.

There are about a dozen utilities in the state that are over 1000 pounds a megawatt hour. Burbank is one of the dirty dozen. But, it is acquiring wind, solar and geothermal at a pace that's a little unprecedented for a municipal utility.

They expect to achieve this as a 33 percent, actually 34 percent renewable portfolio standard up here. And they expect to achieve that by 2020.

What's it going to take to do more than that? Well, it's going to take quite a bit. I want to start with a little discussion of the word grandfathering. I don't like the term. And it's sort of, in my opinion, kind of unAmerican.

Grandfathering is what happens in the British House of Lords. Your grandfather was a lord, your father was a lord, and you become a lord regardless of what you have done, what you have learned and what you have to contribute to the nation. We don't have titles in this country that come with genesis.

But to keep it in sort of the same pejorative category, I would refer to what we need for the dirty dozen is something more along the lines of remedial education. This isn't our grandfather's problem, and it isn't our father's problem. It's our problem today.

And we want to do our best, and we need the tools to accomplish that. And that's what remedial education programs are for is to help those that have a handicap or a limitation or a shortfall of some kind in their ability to respond to the usual educations system. An ability to do their best with help and guidance.

We start from a difficult position. Marc, if I can have my second slide. We've done some modeling of the resource portfolio that I just showed you on Burbank's system. And what it would mean under an emission-based allocation to our rates, starting from a little below 14 cents a kilowatt hour, rising to about 18 cents a kilowatt hour. That's acquiring the renewables and reducing the dispatch of fossil generation.

Under a load-based allocation, starting in 2012, we're looking at more like 20 cents a kilowatt hour. Under auction at more like 21 cents a kilowatt hour. This is all based on an assumed market clearing price of $50 a ton.

Where does $50 a ton come from? That's the point at which a utility might consider running a gas-fired resource rather than a coal resources. It's not enough to pay for the difference between running a coal resource and buying a new renewable resource. But it is enough, it's about the break-even point between running coal, existing coal, and running an existing combined cycle gas, if you have it available. So it's the mixed resource often available for dispatch. By no means always available for dispatch.

The rate slope from 14 to 18 cents a kilowatt hour is about twice the rate of inflation. That's painful enough. That's sort of a best case. That is with the emission-based allocation consistent over the entire period. We're looking at that kind of a rate slope.

To go into the auction rate slope is obviously a little bit terrifying. But even a load-based rate slope where the wealth transfers from the emission-heavy utilities to the utilities that have the benefit of a lot of hydro on their system, from historical allocation of that hydro and their geographic location.

Now, there was talk this morning about a trend starting with emission-based allocation and moving to a load-based allocation. That would basically be moving from this point at 14 cents, when the regulations, before they kick in, up to the 20-cent point over time.

That's, one, a pretty steep slope. And, two, it still involves the same wealth transfer.

If you're looking for options one of them might be a gradual trend from emissions to what I call net load. Net load is load minus that that's served by old, low-cost, noncarbon resources; big hydro and perhaps nuclear.

Now, there's no way that the southern utilities are ever going to achieve the same total benchmark or emission footprint or profile of the utilities that have 30 or 35 percent hydro in their system.

First of all, hydro is cheap. Second of all, hydro is flexible. It is a wonderful resource for integrating intermittent renewables such as solar and wind into your system. It gives those utilities that are fortunate enough to have it flexibility that the thermally based utilities cannot, will not, do not have, until we have a technological breakthrough in energy storage, which we certainly hope is coming.

But if we remove those, by the time the contracts expire, about the time the bonds are amortized, if we start looking at a 2035 to 2050 timeframe, the southern utilities probably could achieve close to the same emissions profile on a net load basis, as the other utilities in the state.

They will still be handicapped by the lack of hydro. Unless there's a proposal to allocate the water statewide, it's very difficult to expect the southern utilities to be able to manage a statewide allocation of the air.

We don't expect a statewide allocation of hydro. We certainly don't want to be penalized by a statewide allocation of the air.

Finally, I want to just close on a comment that was just made, that the MAC indicated on the basis of simplicity, fairness and cost effectiveness that auction was the best way to go.

Under auction the high-emission

utilities face, by far, the highest rate impacts. And I mean the northern California municipal utilities, SMUD and Alameda and those, have current rates that are down in the 7 to 10 cent range. So there's no outcomes that are going to even take them up into the best outcome range for a southern utility.

From a fairness perspective I think auction fails. We did use a simple system for sulfur dioxide, and another for nitrogen oxides, in the national sulfur program and in reclaim. They were simple; they were fair; they'd be cost effective; they've been very effective, they worked. They were historic emissions put on a slope towards the target emissions level.

If you want to look at simplicity, fairness and cost effectiveness I think it makes more sense to look at what has worked historically, as opposed to auction which clearly has the most dramatic impacts.

Now, Devra says both this morning about the notion of you get your money back auction, with strings attached. If you can get, she suggested 75 percent of the auction revenues would go back to the load-serving entity for investment in its own resources.

Burbank obviously has a lot of expense associated with achieving this emissions reduction here. This graph here has both the rates and the emissions reductions. It's 33 percent, 34 percent renewables being acquired.

And if 100 percent of the auction revenues were to come back, we would achieve this rate slope, the emissions-based rate slope. And if it were 75 percent, it would obviously be, you know, one-quarter of the way in between. It would be closer to the green line than to the red line.

The certainty of that occurring is troublesome. There's a history in California of pots of money being diverted from their original purpose to other purposes. And without sort of a constitutional guarantee, the confidence that one can put in that mechanism is fairly low.

I do want to commend NRDC for putting the idea on the table. It's a creative idea. It could work quite well if the results could be assured. But from a simplicity, fairness and cost effectiveness perspective, the best outcome for the southern utilities is worse than the worst outcome for most of the northern California utilities.

Thank you.

CHAIRPERSON PFANNENSTIEL: Thank you. Very good analysis. Now, this was done specifically for Burbank using your information.

MR. LAZAR: This is done --

CHAIRPERSON PFANNENSTIEL: And so it's not just an illustration, it's actually --

MR. LAZAR: It's not an illustration; this is the resource plan that Burbank has developed to implement it's integrated resource plan. These acquisitions, in some cases, are moving forward. Obviously some of them are in out years. And the full acquisition of all of these resources hasn't been approved by the Burbank Board or City Council.

But this is a real resource plan that involves implementing a City Council-adopted 33 percent RPS, and backing off fossil resources. A pretty significant reduction in emissions.

We were about 900,000 tons in 1990. We're about 800,000 tons today. We have some coal resources that expire. We've brought some renewables into the system. We've replaced with the most efficient, new, gas-fired and cleanest of gas-fired generating resource anywhere in the Magnolia Power Plant. That's brought us down from about 900 to 800. The 33 percent renewable standard would get us down in the 600 range.

CHAIRPERSON PFANNENSTIEL: And I want to make sure I'm reading your numbers correctly here. So in the out year on this slide, the difference between emission-based and auction would be about 3 cents a kilowatt hour, is that what we're talking about?

MR. LAZAR: About 20 percent, round numbers.

CHAIRPERSON PFANNENSTIEL: And did you -- are these slides in your written filings? I didn't see them.

MR. LAZAR: They are not. You know, SCPPA submitted some written comments. We hadn't been through enough of a process within Burbank to determine that these were ready to be shown in public yet.

CHAIRPERSON PFANNENSTIEL: But you will put them into the record?

MR. LAZAR: They will come in, yes.

CHAIRPERSON PFANNENSTIEL: Thank you very much.

MR. BEEBE: Could I have just a couple of clarifications? I think it would help everybody, honestly. Bud Beebe with SMUD.

Jim, as I look at your slide here I see that you have the middle one there stated as load-based. Could you explain a little bit what you mean by load-based? Because I think we call that something different. And the use of the term load-based, I think for instance in the rulemakings that the PUC has had, actually has had a different meaning than that.

So, thank you.

MR. LAZAR: Sure. Thanks, Bud. The middle line load-based is an allocation based on a statewide target based on statewide megawatt hours. Burbank is a slow-growing utility. And in calculating that we took the statewide forecast and load, which is faster than Burbank. And a statewide allocation of emissions, which is coming down.

And so while the emissions statewide come down by 25 percent, the allowance per megawatt hour comes down about 37 percent to accommodate the load growth.

But the load-based is megawatt hours.

MR. MURTISHAW: Jim, just -- I think one thing that Bud is getting at is because we used the term load-based to describe a point of regulation, maybe it would help to clarify things if you just started referring to it as sales-based or --

MR. LAZAR: Sales. By the time it comes in in writing I will have that clarification on it. It will say sales --

MR. BEEBE: The term that we've suggested --

CHAIRPERSON PFANNENSTIEL: Bud, you need to use a mic.

MR. BEEBE: SMUD has suggested the use of the term electricity energy share.

(Laughter.)

MR. LAZAR: And is that the same as what's in the Liebermann-Warner bill which is retail sales adjusted for independently verifiable energy efficiency investments?

(Laughter.)

MR. LAZAR: Which I think is what Devra said earlier. I'm going to change the word to megawatt hours, because that's what it is. I didn't have independently verified energy efficiency measures installed through 2020 handy to me.

But I think we all know what we're talking about. And I agree. And thank you, Bud, there is a semantic challenge here in this area. I'll make that correction.

CHAIRPERSON PFANNENSTIEL: We have somebody else who's been waiting.

MR. WILLIAMS: This is Ray Williams from PG&E again. I'm going to run through the comments that I hadn't got to before. And, Steve, I'm going to try to answer your question along the way.

We support the MAC criteria; and we see two overarching objectives. The first is to achieve long-term sustained and significant emissions reductions. And the second is to manage costs for our customers.

And I was struck by your slide for two reasons. One is I saw auction being higher than the other lines, and I'm assuming that means there's no return of revenues to customers. And that's an issue I think that regardless of where you are on the allocation method spectrum, I think we're all concerned about that.

And the second was the dollar figure on the lower right which looks to be $50 per ton or metric ton. And I hope as we go through this we all can do a little better than that. I think, you know, when a utility like PG&E or any other thinks about costs to its customers, they're thinking, one, about this allocation issue. But they're also thinking about the price issue.

And it's very different, at least for me, to think about now what is the risk in terms of customer cost. And think about it, compartmentalizing it into those two issues. I think, you know, you really need to think about it in the context of both.

Okay, so, you know, when we do an allocation distribution policy I think we have to be concerned about costs to California's consumers and businesses. And just to give you -- here's the numbers that go through my head.

Think $20 instead of 50, okay. And think in the natural gas and electric sector, maybe 175 million metric tons a year. Okay. So that takes you somewhere between $3 and $4 billion a year in allowance value. Devra framed that question very well, however you want to look at it.

So, it's a very large number. And actually I'm amazed at how civil the conversation has been on either side of the allocation issue, you know, given how much money is involved here. It's a lot of money.

So, now I'm going to try to get to some of Steve's question. Like NRDC and Environmental Defense and others, we support an output-based approach. It rewards early action and investment by LSEs who have done CEE and, of course, PG&E, we've been doing customer energy efficiency for about 30 years.

It's a very significant issue for the state, as a whole. Devra went through those comments in the context of federal legislation, so I won't repeat them here.

But what I would like to do is to talk a little bit about the issue of, you know, why not just start off with an historical allocation. So, I'd like to maybe take a little broader view than that. And, you know, think about it in the following way.

There are utilities who probably knew that this was coming many many years ago. And as part of their portfolio responded in a certain way. PG&E with its customer energy efficiency. Should be looking at that period and that should be given some consideration. You know, where you are today maybe that should be given some consideration, as well.

But also, I think when you look forward, for a company which doesn't have much in the way of emissions reductions opportunities, that should be factored in, as well.

So, you know, as an example, if you're a high emitter, you probably have more opportunities in terms of moving high emission resources out of your portfolio. You probably have more opportunities to do customer energy efficiency for the same amount of money than a utility like PG&E, which has essentially 2 percent coal in its portfolio, and it's basically qualifying facility power. And we've been doing CEE for so long.

So, you know, I think you really should think about it in those three pieces. What did companies do historically, you know, knowing what they knew about this legislation and these issues coming. What's going on currently. And what happens going forward, and who really has the opportunities to reduce emissions going forward.

So, I think that's maybe a little broader view in terms of this allocation question than just that current question. Okay.

I do commend LADWP on two points. The first is getting to a benchmark at some point in the future, 2020. I think that that's good. And Leilani also talked about the need for data and modeling. And I know that some people have thrown analytics up there. I think that's a good contribution. I wish I had some today.

But I think, you know, we really need some good modeling and some good work on the data front so that we all can develop at least an approximate quantitative view of these issues.

And it's about the allocation question that's the quantity, but it's also about the market quest because that's the price. And when you put that together, I think we'll get a better resolution for everyone. And I think for all the utilities here, we'll be able to go back and say, well, I have a much better feel now for what the risk is of all these policies as they come together. And that being, you know, the risk to our customers.

So, in our view, the Climate Action Team has done a nice job on analysis. I know that the Division of Strategic Planning has hired energy and environmental economics. You know, they're doing a nice job in terms of looking at emissions reductions and costs.

I'll note that there's really not much done in the transportation sector. I really think sort of a fuller picture is going to help out a lot in terms of getting the best resolution that we can on all these issues. Okay.

And then I just have one last comment, call it an area for improvement, on the SCE proposal. I'll try to keep it as positive as I can.

And think about it in terms of three generators. One is one that comes under the marginal rate, and they essentially would receive no compensation, I believe, under this proposal. Please correct me if that's wrong.

Think of another generator that's slightly above the marginal emissions rate. They would receive some compensation.

And the think of a generator which is high emissions and they would receive a large amount of compensation.

And so, you know, that's one issue in terms of how are you positioning three generators with different emissions profiles. And then going forward, if you look at it, the high emitting resource will continue to receive compensation for the foreseeable future. And I'm not sure that that's really the best way to provide incentive for that generator, or whoever owns that generation, to move toward a cleaner portfolio.

So, those are my comments. Thank you.

MS. GRIFFIN: Mr. Williams, I have a question. This is on how important -- the generic question is how important is it to get additional data before we make some of these high-level decisions.

And let me back that up with one of the options, which is starting to float in some circles, is let's just keep slugging ahead, slugging on with existing regulation and not try and design a market for the electricity sector now. Let's maybe look to do that in 2012 or 2015 because we don't know enough to make a good choice.

Is that how badly off we are in terms of what we know?

MR. WILLIAMS: Well, the answer -- the question should be answered probably in the context of federal legislation, which we know is coming, which looks to include a cap-and-trade system. At least for the electric sector.

So, given that, I think, you know, this is a great forum because it really helps to identify the issues. I think there needs to be really a companion process which is a data process so that we can see how these issues are framed and bring the data in really to take a good look at it.

In terms of whether California should do a cap-and-trade program or not, given the federal context, you know, I think it's a fair question to see whether or not it makes sense to do a cap-and-trade program for California, or go forward with programmatic approaches.

Let's put it on the table. Let's examine it. PG&E supports a cap-and-trade program. But I think it certainly makes sense to, you know, look at all the alternatives.

ADMINISTRATIVE LAW JUDGE TerKEURST: If I could just comment on that. I had mentioned earlier this morning that we're planning to issue an amendment to the scoping memo and ask for additional comments on the type and point of regulations. And that is one of the questions we will be asking. So parties can be thinking about that.

MR. WILLIAMS: Okay, thank you.

MR. ROSCOW: And I would just comment, I know it's difficult for one party to critique another party's proposal in real time, and I just would commend you for the way that you addressed Edison's proposal. That sort of dialogue is extremely helpful to us as we go through the comments, and as we're going to go through the reply comments. So, thank you for doing that. That's the type of thing we were talking about at lunchtime that we thought would be helpful this afternoon.

I bet Edison wants to reply, but --

MR. HARRISON: My name's Frank Harrison; I'm with Southern California Edison. I just wanted to respond to a couple things. You had specifically asked the question regarding whether or not allowances should be allocated to the regulated entities.

And I think that the foundation of our approach to this is that the allowances should be allocated according to the burden. And the burden does not necessarily match the regulatory obligation. The economic burden and the regulatory obligation are not the same thing.

In a first-seller approach there is still a significant economic burden placed on ratepayers, both as the market price goes up for those resources that participate in the market; and in terms of the lower emitting generation sources negotiating through bilateral arrangements as a price that recognizes the value of the emissions in the market.

And so in a first-seller approach where, say, for example, not specifically for Edison, but for a pure ESP that owns absolutely no generation, their ratepayers would still be subject to a significant economic burden, even though they are not the regulated entity.

And so we get back to this issue of allowances being really a financial instrument. And this leads into one of the comments that Mr. Williams made, and, of course, the issue of the three, as he characterized, three classes of generators.

We have a generator that is below the emissions rate of the market-setting generator, if you will. And then you have a very high-emitting generator. He characterized, I think, the generator in the middle being slightly above the market, the marginal rate. Whether it's slightly above or equal to.

The idea of allocating allowances to that high-emitting generator is a reaction to a response to the economic burden. The financial incentive to get clean is going to be there whether you reduce the number of allowances over time or not. That financial incentive is still there because every period that that generator continues to emit at its previous level, it essentially pays for those allowances, even those allowances that it would receive in an allocation.

This is, of course, one of the reasons that we saw problems in the EU, they continue to pay for those allowances by not selling them. Whereas, as you clean up your portfolio, you will be able to make that decision whether it's better to clean the portfolio or to retain the allowances.

And then, of course, we add into this idea that the number of allowances going forward will be ramped down. Everybody is going to take a haircut. The Edison approach is that we all take an equal haircut across the different reporting entities.

So I hope that clarifies where we are. I think it's very important that we understand that the allowance decision is one to reduce the cost of compliance, but it is the market price that's going to drive behavior modification. And that market price is going to be there whether we allocate allowances and return the revenues of the auction to the harmed entities, according to that allocation; or if there's a pure auction where the money goes into a well.

In either case there's going to be a market price that's going to drive behavior. We just recognize that if you allocate in such a way as to mitigate the economic harm, you're actually reducing the cost of compliance.

Thanks.

MR. PEDERSEN: Can we go back to the Burbank slide? Right. This is the one that Ray Williams was commenting on for PG&E. By the way, I'm Norman Pedersen from Southern California Public Power Authority.

And when Ray started his comments he said, well, something that Jim Lazar was forgetting was that under the PG&E's proposal where allowances would go to LSEs on the basis of their retail sales, and then LSEs would auction, some money would be going back to the companies, the LSE's customers, Jim wasn't taking into account that money coming back.

This is exactly the problem that Burbank faces. The money would be going elsewhere. Under the auction approach, as Jim expressed, our concern is we'd be doing everything we have to do to retool; and additionally, we'd have to buy allowances through the auction and the money wouldn't be coming back to us on a one-for-one, or 75 percent basis as Devra Wang was saying.

It would be going off for, you know, no doubt very worthy purposes, you know, building new prisons or, you know, whatever California had to do with the money. We've got a lot of pressing needs in this state.

Under retail sales this is Mr. Williams' proposal. Burbank would be doing the things that it needs to do to retool simultaneously, since we had an allocation on the basis of sales, sure, Burbank would get some. But you have the low load, you know, NCPA's 100 pounds per megawatt hour utility getting allowance on the basis of its load, and where's Burbank going to go to get the extra allowances it needs. It's going to have to go and buy them from the NCPA member that's at 100 pounds.

And so we aren't going to be getting that money back. We're going to be paying everything we have to pay to retool, to get to the 2020 AB-32 goal, and we're going to have to go out and buy the allowances.

And now I'd like to move to the end of Mr. Williams' presentation where he was talking about the three generators. He said, well, should we be compensating the dirty generator. And that's exactly what I was addressing this morning, where it seems to me we've got a category mistake here.

We have this idea that allowances -- sure, as has been pointed out by others, as Gary Stern pointed out, they're equivalent to money. But it's not compensation, it's not a reward, it's not a merit badge.

It's like under any air quality program that we have had; it's like under the reclaim program. You know, you start out with a requirement for the regulated entity, from the point of regulation. You ratchet down over time. What's that ratcheting down over time mean, that means fewer and fewer and fewer allowances over time.

You aren't giving allowances as a reward. What you're doing is you're taking the regulated entity down on a glide path towards achieving whatever the goal may be. In this case 2020, 1990 emissions by 2020.

You know, Steve, you asked, you know, how, under the approach that Southern California Public Power Authority is advocating when we get to 2020 or 2050. And we thought about 2050 and actually 2050 is the goal that we tend to have in mind because we see that as where we're going to end up having to be. It's basically through the program that the CPUC proposed. It's effectively direct regulation.

Yes, the point of regulation we'll be told this is how you're going to be ratcheting down, and here's where you're going to have to be by 2020. And, you know, we think it's in the cards; we're going to end up with another requirement for 2050.

We're told we're going to have to achieve that. And we're told that if we don't, there will be, again, direct regulation, there will be penalties if we don't achieve that objective.

We will take into account, we propose to take into account early actions. We propose that we have a -- we base the initial allowances on the base of historical emissions. It might not be 100 percent, by the way. So, would we start out at 100 percent. Maybe it will be something less, you know. We're given between now and 2012 to start. You know, it might be something less than 100 percent of what we need in 2012. It might be 95 percent, or some other percentage.

But we would start out; we'd be ratcheted down over time with penalties as the enforcement mechanism.

Since the starting point was an immediate pre-AB-32 period, say 2004, 2006, anything anybody did between now and 2012, any of those early actions between now and 2012 would be taken into account.

All the utilities would be treated equally. And, again, we tend to have in mind the load-based approaches the PUC had in mind, because in our view that's the approach that is going to be able to pass the legality test. We have a lot of concerns about first seller.

All utilities would be treated equally. It doesn't matter whether you're, you know, Mr. Stern's ESP that's 100 percent purchase power, or an LADWP that's near 100 percent, or 100 percent resourced. All your emissions are going to be taken into account, so all of the points of regulation will be taken into account equally and fairly.

There would be no wealth transfers. It would not be regressive, something I was very concerned about this morning. You had TURN coming up here and say, we support auctions. Electric prices are regressive. A household that is low income, sure it consumes less electricity than a high-income house. A high-income house consumes somewhat more, but overall on a per capita basis, lower income people and higher income people use about the same. And if you raise electricity prices, it takes more percentagewise out of the lower income household's budget than the higher income household.

This is a regressive way, auctioning is a regressive way of getting to our GHG reduction goal. And so I was very surprised to hear TURN, you know, which typically is advocating in favor of low-income households, supporting what is effectively a regressive measure. What we've been proposing wouldn't be.

And lastly, you know, we've heard something about new entrants. We would take into account -- they would be taken into account certainly if you had retail providers as a point of regulation, you don't have that much change, you know. We don't have DA in -- direct access in California right now. You don't have that much change.

But, you know, you would have a secondary market. We think, under AB-32, we're actually headed towards an annual compliance period because that's a term that we see in the legislation.

So we don't see there as being that much of a problem. We do think that we need to think further about that before we give a lot of attention to the new entrants problem, and growth problem, because we also are aware of the other initiatives having to do with land use and other measures that might be taken into account in addressing that. We haven't fully analyzed that, but those are other factors that need to be taken into account.

So we think you can get -- we think we have a plan that gets you to 2020 and gets you to 2050 with minimization of costs. Thanks.

MR. ROSCOW: Just a clarifying question. Are the numbers out there for your plan? You know, the glide -- the starting point, the glide path, the end result. Are there numbers somewhere in your set of comments?

MR. PEDERSEN: We are in the process of developing some more numbers. As I think Mr. Lazar mentioned, in one of our earlier drafts of our comments we did have a chart that looked just like Mr. Lazar's, but we didn't think it was ready for prime time.

And actually I would like to take this moment to say to the extent to which the schedule -- Steve's laughing because we have had a conversation about this, Judge TerKeurst -- to the extent to which the schedule for whatever this next round of comments is going to be, could take into account the things that we have going on.

It is very difficult to pull some of this stuff together in very short order. And to the extent to which time could be allowed, and also we could have dates that don't conflict with other dates. That would certainly be very helpful.

ADMINISTRATIVE LAW JUDGE TerKEURST: I'll go ahead and respond to that. Because I've been hearing about these conversations that have been going on.

And it's of concern for a couple of reasons. One is the PUC's rules explicitly don't allow parties to bring new information in in reply comments. I mean the purpose of the reply comments is to reply to the positions that the other parties have put forward.

And there's a problem if new information comes in in your reply comments. Then do we allow the other parties to file supplemental reply comments to respond to what you've brought in?

So anyone that is thinking that you're going to bring in new factual information in your reply comments, you need to contact me as quickly as possible and let me know what it is you're thinking about doing. And let me think about it and talk about it among the staff to see if we do think it's worth creating additional procedures to allow you to do that.

Because, in fairness, we need to allow the other parties to respond to it.

And that runs right into the other issue that you just brought up, which is the schedule. If we do that, then you're running into conflicting with other dates that we're setting for comments on other equally important issues.

MR. PEDERSEN: Well, actually there are two separate things here, Judge TerKeurst. And thank you for raising that.

Actually what we would hope to present was some further information about this issue that I was just talking about, about how these different allocation methodologies would have differing impacts for differently situated utilities.

And so in our judgment it is responsive

and is appropriate for reply comments, but I would be happy to show you whatever we have before doing it.

However, that may not be possible within the six working days allowed. Is there any chance of getting a bit of an extension of the date of the 14th?

I'll raise it otherwise.

ADMINISTRATIVE LAW JUDGE TerKEURST: Yeah, this is not the time to --

MR. PEDERSEN: Yeah, I'll raise it otherwise.

ADMINISTRATIVE LAW JUDGE TerKEURST: -- time. There will be other deadlines coming at you besides this one. So that's part of the concern.

(Laughter.)

MR. PEDERSEN: Well, and that was the other concern. We, for example, the date of the 14th is exactly the same date as we have the E-3 workshop; the last date, the 31st, is the same day as the CARB workshop. And so to the extent to which it would be possible to have all this taken into account, we'd certainly appreciate it. At least we would.

ADMINISTRATIVE LAW JUDGE TerKEURST: You

could file early.

(Laughter.)

MR. PEDERSEN: But then we wouldn't have our data, right?

MS. JOHNSON KOWAL: Leilani Johnson Kowal with LADWP. I appreciate the fact that we can laugh a little bit about this whole process. It is a bit crazy.

And for those of us all in the room that have spent the last year on this AB-32 rulemaking, I think we appreciate the fact that we get to come together every two weeks.

I just want to make it very clear that from LADWP's perspective, an output based allocation, one that's based on retail sales, absolutely sends the wrong message. And it is a complete disconnect from AB-32.

It leads us down the wrong path. And the reason why is because in an emissions reduction program the whole point, and the reason why an emissions-based allocation works is when you purchase allowances that are freed up because of early actions, they do reflect emission reductions.

If we went down the path of giving extra credit for clean portfolios that are nuclear and hydro, which was mentioned this morning, one of the problems is that that is already accounted for in someone's resource mix.

And to go down the path of allocating based on sales and output-based methodology basically provides the same type of results here in California simply because those that have the nuclear and hydro would also benefit from a retail sales based allocation.

We are not interested, let me be very clear, we are not interested in trading for the sake of trading. That does not get us to the end goal of AB-32.

And I came in here today this morning with our filing and with the presentation where we did come to a compromise. And that was something, Karen, that you had mentioned this morning, was that you were hoping that there was going to be some kind of compromise, and some kind of common ground that we could come to. And LADWP came here with a 2020 benchmark, which I think is a huge step.

And yet this afternoon we start off with PG&E, with Ray Williams, talking about output based on sales where we're talking about no emission reductions. He even mentioned that they don't have the opportunity for emission reductions. And yet an output based would result in them receiving a huge windfall in allowances in the early part of this.

And to me that is where the disconnect happens. I think we have to come back to what the goals were of the program, and go through the whole exercise of developing the inventory, determine what the reduction goals are, and meet those goals.

And to do so, trying to do that with an output based basically places additional burden on those utilities like LADWP and the other SCPPA utilities, that are trying to change our resource mix, but then at the same time have to go out and buy these allowances.

To us that is what you call a wealth transfer, and that is absolutely not acceptable under AB-32. That does not meet the intent of AB-32 to be cost effective. And to us that is something that absolutely cannot go forward.

There's no correlation to the major emission sources or the potential for reducing emissions. And, again, this morning I did indicate that we are committed to making those reductions; and we do recognize that LADWP is in a position of making greater significant emission reductions than those utilities that have cleaner carbon resource mixes.

So, a utility like PG&E or those utilities under NCPA that do have cleaner portfolios because of nuclear and hydro, they are being rewarded. And those ar early actions that are being rewarded in their carbon resource mix. And it does lower their overall compliance costs.

The gloves are still on, by the way.

(Laughter.)

MR. ROSCOW: I -- we'll take people in order, so whoever's next. But I would like to hear today a response to the wealth transfer argument or concern. Because I haven't really seen that in comments yet. And it -- okay, so great. Whoever, however you want to sort things out.

MR. REED: My name is Jeff Reed; I'm here from San Diego Gas and Electric today. And I'd just like to support a few comments that I've made before.

I think our overarching objective here, in terms of AB-32 compliance, is to insure that the goal for verifiable emission reductions is achieved at the lowest overall cost.

So, to us, that would be consistent with either administrative allocation or an auction with funds returned to the utilities for the use of making these emission reductions. And the difference being that this doesn't have a market uplift in it that would go to other market participants than the utilities or load-serving entities.

As far as this issue of wealth transfer, though, we did want to comment briefly on that one. If we leave aside for the moment nuclear and hydro, but look at actions and investments under the Energy Action Plan, and energy efficiency demand response programs and some of the things mentioned by PG&E, those investments are significant; the costs either of PPAs or investments in EEDR, and those are embedded in our current rates, and we have actually looked at rate differentials between some of the lower emitting utilities and some of the higher emitting utilities, and see a pretty significant correlation between rates and carbon intensity.

So, I guess obviously there's gray area here, room for compromise. But our perspective on the wealth transfer discussion would also be that there's issues of embedded cost recovery that you could look at under the same concept.

MR. GOLDBERG: I guess Norm Pedersen rang my bell so I had to get up as --

(Laughter.)

MR. GOLDBERG: But I want to say, from what I had heard of the SCPPA comments, and this is -- TURN's position has been that we are not necessarily enamored with the cap-and-trade market, per se.

And I think much of this whole effort is focused on the notion that we will have a cap-and-trade market.

As I heard Norman's comments, I thought they spoke to a regulatory, a basic regulatory approach. And I'm not sure if there's a basic regulatory approach that this exercise needs to go that much further.

What we are talking about, though, is we are creating a market. And when you do that there are always going to be winners and losers. And really the focus of this, when you -- and I think as you come up with each method of allocating allowances, just to clarify, the phrase windfall profits comes in not as Steve Kelly mentioned it, anybody doing well in the market. It comes in from giving a prior stakeholder an allowance that they then are granted for free and get to trade on the market.

And the discussion, which I think was fairly sophisticated, in Europe was not kind of waving our hands about windfall profits and economic rents, but it had specifically to do with the granting of allowances that were then traded on the market. And in that context, prices rose by the same amount that they would have anyway.

So, the question becomes if prices are going to rise in a carbon reduction system, in a cap-and-trade market where essentially the opportunity cost of the allowance is what is going to determine the market price, then if you give them away ratepayers are paying the same amount of money, but are getting none of the benefits back.

If you sell them on the notion that we all have a stake in the allowances, then that revenue recycles. And that's really where the key comes in.

So I think much of the discussion, I think you'll find a dead end if you try to figure out which resources, which historical set of circumstances needs to be rewarded, and which set should not be rewarded because you'll never find agreements among stakeholders.

What you will find is if you go to a market-based system and sell the allowances the discussion comes most significantly with regard to revenue. And how that revenue recycles, who it goes back to, what it is used for. And that is presuming a cap-and-trade system.

I think we could also say from TURN's perspective we are concerned, and I mentioned this early, and it's reflected in our comments, on what happens to the market clearing price on the extent to which, I think there was a presentation by Bruce Biewald, who we consulted with, where many people criticized and took his -- criticized his very simplified model.

But in that model there was a more than equivalent, if that's a proportional rise in energy prices, with in an auctioning situation. That is something we would be concerned about.

But in any case, rates are going to rise. Allocations will be given. Windfalls will begin. I also just want to add that in this market it is very likely that if everyone has to buy their own allowances you will find innovation from now to 2012. You will have a minimum purchase of the number of allowances.

The trading market may not be that -- in fact, you will buy the minimum number you can. You then can save and sell on the market. But it's kind of the tail will not be wagging the dog. It will not be the market wagging the -- or the trading underlying the whole allocation, but the allocation will be minimized in the first place; the number of permits will be minimized.

We've also suggested that in order to implement this program and to begin it, that the ARB has the authority right now to implement a fee, a carbon permit fee. They can do that on a very low level at $1 a ton in order to start to gather information and to pay for their own program.

But I do think if we are going to a market that it really is the use of the revenue that we should be looking at.

MS. LUCKHARDT: Hi, again. I'm Jane Luckhardt on behalf of SMUD. And I would guess I would like to respond to a couple of things. And it goes to kind of the wealth transfer issue and the first point. As well as to Mr. Murtishaw's question to Mr. Tomashefsky this morning on how you distinguish between entities that just are a happy circumstance and have low greenhouse gas emissions, and those that don't.

And I can say that from SMUD's perspective this is not a happy circumstance. These were conscious, deliberate decisions made starting in around 1990 in response to actions taken in the global arena that Devra mentioned, on greenhouse gas emissions, on all of those issues that were coming up. The SMUD Board made conscious decisions to go out and procure gas-fired resources, to procure cogeneration resources, to do investments in utility-scale solar, to expend quite a bit of funds in energy efficiency and other methods.

And these are things that have been expended. And are included, just as the gentleman from SDG&E stated earlier, are included in SMUD's current rates. These are items; these are expensive generation. This isn't inexpensive generation. Solar, early solar was anything but cost effective. Energy efficiency has been expensive, although it's been a wonderful solution. It has not been as inexpensive as other resources.

And when we talk about wealth transfers you really need to look at the whole broad scale. We're not talking about investments just right now and just this one piece. We're talking about investments that have occurred over a long period of time.

Utilities plan over a long period of time. Investments in generation are long-term investments. These are things that aren't done on the turn of a dime.

And so to look at just one aspect and say, well, we've got a wealth transfer right here, really fails to take into account what it takes to develop utility rates and what's in them, and utility generation profiles.

And, you know, I also would like to mention that, you know, those who have invested in these other generation sources, whether it's gas-fired or renewables, have not had the ability to enjoy the low cost of relatively unrestricted emissions from coal generation. It's just it's very different. And to just put a point down on this one point that's shifting from coal to other things right now is a wealth transfer is simply one issue. And we need to look more holistically than that.

You know, SMUD walked into this and presented their comments in this area really as a compromise solution. The comments that we made are not entirely in SMUD's self interest. SMUD is a relatively low emission utility with a lot of renewables. They have hydro assets and a lot of energy efficiency, very little coal, and some system contracts, and that's it.

And it was presented as a compromise solution. It starts with a historic allocation recognizing the costs that are faced by some of the other utilities. And then shifts to an allocation based on megawatt hours. And I won't try and go through the different names that that may be called at this point.

And it's important, though, to have a shift. Because if you don't shift across time, then you are, in effect, penalizing those entities that have spent a lot of money and effort in developing low emissions resources.

And so there does need to be a mix between the two and a balance. And that is what SMUD is proposing in its analysis.

And there's just one other thing that I would like to cover while I'm up here, and that is the question about markets and auctions, and what do they really bring to the table.

And I think part of the concern that SMUD has about auctions is the volatility, and what that potential volatility could be. We were looking at what that could mean for SMUD. And that could be if SMUD is purchasing allocations, it could be a potential cost of between $30 to $150 million per year. And we're talking about an energy procurement budget of $800 million for SMUD. We're talking about a rate stability fund that they use for emergencies and, you know, low hydro years and high temperature years, or facilities breaking down. That is between -- they plan between 50 and 100 million.

This potential volatility in the market could blow through by itself their entire rate stabilization fund. And that is a great concern.

Volatility would only take from SMUD's ability to respond to GHG, to greenhouse gas reduction needs.

In this instance, all the utilities and all the entities need to be putting their money and their time and their planning into resource procurement shifts. And not into concerns about building up rat stability funds on potential volatility of the market.

Now, the market may reduce volatility over time, but that's why SMUD is really proposing a smaller portion of the market to auction, because if it creates a great amount of volatility, then that just pulls money away from the goal of reducing greenhouse gas emissions.

And the one other thing that I would like to mention, I just about forgot, is there's a lot of statement about, a lot of comments today about, well, how will this impact the federal debate. And how will we ultimately influence what happens there. And if we go to a straight megawatt hour basis now, if we use a historic basis now, that well, then that will really hurt California in the future.

I think we can show leadership by coming up with a reasonable compromise. We have to remember that California is only one state of amongst 50, and there are many coal states out there.

And so I think our ability to show that we can come up with a reasonable compromise may well lead us in the future.

MR. ROSCOW: Just a question. Aren't you pretty close to LADWP in terms of your proposal? At least the way I summarized it is you both want to start with historical -- an allocation based on historical emissions, and then move to some form of benchmarking. And I think your form of benchmarking is different, but it seems like you're actually quite close to each other.

MS. LUCKHARDT: Yeah, I think we are. I think we have some concerns about whether it's realistic to assume that some of the entities can actually get down to what we're kind of generally saying, maybe about 500 pounds per megawatt hour. And we're just not sure that everyone would be able to get to that by 2020 realistically.

But, yes. No, I think we are very close.

MS. WHYNOT: Good afternoon. I'm Jill

Whynot with South Coast Air Quality Management District. I've decided to come up and make some comments because reclaim has been mentioned several times today.

For those of you who may not know, we run a large emissions trading program for many of the stationary sources of nitrogen oxides and sulfur oxides. And it's been in place for about 14 years.

Our agency has not been very engaged in your process so far, but I think after hearing the discussions today I'm going to go back and recommend that we fully engage, because I think there's a lot of things that we've learned that you may find beneficial.

We don't have a position at this point in terms of whether you should base the start of a cap-and-trade program, if there is a program, on an auction or an allocation. But I have some general observations that I hope might be interesting to you.

First of all, whichever way you go, you have to have an accurate inventory for each of the facilities. And that's critical. And what we found in reclaim, we based it on historical activity, we had a lot of companies coming to us saying, oh, I made mistakes and I need to go back and fix my previous allocations. So we started with a better inventory.

It's also very important that the sum of all of your allocations, whether people buy them or whether you give them to them, be very close to your actual emissions. Because in hindsight, we let companies pick a peak year over a five-year period because of recessionary impacts, to base their starting point. And we started with an awful lot higher total allocations than what the actual emissions were. And that really took a lot of the impetus out of people doing early reductions so they could take advantage of the trading program.

I think one of the key things is that regardless of how these get to the companies, these allocations cannot be property rights. We had to go back into reclaim in 2005 and set further emission reductions. Had we said these were property rights, or not specifically said they were not property rights, we would have had a lot of challenges on that respect.

So if, for some reason, the 2020 or 2050 target gets readjusted and you have to go back and say sorry, everybody, you've got 5 percent less of an allocation in these years, you need to set it up that way. And we did it based on what they did in the acid rain programs, a very specific language that said that.

Someone talked about investors in reclaim. And we actually have a study group and a working session going now to look at the role of investors. For the first 10 or 12 years we just had basically traders back and forth from facilities. Some third parties that would make a little bit of money on it. And actually some environmental groups that would buy credits in the program and they would retire them for benefit of the environment, or give them as gifts. I actually got a pound of NOx as a gift once, which was kind of cool.

But we're now seeing investors, and we're seeing overseas traders. And so that brings in all kinds of enforcement issues in case there's a trade that's not done properly. How do you go and, I think it's the Isle of Man, which is a little island in the Indies or South Pacific, how do you go about doing that. So that's something that definitely needs to get considered when you set that up.

Also the other point I need to say is that no matter how good your economic studies are about markets and how people will react, our experience is that the people in the market do not always follow rational economic behavior.

Companies that have excess credits to sell, and could make a lot of money doing that, sometimes choose not to because they think it sends the wrong environmental message. And companies that have low-cost emission reductions, so that they could do those onsite and sell, don't always make those choices. So it's an interesting thing to take the academic exercise into practical. And you need to allow some margin for people behaving like humans, and not like an economic model.

And so with that I'm going to close. We haven't followed this process. What I'd like to do is submit a whitepaper that we prepared for the Air Resources Board earlier this year on key lessons learned for reclaim. And there's a real nice executive summary there that shows some of the things that, had we gone back knowing now what we do, and were to redesign the program, we would have done quite a few things differently. So we'll be submitting that by the deadline on the 14th. And look forward to working with you. Thank you.

MS. BERLIN: Susie Berlin for the Northern California Power Agency. I'd just like to mention a couple things. You said no one's responding to this wealth transfer issue.

I think that the term wealth transfer needs to not even be a part of this debate because it depends on where you stand. If you are a low-emitting resource and allocation of allowances are based on high emissions, and yet you have to reduce, you're going to have to purchase your emissions from someone else. So then there's a wealth transfer away from you.

So that just really, like Steve said, depends on where you sit, depends on where you stand.

I don't think that there's this notion of windfall profits to low-emitting resources, because as has been mentioned, those are resources that have already been bought and paid for. And those are rolled into ratebase. For example, Alameda's rates are not 7 cents per hour, they're 12.5 cents. So there's a big difference.

And we need to understand also that all of the resources, the renewables and the low-emitting resources, are not gratuitous free hydro. First of all, even if they are hydro, those are extensive investments. And further, there are extensive investments that were made by proactive and conscious decisions to reduce emissions starting further back than AB-32 in expensive resources such as geothermal.

So it's not as black-and-white as -- it would be easy if it was, but it is certainly not as black-and-white as it may appear.

So, that's a couple points I wanted to raise.

MR. ROSCOW: I think there's a line in the back and the folks in front aren't seeing it. Is that --

(Laughter.)

MR. ROSCOW: -- is that accurate?

MR. MORRIS: I've been kind of waiting for awhile, so --

MR. ROSCOW: Well, okay, so who's in line? Okay, so go ahead, and then we'll start in the back after that.

MR. MORRIS: Thank you.

MR. ROSCOW: Sorry for the confusion.

MR. MORRIS: Sorry. Greg Morris of the Green Power Institute. Some people have described these allowances as if they're dollars. I think that's a little bit wrong. What they really are, are they're commodities.

And we've also sort of taken a binary approach where we say we're either going to auction them off, or we're going to give them away according to some kind of administrative formula. But those are not the only two choices.

One can certainly distribute allowances by administrative formula, but sell them at a price that is reasonably reflective of the difference in price between a cheap, high-emission resource, and that of a zero-emission resource.

And when you start to do that, you avoid what concerns me as the greatest potential for a perverse transfer of wealth, which is that if you allow allocations o be given away, and we have the effect that TURN just described, which I think is the inevitable effect that overall wholesale prices rise because they go to the market clearing price. What you actually do is give the potential for that transfer of wealth to go to the fossil fuel generators, who are now able to raise their prices against that higher wholesale level, and not having to purchase allowances because the allowances have been given away. So, to me, that's a very important and big concern in terms of transfer of wealth.

So, I think that it's important to look at these things as commodities; and it's important to understand that commodities, public sector created or owned commodities, should not be given away.

Thank you.

MR. MICHEL: Commissioners, Judge, my name's Steve Michel with Western Resource Advocates.

Just quickly responding to what was just said, I think there's a lot of merit to the notion that if you do go down an auction path instead of, for example, a sales path, you need to be very careful. We are in a -- you know, we're dealing with a very immature market, a brand new market. And, you know, while economic theory says that the marginal cost of reducing carbon should drive the price of these allowances, you know, if there are market-design imperfections, game theory, there are a lot of things that can play into how these prices are going to be set in an auction. So, you know, I'd urge you to just approach the auction issue carefully.

The other thing I'd like to say is that there's a distinction here that I haven't heard drawn yet. And from where we're coming from we want to see as much CO_2 reduction as quickly and as cheaply as we can get it. We think that's paramount.

Unlike the eastern electricity markets, in the west you've got vertically integrated utilities. And I think that's an important distinction. Because economic theory is going to tell you that in a competitive market if you give away allowances the recipients of those allowances are going to be able to charge the value of the allowance regardless of whether they pay for it or not. And that's a big concern, because somebody's going to have to fund that economic gain.

But when you're dealing with price-regulated, vertically integrated utilities you don't have that concern. If allowances are given to those entities, there's no cost recovery for those under every utility regulatory model that I've seen.

So, what we need to distinguish is utilities with dedicated resources that are rate-based versus recipients of allowances that are not part of a price-regulated regime.

And what we would suggest is that for utility generation that is rate-based and price-regulated, that those allowances should not be sold or auctioned. That they should be given to those utilities based on some, you know, historic baseline; you know, depending on when you want to start rewarding early action. That's when you would set that baseline.

But we do think that a distribution to utilities in that instance is better. And that an auction or a sale is more appropriate when you get away from that, when you get to independent power producers or others that are selling to utilities and are the recipients of allowances.

And just real quickly, you know, the reason for that is that is let's just assume you have a utility that's producing 1000 gigawatt hours of electricity a year. And it's all coal-fired, so they're emitting 1000 tons per gigawatt hour. It means they're putting a million tons of CO2 into the atmosphere every year.

Let's say you want to reduce that 10 percent. That means you need to reduce that by 100,000 tons. If you assume a price of $30 per ton, that's going to cost that utility $3 million.

Now, let's take the situation where you auction allowances to that utility instead of provide allowances. That utility is then going to have to reduce its emissions 10 percent, the 100,000 tons; plus it's going to have to buy 900,000 allowances.

If you use the same price of $30 per ton, instead of costing that utility $3 million, it's going to cost that utility $30 million. Instead of raising electric rates .3 cents per kilowatt hour, you're going to be raising electric rates 3 cents a kilowatt hour. And the key is you're not getting a single ton more carbon reduction when you do that. All you're getting is $27 million for somebody to spend.

And that's not a direction that we think is prudent to go. Like we said, we want to get as much carbon reduction as cheaply and as quickly as we can.

Thanks.

MR. LAZAR: I'd be happy to spend the $27 million if nobody else wants to volunteer. Jim Lazar for Burbank.

My friend from TURN brought up the issue of -- I'm actually not going to -- I'll talk the rates issue first.

We heard that the rates issue is not black-and-white; and indeed, it isn't. It's blue-and-red. What I've graphed here are the average revenues per kilowatt hour for the California larger municipal utilities from the Energy Information Administration. I took their data; I didn't -- all I did was graph it. So there's no analysis by me.

I don't have the investor-owned utilities on this chart because their rates are calculated including some additional costs, federal income tax, shareholder profit, and it's not quite an apples-to-apples comparison.

But the reds are the southern California utilities. Vernon is a special case; it's almost all industrial and has like no residential load to speak of at all. Anaheim, L.A., Imperial

Irrigation District, Pasadena, Riverside, Glendale and Burbank.

The high-cost utilities are also the high-emission utilities. They don't have cheap hydro from rivers in northern California. All we've got is a desert. We will have more solar than anybody else in time, but we're certainly not there yet.

The blue utilities are the southern (sic) California utilities, San Francisco, also a special case. They only serve city loads. Palo Alto, Silicon Valley Power, Roseville, Turlock, Modesto and SMUD. And you've heard that SMUD has spent a lot of money on a lot of good things and, indeed, they have. They retired their nuclear plant prior to the end of its accounting life, and that was an expensive thing to take into their rates. They had to buy replacement resources for it.

But my point is the high-emission utilities that SCPPA represents are at the high end of the scale. And the low-emission utilities have the lower rates.

Now, let me turn very briefly to the comment that was made by Lenny. Indeed, if you were to allocate allowances to generators, as we did allocate sulfur to generators, and the generation market was unregulated and separated from the ratepayers, then indeed the market price would bid up and consumers would pay a higher price for all of their electricity.

It excited Bruce Biewald who did a presentation on this. I've worked with Bruce quite a bit. He's based in Boston. The five of the six New England states are fully deregulated. The distribution utilities have no generation. The customers have no cost-based entitlements to electricity. And, indeed, in that situation when the wholesale market bids up, the consumers pay 100 percent of the cost.

The municipal utilities, to a greater extent than the investor-owned utilities, and this is true north and south, the municipal utilities north and south are pretty much fully resourced. We have acquired by ownership or long-term contract the resources that serve our customers.

Our customers are not exposed to the market in a big way. If you were to allocate allowances to generators it would affect the investor-owned utility customers to the extent they're market-dependent. Nobody, except maybe the independent power producers, is proposing allocating allowances to generators. I think all the rest of us are either talking about allocating them to retail providers, or allocating them to nobody at all and auctioning them.

Within that context the municipal utilities, who are fully resourced, and not very exposed to market, a few percent here and there, would not have any run-up in price as a result of the market price bidding up. The market price might, in fact, bid up, but we're not exposed to it very much. And our customers would not have that exposure.

So the concern that TURN expressed, while it has some applicability if allowances were allocated to generators, we think it has no applicability at all to the consumers of municipal utilities if allowances are allocated to the retail provider.

Thank you.

MS. WARREN: Joy Warren with the Modesto Irrigation District. I just want to make a quick point. We've heard a couple times today this idea of a split between north and south, northern utilities and southern utilities.

And I just wanted to me it clear that that can be somewhat of a simplistic division in that there are many northern utilities that may have some high carbon resources, and high carbon mix, as well as some southern California utilities that have low carbon, low emission rates. As well as some northern utilities that don't have a lot of hydro.

So, it's not a clear distinction or a clear division. And there are many variables that affect the impact that AB-32 reduction requirements and allowances will have on different utilities in the north and south.

So we don't want to get caught up in thinking that it's a clear line that splits the state.

MS. GRIFFIN: Sort of sounds like we're all kind of to the end of our comment period here. Any party who hasn't spoken wishes to come up and talk on this issue?

CHAIRPERSON PFANNENSTIEL: Is there anybody on the phone?

MS. TAM: Hi. I'm Christine Tam from Division of Ratepayer Advocates. When we looked at the ruling issued by the Joint Commission, it really asked this question of allocation from two regulatory perspectives. One is from the low base, and one is from the first seller regulation, point of regulation.

And I hear a lot of comments today primarily from the utilities regarding the allocation of the allowances to the utilities. And DRA wants to put in a third perspective, a third regulatory perspective, which is from a source-based point of regulation, very similar to what RGGI is currently doing.

The PUC currently has full regulation. They can exercise their regulation over the investor-owned utilities to require the investor-owned utilities to maximize the energy efficiency savings, and to meet their renewables target.

And similarly, the municipal utilities are also required by legislation to meet the 20 percent renewables target by 2020. And AB-2021 also has requirements of the munis to establish ten-year energy efficiency savings targets.

To the extent that these utilities can reduce their greenhouse gas emissions through their fully exercising their energy efficiency programs and increasing their renewable supply, we want to turn the angle to the generators and see how we can meet the targets of AB-32 through reducing the reductions at the generator level. And really looking at the allocation question from a generator perspective.

And I heard Mr. Lazar just mentioning that the munis are fully resourced. That, I think, is very useful information. And to what extent and for how long as these munis fully resourced. I think that's also a question that I would have for Mr. Lazar.

But I really want the parties to, you know, take a look at DRA's proposal and our opening comments, and respond to it. And I think that would also -- yeah, so anyway, okay. Thank you.

MR. MURTISHAW: There is one question that I've had as far as this opportunity for transfer of wealth. And I wonder if there might be some reaction in the audience, particularly from some of the high-carbon utilities.

But there's generally discussion about the possibility for transfer of wealth assumes that that transfer would occur by having high-carbon utilities having to buy allowances from low-carbon utilities.

But there's an interaction here with the reporting protocols that are still being developed by ARB, and have yet to be fully adopted or finally adopted. And that is what is the possibility for a transfer of wealth if allocations are done on the basis of historical emissions. And yet those utilities have an opportunity to sell off their coal and replace that with purchases of nuclear power from an out-of-state generator or hydro. Then wouldn't they have received an over-allocation which would result in a transfer of wealth to southern California utilities.

MS. JOHNSON KOWAL: I'm sorry, Scott. This is Leilani Johnson Kowal, LADWP. I think I indicated this morning in my presentation that LADWP is investing in renewables and renewable transmission and energy efficiency. And I don't think I recall any mention of hydro or nuclear as being replacements for coal.

And in terms of contract shuffling, I think there's a fundamental flaw in AB-32 that we've all come across, particularly in the mandatory reporting protocols we're coming across it with the first seller, we're coming across it now with this allowance allocation.

It's a fundamental flaw of AB-32 that we can't get around, and we can't plug these certain things without violating the commerce clause.

So, I think one of the things that we have to think about, how do we get to the direct emission reductions related to emissions associated with electricity consumed in California, whether it's imported or generated instate.

MR. MURTISHAW: I'll just say I have noticed that there was no discussion of purchasing nuclear or -- existing nuclear or hydro by you in your presentation. And yet, at the ARB workshop on the 31st, LADWP's representative kept arguing for that possibility to remain on the table.

And so, if your representative at ARB was arguing for that possibility, then I'm assuming that you still want that option available. And if that is true, and if that option were available and allowance allocations were made on the basis of historical emissions, then I see an opportunity for a transfer of wealth from low carbon to high carbon.

MR. PEDERSEN: Leilani and I were both otherwise occupied on the 31st. So we were not at the AB-32 workshop.

MR. MURTISHAW: Right. Cindy Parsons from LADWP --

MR. PEDERSEN: Cindy was there.

MR. MURTISHAW: -- made that --

MR. PEDERSEN: But we're very well aware of what is in the draft proposal that went -- the proposal that went from the CEC and the CPUC. We did not challenge that. We understand it. We support it, you know, the idea that it would be contract shuffling to go out and replace your out-of-state coal-fired with big hydro, large hydro or nuclear. That's in the rules; that's what ARB has proposed.

We did, of course, urge that there be a change in your proposal about being able to go out and buy existing renewables, you know, wind, not large hydro, not nuclear, and be able to use those to replace coal-fired resources. And actually the Commission went along with that suggestion.

But certainly that is not something that we're looking forward to as a possibility. And it's, in large part, due to the fact that that isn't what's in the proposed reporting protocol.

MR. MURTISHAW: Okay, all right, well, thanks for that clarification.

MR. MICHEL: My name's Steve Michel. With regard to the contract shuffling it's not just trading out coal for nuclear or hydro. Even if you're trading it out for renewables that are already in existence you're not getting carbon reduction, you're just moving resources around.

And we think that's a real problem, or at least one that we really need to look at. And, you know, without going into details, you know, we have -- this paper in dealing with carbon dioxide reduction credits, and using credits instead of allowances.

Well, those credits would trade independently the electricity. So you have, basically they would trade like RECs would trade. So that there is no opportunity under that method for any kind of contract shuffling because there's no benefit to do that because your emissions are being traded separate from your electricity.

You're going to buy your electricity wherever it's cheapest, and you're going to buy your credits wherever it's cheapest. And the contract shuffling issue does, we think, go away.

MR. MURTISHAW: Excuse me, so would that be -- I can see that that's certainly true for instate resources where you can track every megawatt hour and the emissions associated with it.

And I'm sorry that I haven't had the time to fully read the comments that you and your organization submitted. I got started on them, but didn't quite finish, so I'm not sure if I got through the section that talks about how to include the out-of-state resources in the CORC method.

So what would prevent contract shuffling among out of state?

MR. MICHEL: Well, because CORCs are allocated, awarded, what-have-you, based on the entire generation footprint in the WECC. So the entire market of generation is encompassed.

You know, certainly if you only gave CORCs to generators in the WCI or within California, then you do have that potential.

But this, in our mind what you have to do to avoid contract shuffling, to avoid leakage is you have to recognize that you're dealing with a whole market here. And you have to encompass the whole market, even though you're only a part of it. And when you do that, the contract shuffling issue goes away.

The next issue you need to deal with is how much are you going to pay extra to bring in this whole market and make sure that you've got the whole market involved. And that's an issue we deal with in some detail in the paper.

But the idea is you give CORCs to every generator, or associated with every generator, in the west. And then when you're complying you need to make sure that all those CORCs get reabsorbed so that you get genuine reductions instead of just clean energy transfers between LSEs in and out of whatever region you're regulating.

I don't know if that helped you, but I guess the short answer is all the generators in the WECC -- in the entire market are involved. So there's -- and the reason you can do that is because it's not -- because by giving credits instead of by giving allowances, you're going from an enforcement requirement, which you really can't do, out of your jurisdiction, to an incentive requirement which is self-policing.

And that's why it works with credits instead of allowances.

MR. MURTISHAW: This is assuming that other states in WCI would, at some point, have enforceable caps so that the amount of generation doesn't far exceed the amount of load in the regulated system? I'm not sure that I understand how, if you're giving these CORCs to every generator throughout WECC, but California is the only state with an enforceable cap, then who would claim the out-of-state high carbon resources? Wouldn't this flood the market and reduce the value?

MR. MICHEL: Well, as you get more and more participation, you know, as you go to a WCI footprint instead of a California footprint, the issue gets much easier.

But, let's say whatever your footprint is, let's say it's the WCI. You've got two-thirds of the energy represented there. That two-thirds of the energy needs to absorb all the CORCs that are issued for all the generation in the WECC.

Now, the issue that I think you're grappling with is well, aren't you paying a lot more than we should be paying to do that. And there are some methods to deal with that.

One is to sell CORCs instead of give them away, and use the proceeds to offset the financial impact of issuing them to everybody. But, you know, another method is to give CORCs to the LSEs when they're associated with non -- well, let me just back -- let me try and shorten.

We think we can deal with the issue of the financial burden on the WCI states having to issue CORCs associated with the entire WCI without much of an economic burden. And all I can probably do at this point is refer you to the paper. Because for me to try and explain it right now is a little bit -- it's something you need to sit with for a minute.

But, we think we can do that. And we also think that to really avoid the leakage issue and the contract shuffling issue you need to recognize that you're dealing with a complete market, and somehow encompass that whole market in whatever you do, even if you're only doing it in California or in the six WCI states.

CHAIRPERSON PFANNENSTIEL: Thank you. We do have one person on the phone who'd like to speak. Michael Sandler from Climate Protection Campaign.

MR. SANDLER: Yes, hello. Can you hear me?

CHAIRPERSON PFANNENSTIEL: We hear you, yes. Just go ahead.

MR. SANDLER: Okay, thank you. Thanks for allowing me to speak. And I've been following the webcast during the day. My name is Mike Sandler; I'm with the Climate Protection Campaign.

I have been involved in commenting to the Market Advisory Committee, and have been an advocate in that venue for auctioning 100 percent. And I believe there are a lot of -- I mean there was a good discussion this morning about that. And I agreed with some of the comments from TURN and Union of Concerned Scientists and others.

And one of the important issues in how you treat the revenue and will the revenues raised by an auction help balance some of the disproportionate impacts of having to reduce greenhouse gas emissions statewide.

And hearing from some of the electricity providers, it does seem that LADWP is behind PG&E in their profile right now. But LADWP has more low-hanging fruit. So the issue in that case then comes to protecting consumers around the state. And I mean human beings, individual human beings, people.

And one way to do that would be to provide the permits directly to individual humans, people. And that could work like the Alaska permanent fund. And such a system, I call it carbon share, but it could work alongside a 100 percent auction.

Your tax forms, you could (inaudible) you like your emissions entitlement. You could receive a cash rebate the same way the Alaska permanent fund does. Those revenues come from a statewide 100 percent auction.

You could also receive a tax cut. Or you could receive the share and do it (inaudible) bank. And the bank would, for some financial intermediary, some of whom are probably in the audience there, would be able to sell that on the open market.

And that would help the individual consumer, because the costs that we're all discussing will eventually be passed on to the individual consumers. And a per capita approach is really the only fair way to deal with that.

So that's pretty much what I wanted to say, and thanks for allowing me to comment.

CHAIRPERSON PFANNENSTIEL: Thank you for participating.

Karen, are there further discussions or comments?

MS. GRIFFIN: No, ma'am.

CHAIRPERSON PFANNENSTIEL: Yes. Judge TerKeurst, would you like to talk about the procedure?

ADMINISTRATIVE LAW JUDGE TerKEURST: Well, what I was wondering, I mean if we want to wrap the workshop up and go off the record, the parties may want to stick around, since we have some extra time, to talk about procedure. I don't know that it needs to be on the record.

But I'd certainly be willing to do that either on the record or off. We could just go off the record and stay in the room, or give five minutes for people who don't want to stick around for it, to clear out so that we can hear each other talk, whatever --

CHAIRPERSON PFANNENSTIEL: I think that's a good idea. I think we can conclude and take a break. And then those who want to talk process can stay and do that.

With that, I want to thank Karen Griffin and the staffs of both Commissions for putting together a really remarkably insightful day. As I said before, I did read most of the comments that came in, and found them to be very well reasoned and based on good, both information and analysis and policy considerations.

You haven't arrived, I wouldn't say, at the end of today at that nice consensus position that I was looking for this morning.

(Laughter.)

CHAIRPERSON PFANNENSTIEL: But I do think you've given us a lot of direction and kind of showed us where the areas are that require the most tweaking to move towards some kind of position that I think would make the most sense for those of us in the state.

I know that Commissioner Byron, who is the other Commissioner on this proceeding with me, regrets having missed it. And I know he will review the transcript of it. And I will encourage him to do so; it is a really useful set of information.

With that, we will adjourn the on-the-record proceeding and then stay around and talk procedure.

Thank you, all.

(Whereupon, at 3:25 p.m., the Joint Agency Workshop was adjourned.)

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CERTIFICATE OF REPORTER

I, PETER PETTY, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission/California Public Utilities Commission Joint Agency Workshop; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said workshop, nor in any way interested in outcome of said workshop.

IN WITNESS WHEREOF, I have hereunto set my hand this 8th day of November, 2007.

PETER PETTY