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Ms. Sandra Berg
Ms. Doreene D'Adamo
Ms. Lydia Kennard
Mrs. Barbara Riordan
Mr. Ron Roberts
Dr. Daniel Sperling
Mr. Ken Yeager

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Mr. James Goldstene, Executive Officer
Ms. La Ronda Bowen, Ombudsman
Mr. Tom Cackette, Chief Deputy Executive Officer
Mr. Bob Fletcher, Deputy Executive Officer
Ms. Ellen Peter, Chief Counsel
Ms. Lynn Terry, Deputy Executive Officer
Ms. Mary Alice Morency, Board Clerk
Ms. Edie Chang, Chief, Program Planning and Management Branch, OCC
Ms. Susan Fischer, Ph.D., Climate Action and Research Planning Section, Research Division
Mr. Ryan Huft, Air Resources Engineer, Technical Analysis Section, Stationary Source Division
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Mr. Bill Knox, Air Pollution Specialist, Office of Climate Change

Mr. Rob Oglesby, Legislative Director, Office of Legislative Affairs

Mr. Chuck Seidler, Manager, Climate Change Planning Section, OCC

Mr. Wayne Sobieralski, Air Resources Engineer, Mobile Source Operations Division

ALSO PRESENT

Ms. Nidia Bautista, Coalition for Clean Air

Ms. Cynthia Cory, California Farm Bureau Federation

Ms. Kendra Daijogo, The Gualco Group, Inc.

Mr. Timothy French, Engine Manufacturers Association

Mr. Randal Friedman, Department of Defense

Ms. Martha Guzman, CRLAF, CRPE

Ms. Bonnie Holmes-Gen, ALA

Ms. Betty Plowman, Ad Hoc Working Committee

Mr. Shankar Prasad, Coalition for Clean Air

Ms. Evelyn Rangel-Medina, Ella Baker Center for Human Rights
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CHAIRPERSON NICHOLS: So the October 21st, 2010 public meeting of the Air Resources Board will come to order, as soon as Mr. Goldstene gets here. And I would ask everyone to please stand and say the Pledge of Allegiance.

(Thereupon the Pledge of Allegiance was Recited in unison.)

CHAIRPERSON NICHOLS: Will the clerk please call the roll?

BOARD CLERK MORENCY: Dr. Balmes?

BOARD MEMBER BALMES: Here.

BOARD CLERK MORENCY: Ms. Berg?

BOARD MEMBER BERG: Here.

BOARD CLERK MORENCY: Ms. D'Adamo?

Ms. Kennard?

BOARD MEMBER KENNARD: Here.

BOARD CLERK MORENCY: Mayor Loveridge?

Mrs. Riordan?

BOARD MEMBER RIORDAN: Here.

CHAIRPERSON NICHOLS: Supervisor Roberts?

BOARD MEMBER ROBERTS: Here.

BOARD CLERK MORENCY: Dr. Sperling?

BOARD MEMBER SPERLING: Here.

BOARD CLERK MORENCY: Dr. Telles?
Supervisor Yeager?

BOARD MEMBER YEAGER: Here.

BOARD CLERK MORENCY: Chairman Nichols?

CHAIRPERSON NICHOLS: Here.

BOARD CLERK MORENCY: Madam Chairman, we have a quorum.

CHAIRPERSON NICHOLS: Thank you very much.

A couple of routine announcements. If there's anyone who is not familiar with our procedures and you wish to testify, please sign up with the Clerk of the Board. There are speaker cards both outside the room and at the Clerk's desk. We do expect to be imposing a time limit on testimony today. And we'd appreciate it if people do not read their written testimony, if they have any written testimony, but just summarize it in their own words. And then the written remarks will also be entered into the record.

The emergency exits are at the rear of the room as well as to my right and left. And in the event of a fire alarm, we have to evacuate this room immediately and go downstairs and out of the building. And we'll come back when an all clear signal.

I think it's okay to announce we are not going to have an earthquake drill today. There is an earthquake
drill going on around the state, but this building is going to be exempt so we can have a meeting. We appreciate all the people get a chance to practice earthquake safety another day.

So we will begin this morning's meeting with a presentation on the plan for air pollution research for fiscal year 2010, 2011.

And Mr. Goldstene, would you present that item?

EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman Nichols.

Each year, ARB staff solicits research ideas through a public process and develops an annual research plan that supports the Board's mission. The research ideas are evaluated by ARB staff as well as staff from other funding agencies and the Board's Research Screening Committee.

This year's plan supports ARB's regulatory priorities associated with health effects, emissions reductions, innovative technologies, economic analysis, climate change, energy efficiency, and conservation.

Twenty-four new research projects are being recommended for funding, and an additional four projects are offered for consideration should additional resources become available.

If approved by the Board, the projects described
in the plan will be developed into full proposals for your approval over the next several months.

Dr. Susan Fischer of the Research Division will present the research plan as well as a few highlights from our portfolio of completed research.

Susan.

(Thereupon an overhead presentation was presented as follows.)

DR. FISCHER: Good morning, Chairman Nichols and members of the Board.

This morning, I'll present the Air Pollution Research Plan for fiscal year 2010-2011 and offer an overview of ARB's Research Program.

DR. FISCHER: The Air Pollution Research Plan for fiscal year 2010-2011 comprises 25 projects that address gaps to support the Board's decision making. If the fiscal year 2010-2011 Research Plan is approved today, staff will work with our research partners over the next few months to develop projects into full proposals. We will then bring each proposal to the Board to request approval and funding.

DR. FISCHER: Established by the State Legislature in 1971, ARB's program of research probes
causes, effects, and solutions the California's air pollution problems to support decision making and implementation by the Board.

ARB's Research Program identifies and explores questions that are critical to sound policy. Since ARB is legislatively mandated to work with the State's publicly-funded universities where possible, ARB's Research Program partners with internationally recognized scientists in California.

DR. FISCHER: A strong scientific basis forms the foundation of ARB's air quality programs by: informing the Agency's mission to set health-based standards to conduct exposure assessments; monitoring air quality and developing models to account for air pollutant emissions as well as their fate in the atmosphere; supporting the development of cost-effective and scientifically sound emission control strategies, fostering technological innovation and supporting a leadership role in air pollution control policy.

DR. FISCHER: This morning, I will present highlights from the past 40 years of air pollution at ARB followed, by an overview of the research planning process and research questions that have been identified for the
fiscal year 2010-2011 research plan.

Many studies over the past 40 years of ARB-funded research have directly affected legislation as well as the Board's decision making.

DR. FISCHER: In the 1950 Dr. Arie Haagen-Smit, ARB's first Chairman, revealed the source of nature of Southern California's smog through research conducted from his mobile laboratory as shown in this photo. Haagen-Smit's pioneering work was built upon by research at the Statewide Air Pollution Research Center and the establishment of ARB's Research Program. Based on the research of Haagen-Smit and other scientists, ARB was the first agency in the world to pursue NOx control on automobiles.

The efficacy of ARB's NOx control efforts was formerly recognized by the National Research Council in 1991 with its report re-thinking the ozone problem.

Following ARB's successful example, U.S. EPA and other air pollution control agencies around the world have implemented NOx control to protect their population's health.

Today, California's ozone and PM2.5 concentrations are about 75 percent below what might have happened in business-as-usual scenario, although
challenges remain.

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DR. FISCHER: Shortly after ARB's research program was initiated, it undertook the first ever field studies aimed at clarifying air pollution formation and transport as a basis for developing models to support science-based air pollution control policy. These studies have been highly leveraged, with ARB funds often matched by more than two to one.

ARB's field studies target critical air quality issues related to ozone, PM, and global climate change. Field studies conducted throughout California help us to validate emissions inventories, improve our understanding of atmospheric science, and develop strategies to improve air quality.

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DR. FISCHER: One example of ARB-funded research feeding directly into air pollution control policy is the children's health study, which was designed to investigate the health impacts of air pollution on California's vulnerable young population. This study was the first of its kind, with a sample of over 5,000 children followed from 4th to 12th grade under ARB funding and now into adulthood through the National Institute of Environmental Health Sciences. This
ambitious study has produced more than 100 peer reviewed scientific publications that found significant, permanent reductions in lung growth from air pollution exposure and implicated air pollution in both the onset and the severity of asthma.

Among the direct policy implications of this work was legislation requiring California to reassess its air quality standards to ensure the health of children, to identify toxics that pose particulate hazards to children, and to assess children's exposures to pollutants at educational facilities.

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DR. FISCHER: As we clean up the outdoor environment, the indoor environment is becoming more important for human health. ARB's indoor air quality and exposure research has had direct impact on State policy and regulations by forming the basis for measures to limit health damaging indoor exposures to formaldehyde, a regulation to limit ozone emissions from indoor air cleaners, and Support a stronger state green building code.

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DR. FISCHER: Now I'll present an overview of research planning process.

Each year in collaboration with external experts,
technical review teams identify research priorities. Then
research concepts that address these gaps are solicited
from the public.

Rigorous technical review identifies independent
reviewers -- includes independent reviewers from State
agencies, air pollution control districts, federal
agencies, and other funding organizations.

Finally, top concepts are selected based on
technical merit, cost effectiveness, and policy priority.

DR. FISCHER: As part of the research planning
process, ARB's Research Screening Committee meets on two
separate occasions, first to give feedback on the entire
set of research concepts, and finally to approve ARB's
draft plan for research.

The Committee consists of national experts
representing a broad range of academic disciplines and is
Chaired by Professor Hal Cota.

No project can be funded until the Committee has
reviewed and accepted its technical proposal and budget.

The Committee also approves final reports.

DR. FISCHER: Staff also worked to coordinate
research with other funding agencies in an effort to
prevent duplication and identify opportunities for
collaboration. These efforts involve representatives from the technical review teams which include members from air districts, State agencies, federal agencies, and research funding organizations such as the Coordinating Research Council and Health Effects Institute.

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DR. FISCHER: ARB's research keeps state dollars in California, with 75 percent of research funds spent over the past ten years staying in state.

To make the most use of limited State funds, ARB consistently seeks to leverage external funds in the form of direct co-funding, in-kind resources, or access to facilities, equipment, and data sets.

ARB's proposed research portfolio is substantially leveraged. The proposed 2010-2011 projects leverage one dollar of external resources and co-funding for every dollar spent by the State. Over the past ten years, we have secured roughly three dollars in external leverage per dollar spent.

ARB's Research Program with its unique statutory responsibility to conduct air pollution research has benefited from the lowest overhead rates available with California's universities. This low overhead, which ensures that our funds are used for actual research rather than administration, has been key to ARB's achievements.
ARB, the Department of General Services, and public university representatives are currently negotiating whether ARR will continue to receive these low overhead rates for its air pollution research. For the success of ARB's research program, which has limited funding, it is critical that we do not lose low overhead rates.

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DR. FISCHER: Strategic research planning to inform regulatory development and implementation is challenged by the disparity in planning cycles, with four to six years typically needed to generate peer-reviewed research results, but only one or two years typically available to fill information gaps for pressing regulatory development.

However, ARB has several opportunities to enhance its strategic planning by redoubling efforts to coordinate with other research and funding agencies at the State and national levels, increasing in-house resources dedicated to following external research, including external experts and Board members in an ongoing dialogue aimed at anticipating long-term research needs.

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DR. FISCHER: Now let's have a look at the proposed fiscal year 2010 Research Plan.
DR. FISCHER: The proposed annual plan supports Board priorities related to health effects and exposure, air quality and emission reductions, economic analysis, and climate and energy efficiency. For each of these research categories, I'll summarize the research gaps that ARB's proposed research plan will address.

DR. FISCHER: ARB's recent research in the area of health effects and exposure has helped establish state-of-the-art research centers for investigating PM2.5 toxicity, has quantified health effects associated with ambient ozone, and has quantified high exposures to air pollution near roadways and in vehicles.

DR. FISCHER: The fiscal year 2010-2011 research plan will fill gaps related to mechanisms of PM toxicity, vulnerable populations, and indoor air quality.

In the area of PM toxicity, research will support cost effective strategies for PM reduction by clarifying which sources and components of PM are responsible for ill health. Building on earlier research on exposures to traffic-related air pollution, we will investigate biological responses to traffic-related air pollution.

Continued research in the area of vulnerable
populations will help safeguard the health of children by clarifying air pollution's effects on asthma as well as development of immunity and lung function.

To protect California's indoor air quality, research will assess how air cleaners can affect indoor air quality as a basis for helping the public make informed and safe decisions. The proposed study of childhood asthma --

DR. FISCHER: -- builds on ARB's legacy of asthma-related research in which we learned that air pollution does not just exacerbate existing asthma, but can induce asthma, particularly among children exposed to high levels of ozone or traffic-related air pollution.

The proposed project will investigate which sources and components of urban air pollution cause asthma symptoms in children and will attempt to disentangle impacts of primary and secondary PM2.5, traffic-related pollution, and ozone.

DR. FISCHER: In the area of air quality and emissions reductions, field studies of on-road emissions as well as fleet turnover have verified the benefits of our regulatory strategies by using data collecting in the tunnels to document emissions reductions.
We are continuing to refine our air quality models through investigation of criteria pollutants interactions as well as the impact of climate change on air quality.

We have done extensive research on characterizing the physiochemical and toxicological properties of particles from heavy-duty diesel vehicles with diesel particle filters and selective catalytic reduction, or SCR for NOx control.

Research is also underway to do the same for new technologies foreseen in light duty vehicles, such as gasoline direct injection and vehicles powered by alternative fuels.

DR. FISCHER: Four studies in the proposed plan fill gaps critical to our understanding of particle chemistry, its health effects, and its representation in models.

Proposed research will also develop sensitive instruments enabling us to quantify tailpipe emissions from vehicles that are far cleaner than their predecessors with regard to sulfur and particles. We also propose to develop a zero emissions portable off-road power source, which could be used for such applications as mowing lawns.
DR. FISCHER: Building on work by the U.S. EPA, we'll investigate how the current heavy-duty fleet can achieve greater fuel economy and reduced emissions through the use of multiple aerodynamic fairings.

The next pair of studies will enhance our existing methane emissions monitoring network and improve our emissions inventory for methane as well as inventory methods. These studies will support development of cost effective strategies to reduce methane emissions from a variety of sources.

Two studies in the agricultural sector will help us understand and reduce sources of VOC and greenhouse gas emissions.

Finally, we'll work with scientists from the CalNex 2010 study to synthesize policy findings so they are available as soon as possible to support decision making.

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DR. FISCHER: Recognizing that the challenges of climate change and ambient air quality are not independent of each other and will become increasingly important in a warming world, ARB partnered with the National Oceanic and Atmospheric Administration to investigate the interaction of these challenges by land, air, and sea.
This summer, the field campaign was successfully completed. Our research will support timely synthesis of the most policy-relevant results to facilitate better air quality modeling, control strategies, and planning.

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DR. FISCHER: In recent years, ARB has funded a variety of economic models that support regulatory development, including statewide economic models as well as sector-specific models.

This year, we propose to launch a fellowship program to foster additional refinements to economic models. An external expert will work with ARB and with collaborators throughout California to identify and address the most critical methodological needs. Research results should help us forecast near and long-term impacts of environmental regulatory and non-regulatory strategies on California's economy and on individuals.

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DR. FISCHER: Over the past ten years, ARB has launched a variety of research projects in the area of climate change.

This research has helped us to improve the greenhouse gas emissions inventory and develop strategies to cost effectively curb emissions on non-CO2 gases.

With our research partners, we have also begun to understand how climate change will affect California's air...
quality, making ozone standards more difficult to attain. And we have confirmed that diesel regulations of reduced black carbon as well as regional climate forcing due to this pollutant.

ARB's energy efficiency research has helped us understand how indoor air quality is affected by ventilation as well as indoor emissions. Our research has had direct policy impacts, including support of stronger State green building standards.

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DR. FISCHER: Two proposed projects related to the built environment will help us quantify emissions reductions from buildings and develop effective planning strategies. Two more projects will help us partner with building owners and managers to reduce energy consumption in buildings by: Developing low-cost means of keeping occupants cool and offering feedback to support energy conservation.

Our efforts to achieve voluntary emissions reductions will be directly supported by investigating how to communicate residential usage in a manner that fosters reduced consumption and evaluating the impacts of the information tool developed by ARB on several communities who have voluntarily chosen to adopt it to foster energy savings and emission reductions.
One of our proposed projects will investigate cool roofs.

DR. FISCHER: Cool roofs cool the planet by reflecting sunlight back to space. The proposed project addressing how cool roofs may mitigate greenhouse gas emissions builds directly on an ongoing partnership with the California Energy Commission.

The project will also support national policy issued by the Department of Energy requiring cool roofs on federal buildings.

Cool roofs are available in a variety of architectural styles and colors as shown on these photos. The proposed project quantifies how cool roof deployment in California can impact the state's reflected radiation budget.

DR. FISCHER: In summary, research sponsored by the Board is strongly supportive of policy priorities and fosters research tailored to California's needs at low overhead rates and high levels of leveraging.

DR. FISCHER: If the fiscal year 2010-2011 Research Plan is approved today, staff will work with our
request approval and funding for the projects in this
portfolio.

We recommend that you approve the planned Air
Pollution Research for fiscal year 2010-2011.

CHAIRPERSON NICHOLS: Thank you. That was a very
comprehensive report.

Is there any questions that Board members have?

Dr. Balmes.

BOARD MEMBER BALMES: Yes. I actually read the
research plan. And I have a question about one of the
proposed studies for funding. It's actually the season
and location specific systemic health effects of ambient
particulate matter study that I think would be done with
U.C. Davis.

And I actually am totally fine with the research
project, and it seems at a reasonable cost, except for the
fact that it suggests that the project would be leveraging
work that that group is already doing under their EPA
funding. But I think they lost their EPA funding. So I
just want to know if that project would be able to go
forward in the absence of the EPA Center funding.

STAFF COUNSEL KERNS: We have discussed that, and
they are going to make adjustments for that.

CHAIRPERSON NICHOLS: So the report is out of
date, perhaps. And as I understand it, although the
Research Plan contemplates particular studies, there's always room for adjustment along the way. That gives an overview of what they're thinking.

BOARD MEMBER BALMES: I'm fine with that concept.

CHAIRPERSON NICHOLS: Others? Yes.

BOARD MEMBER SPERLING: I looked at the slides carefully. Slide 6 I have a little issue with. This is Professor Haagen-Smit in his car. This is in the transportation world what we call a distracted driver.

I'm sure he's good at multi-tasking.

CHAIRPERSON NICHOLS: Let me just say at the time that this picture was taken in 1952, the consequences of having one's eyes off the road for a few seconds were probably a little less severe.

BOARD MEMBER BALMES: He's probably not wearing his seat belt.

CHAIRPERSON NICHOLS: In fact, there's no sign of a seat belt.

Thank you for that comment.

BOARD MEMBER SPERLING: I do have a more substantive comment.

There was a quick discussion of strategic planning, and I like that a lot. And as I understand from discussion with staff that the previous -- there was a strategic planning document that was done many years ago,
and that there is discussion about revising it. I really want to strongly support that effort, because you know, the mission of ARB is changing. Challenges are changing. And we're really looking five to ten years ahead when we develop a research program. And I think we need a very deliberate effort to think about what are the challenges in the future. And, you know, scientists are not necessarily the best people, at least the principle group of people to be making -- determining those priorities.

I think it's people that understand and can appreciate what those -- how the mission is going to change, how the policies and regulations are going to change, what is going to be happening in five or ten years.

So I would just encourage a sincere and strong effort to really put together a meaningful strategic plan here. You know, we have limited resources. And especially as we get in the climate world, there's many, many other organizations doing research. There's obviously huge gaps and especially gaps in terms of supporting the kinds of things ARB is going to be doing over the next five to ten years.

CHAIRPERSON NICHOLS: Go ahead, Dr. Balmes.

BOARD MEMBER BALMES: I would just strongly
underscore my support for Professor Sperling's idea that we should have a strategic planning process. I actually participated in the last one, I think. And it was a long time ago.

The only issue I would have is I would agree that scientists shouldn't be running the strategic planning process. But I think that what we really need is a dialogue between scientists in terms of where the science is going and the people with the policy -- responsibility for implementing policy that needs to be based on science. So I would encourage a plan or process that supports that kind of dialogue.

CHAIRPERSON NICHOLS: Well, as a non-scientist who actually had the responsibility for running a unit at UCLA that was involved in policy-oriented science, I'd like to really triple underscore both of your comments in this regard.

ARB's research has produced a lot of really valuable work over the years, and it has traditionally been pushed along and prodded by the Board to be relevant to the policy questions the ARB needed to have addressed. And I think there's been a very strong and positive relationship over the years.

But it's been a while since the Board met with our Research Screening Committee as a group. Certainly,
several years at least. And we have some members of that Screening Committee, and I think both they and we would benefit if we could organize a workshop early next year where there would be an opportunity with an agenda to really work through some of these questions. I think we would all feel a greater sense of ownership in the process. And it's even more true as I think both of you said, you're aware resources are harder and harder to come by.

I was just asked to serve on a Review Committee for the Energy Commission's Peer Research Program, which is much richer program than ours. And one of my reasons for wanting to do that, of course, is to see if there are ways we can leverage their work a little bit more.

But they actually have to go through a formal legislative re-authorization process every few years because they have a dedicated source of funding. So the Legislature looks at them very seriously. We don't get quite that level of scrutiny. But I think all of us should be expecting scrutiny in the next budget year. So I'm hoping our executive officer and the Research Commission can get this organized.

EXECUTIVE OFFICER GOLDSTENE: We'll work on it for sometime late winter or spring have a public workshop with the Research Screening Committee and the Board to
talk about the future of research and think through the
questions on climate air, and toxics.

CHAIRPERSON NICHOLS: Sounds good. All right.

Do I have a motion to approve the plan?

BOARD MEMBER BALMES: So moved.

BOARD MEMBER SPERLING: Second.

CHAIRPERSON NICHOLS: All in favor, please say
aye.

(Ayes)

CHAIRPERSON NICHOLS: Thank you.

Moving right along, the next agenda item is a
staff update on the legislation that was considered this
year. And our Legislative Representative, Rob Oglesby
will be presented this morning. We just finished a
two-year session, so it's a good time to see how we did.

EXECUTIVE OFFICER GOLDSTENE: Chairman Nichols,

this year marked the end of a two-year session and the
Governor signed or vetoed all the bills that reached his
desk just a few weeks ago. So it's a good time for Rob to
report on the session highlights, including items related
to the budget.

I want to draw specific attention to a very
important bill to us. This was AB 2289. Rob will talk
about that in greater detail. This was by Assembly Member
Mike Eng. This bill will capture 70 tons of smog-forming
emissions every day from our Smog Check Program and save
consumers a lot of money. And we are very happy to be
able to work in partnership with the Bureau of Automotive
Repair to get this bill through.

Overall, like most legislative years, it was a
challenging year. But I think we did pretty well, and Rob
will go through the details now.

(Thereupon an overhead presentation was
presented as follows.)

LEGISLATIVE DIRECTOR OGLESBY: Thank you, Mr.
Goldstene, Chairman Nichols, and Board members. Good
morning.

I want to thank you for this opportunity to
provide an overview of the significant actions and trends
in the California Legislature for 2010.

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LEGISLATIVE DIRECTOR OGLESBY: Overall, it was a
very unusual session. In fact, there were multiple
sessions. In addition to the regular session, there were
eight special sessions. That's a new record. And then of
course, there was the tortured budget process, with the
Governor acting on the package of trailer bills just this
past Tuesday.

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LEGISLATIVE DIRECTOR OGLESBY: There were about
280 bills related to air pollution and climate change.
And there were many special hearings, 13, which would be a lot of hearings for most State agencies, but for ARB, that has become the norm.

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LEGISLATIVE DIRECTOR OGLESBY: The topics for the special hearings included AB 32 and climate change, carpool lanes, energy, and electric vehicles. But at the closing bell, there were relatively few significant air or climate-related bills that made it to the finish line.

Of course, the economy was and remains the dominant concern in the Legislature. There was a great deal of attention devoted to bills intended to improve the economy, create jobs, and generally improve the business climate.

However, angst over perceived costs associated with air quality and climate change programs caused some members of the Legislature to seek re-evaluation or delay of some of ARB's most significant programs to reduce air pollution and curb global warming.

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LEGISLATIVE DIRECTOR OGLESBY: This slide gives you an idea of the bills that were introduced to roll back programs or add additional procedural steps to the adoption of new regulations. For a variety of reasons,
legislation to abandon or delay air quality and climate
change programs was defeated.

Although there are significant costs associated
with many of ARB's program, there seems to be a growing
understanding that most of the examples frequently blamed
for our current hard times are for programs that haven't
even started yet. And while improvement in the economy is
paramount, there is a renewed appreciation for the public
health and energy policy benefits of ARB's programs.

It was also important that you, the ARB Governing
Board, sent the signal earlier this year that the
implementation schedule for the on and off-road diesel
rules would be revised in recognition of the economy and
lower than projected emissions from these sources. The
recent progress on the diesel items scheduled for December
helped diffuse interest in preemptive legislation.

In addition, there is a growing recognition of
the economic upside of California's environmental
policies. As an example, last year, investors poured more
than two billion dollars into California's clean
technology businesses and in research and development.
That was 60 percent of the total green technology
investment in all of North America. And the Clean Tech
Group, a global research and consulting firm, forecasts a
$10 billion market for California in 2010, growing to
almost 80 billion by 2020.

Now I'd like to turn to a few significant bills that were recently signed into law.

LEGISLATIVE DIRECTOR OGLESBY: I'm very pleased to report that the biggest pollution-cutting bill of the session was sponsored jointly by ARB and the Department of Consumer Affairs Bureau of Automotive Repair.

That bill, AB 2289 by Assembly Member Mike Eng, will both cut smog and save consumers big money by reforming and enhancing the State's Smog Check Program. The bill will significantly reduce smog-forming emissions, and most consumers will have faster, lower cost smog checks.

Most Californians don't realize it, but on average, motorists in the state pay more than twice the amount for a smog check than consumers pay in other states. And California's Smog Check Program has not kept pace with the best practices of smog check programs in other states. That said, Smog Check is one of the California's biggest smog-cutting programs.

LEGISLATIVE DIRECTOR OGLESBY: Last year, Sierra Research published a report on the effectiveness of the California Smog Check Program. The report was performed
under contract with ARB and the Bureau of Automotive Repair and involved testing thousands of vehicles at the roadside on portable smog check equipment. The study concentrated on pre-1996 model year vehicles. These vehicles make up only 25 percent of the California fleet, but are responsible for approximately 75 percent of all passenger vehicle emissions.

The outcome of this study was extremely disappointing and cut across both types of smog check stations, both test only and test and repair.

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LEGISLATIVE DIRECTOR OGLESBY: The study revealed that many smog check stations gave a passing grade to cars that should have failed their smog check. In fact, 19 percent of the vehicles that initially passed a smog check subsequently failed a roadside smog check shortly afterward. Even more troubling, of vehicles that were supposedly repaired in order to pass a smog check, 49 percent failed the roadside tests.

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LEGISLATIVE DIRECTOR OGLESBY: It is important to note that not all smog check stations have the same track record, and the Bureau of Automotive Repair has the data and ability to evaluate station effectiveness. AB 2289 directs the Bureau to rate the performance of smog
stations and refer the vehicles most likely to need repairs to the highest-performing stations. The bill also streamlines the enforcement process for stations that perform irregular inspections.

The bill improves consumer convenience by authorizing the use of on-board diagnostic systems, or OBD in shorthand, instead of a dynamometer for smog checks for cars that are model year 2000 and newer. This should reduce the time and cost of a smog check. Other states that have already adopted this reform take half the time to do an inspection and charge half the amount that Californians typically pay. This process is in use in 22 other states and in California will be available to over 70 percent of the passenger vehicle fleet.

It is worth mentioning that the development and the worldwide use of OBD technology was pioneered by the ARB. In the 1980s, we're lucky to have some of the leading staff in that issue area like Mike McCarthy leading an internationally recognized expert on OBD.

In the 1980s, computers began to control engine operation. But mechanics were faced with diagnosing engine systems which were unique to each vehicle manufacturer and required expensive special tools. ARB staff realized that with standardization of connectors and codes, OBD could become the smog check of
the future, where the vehicle computer could make a far better determination regarding whether the vehicle is meeting emissions standards than a tailpipe test. OBD first became required emission control equipment in all 1991 model year vehicles.

Motorists know it as the check engine light on the dashboard that alerts them about malfunctions, but that is only part of the system. OBD provides thousands of smog checks per second as vehicles are operating. It is very accurate and reliable, and even stores detailed information that lets mechanics quickly diagnosis problems and make the correct repairs. ARB's leadership in establishing OBD standards helps reduce emissions, improve vehicle durability, and enable the streamlined smog check process used by other states and soon to be made available to California motorists.

Overall, AB 2289 will cut smog-forming pollutants by about 70 tons per day, and that's the emissions cutting equivalent of removing 800,000 vehicles from the road. AB 2289 cleans the air and saves consumers time and money.

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LEGISLATIVE DIRECTOR OGLESBY: A related bill was authored by former ARB Board member and current Assembly Member Jerry Hill. His AB 787 makes more low income families eligible for financial assistance with smog check
related vehicle repairs by increasing the eligible income
limit to 225 percent of the federal poverty level. In
real terms, this means families of four with annual
incomes of up to almost $50,000 can get as much as $400
for repair assistance.

This bill also sets the price for cars submitted
for State scrap programs at $1500 for low income earners
and $100,000 for all others.

Finally, the bill removes repair subsidy
eligibility for higher income individuals. Previously,
even a millionaire was eligible for the $400 repair
subsidy if their car was directed to a smog check test
only station.

Let me now move --

CHAIRPERSON NICHOLS: Is that the Assembly Member
Hill, the former Air Resources Board member?

LEGISLATIVE DIRECTOR OGLESBY: It is, indeed.

Let me now move to a couple of other
vehicle-related bills of interest.

Two bills change the rules for single occupant
access to carpool lanes, AB 1500 and SB 535.

First a little background.

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LEGISLATIVE DIRECTOR OGLESBY: Currently, some of
the State's cleanest and most innovative passenger
vehicles have special access to the carpool lanes with
only one person in the vehicle. The idea is to gain
consumer acceptance to emerging technology and provide an
incentive to expand the market for these vehicles.

These vehicles must display a white or yellow
carpool lane sticker. The white sticker was issued for
zero emission vehicles or a qualifying federal inherently
low emission vehicle. Examples are battery electric
vehicles and some natural gas vehicles.

A yellow sticker was issued for qualifying
hybrids, like a Prius. There are 11,000 white stickers
and 85,000 yellow sticker cars. Both white and yellow
stickers were set to expire January 1st of next year.

LEGISLATIVE DIRECTOR OGLESBY: As I mentioned,
there were two bills that amended the statutes that give
the special access to carpool lanes.

AB 1500 by Assembly Member Ted Lieu extends the
expiration date of the white sticker vehicles until
January 1, 2015. Those are the zero emission and
inherently low emission vehicles.

Senator Leland Yee's SB 535 extends the yellow
sticker expiration date by six months, to January 1, 2011,
for the 85,000 hybrid vehicles that bear these stickers.
This gives a bit more time for education and outreach to
motorists about the expiring deadlines.

Most important, SB 535 provides an incentive for
the next generation of the high tech vehicles by
authorizing carpool lane access to 40,000 new enhanced
technology vehicles. These are vehicles like plug-in
hybrids. They will be eligible for the carpool lane
access from January 1, 2012, to January 1, 2015. DMV will
come up with the design for a new sticker for these
vehicles.

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LEGISLATIVE DIRECTOR OGLESBY: This bill promotes
the development and consumer acceptance of new ultra clean
technology vehicles that reduce emissions and oil
dependency. Access to carpool lanes is a powerful
incentive, and HOV lane access for vehicles that meet the
requirements of this bill gives a high visibility signal
that new technology zero and near zero emission vehicles
are viable and commercially available.

Shifting gears, next I'd like to mention a bill
relating to ARB enforcement activities.

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LEGISLATIVE DIRECTOR OGLESBY: Senator Dutton's
SB 1402 responds to the issues raised to the Board at your
July 2009 meeting concerning equity and transparency in
ARB enforcement proceedings.
ARB staff followed up with the outreach in a public workshop last October and a staff update was presented at your January 2010 meeting. SB 1402 puts into statute many of the outcomes of this process.

Under this bill, ARB must provide air pollution violators with written information on how their penalties are determined. The bill would require ARB to adopt a written penalty policy by March 2011 and prepare an annual report to the Governor and the Legislature summarizing the penalties.

SB 1402 took effect on September 28, and ARB enforcement staff is now providing the required written details on penalties and enforcement action.

ARB already prepares an annual report summarizing the enforcement program's activities, cases, and penalty amounts. The report is posted on the ARB website. That report will now be provided to the Legislature formerly.

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LEGISLATIVE DIRECTOR OGLESBY: Turning to the State budget, which only was approved days ago, ARB's base budget was trimmed, but is still adequate to fulfill our mission. A budget trailer bill signed just two days ago, SB 855, includes two provisions especially related to ARB.

The first piece fixes an internal inconsistency in legislation enacted just last year to improve public
access to documents supporting ARB regulations. That bill was AB 1085 by Assembly Member Mendosa. However, the intent language in AB 1085 was inconsistent with the statutory requirements in the bill leading to the potential for future litigation.

The clarifying amendments proposed in the budget trailer bill harmonize the AB 1085 intent language with the statutory requirements and as a result lower the risk of litigation.

LEGISLATIVE DIRECTOR OGLESBY: The budget trailer bill also includes a provision related to the implementation of AB 32. The administration is charged with developing a zero-based 2011-12 budget for the California Global Warming Solutions Act. With the implementation of the Act spread out among multiple state agencies, the Legislature intends to get a better handle on the overall size of the climate-related programs and expenditures, the manner in which funds are being allocated and prioritized, and their effectiveness in furthering the goals of AB 32.

The zero-based budget for the 2011-12 fiscal year must be presented to the Legislature by April 1, 2011. And while I'm on the topic of climate change, I want to draw your attention to the veto of a bill that
many feel strongly about.

LEGISLATIVE DIRECTOR OGLESBY: That bill is Assembly Member Kevin de Leon's AB 1405. This bill would have created the California Climate Change Community Benefits Fund to receive 10 percent from the anticipated revenues from the cap and trade auction. Cal/EPA was charged with designing the program and distributing the funds to projects in environmental justice communities.

CHAIRPERSON NICHOLS: There is an error on the slide. It says SB 1405. It's AB 1405.

LEGISLATIVE DIRECTOR OGLESBY: Excuse me. Thank you for that correction. It was indeed AB.

There was a large coalition of support and a great deal of opposition as well. In the end, the Governor vetoed the bill as premature since the design of the Cap and Trade Program has yet to come before the Board.

The Governor stressed the commitments in AB 32 to ensure that the impacts of climate change and the impacts of reducing climate change would not fall disproportionately on California's disadvantaged communities.
climate change, the Governor signed a bill that will facilitate projects that reduce greenhouse gas emissions. AB 1507 authored by Assembly Member Ted Lieu provides flexibility to the Carl Moyer Program to allow projects that help reduce smog to also receive state and federal funding for greenhouse gas benefits. Current law does not allow that flexibility and has had the result of disallowing some projects that could achieve both criteria pollutants and greenhouse gas benefits.

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LEGISLATIVE DIRECTOR OGLESBY: Examples of projects that now could qualify for Moyer funds include: Electric and plug-in hybrid trucks, alternative fuel hybrid vehicles, fuel cell vehicles, next generation bio-based diesel fuels, and hybrid tugboats.

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LEGISLATIVE DIRECTOR OGLESBY: A comprehensive review of the bills we followed is in this year's addition of our annual summary. You have copies, and it is available online on ARB's website, and hard copies were available at the entrance to the hearing room.

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LEGISLATIVE DIRECTOR OGLESBY: This concludes my presentation. Thank you for your attention.

And on behalf of the entire Legislative Office, I
want to thank the Chair, Mr. Goldstene, and the Executive
Office and Program staff for their valuable support.

CHAIRPERSON NICHOLS: Thank you, Rob.
I think we should also note that your workload
this year was heavier than ever historically. There were
an extraordinary number of bills in this session that
needed to be dealt with. And I think overall ARB did
indeed come out of it very well. And I know it look a lot
of work.

People who aren't familiar with the State
government process may not realize how much work has to go
into analyzing each and every bill regardless of whether
it has a chance of ever making it through, not to mention
all the work that actually goes into getting the bill
through the process.

And you did a terrific job, which by the way is
also assisted by Cal/EPA and the Governor's office, not an
operation completely free of oversight or involvement. We
get a lot of help both from the Agency and from the
Governor's office in dealing with the Legislature.

But we are on point to just produce an awful lot
of analytical material information. So a lot of good work
went into this. And it was really gratifying to be a
party to the press conference down in El Monte this week
with Assembly Member Eng, who's such an enthusiastic
mayor, really devoted and intense on a personal effort to
getting his smog check bill through. It's a program which
people tend to want to forget about. It's not the most
pleasant thing. But we do have to get a car inspected.
But the opportunity to make that program more effective
and more cost effective is just really irresistible after
all these years. And I'm really pleased to see us moving
ahead.

And I think it is appreciated the fact that Rob
mentioned the fact that the OBD systems is just a platform
for this new type of smog check with something that the
ARB invented, at least pioneered. And I have approved --
I was at U.S. EPA when we were trying to get the 1990
provisions of the Clean Air Act implemented as they were
written in California and kept bumping up against those
tough folks at ARB who insisted they had a better way of
doing smog check. We don't want to relive those days.
But there has been progress made. It's all in a good
direction.

Any comments or questions by the Board? If not,
this is just an informational item.

We do have a couple of members of the audience
who have asked to speak. I think they all are here to
talk about the Community Benefits Fund and would just call
them up in order. Nidia Bautista, Shankar Prasad, Evelyn
Rangel-Medina and Martha Guzman.

MS. BAUTISTA: Thank you, Chair and members of the Board.

Nidia Bautista, Policy Director at the Coalition for Clean Air.

And I do appreciate the opportunity to speak on AB 1405. I think Rob may have been projecting for next year, since our lead author will likely be in the Senate next year.

We did want to take this opportunity to highlight this bill. As Rob noted, it's a bill that received very wide support. We provided some information to you regarding the existing list of supporters. You'll hear from some of the other co-sponsors of the bill, but it includes folks like the NAACP, the California Black Chamber of Commerce, Waste Management, to over 40 environmental public health organizations, environmental justice organizations throughout California, as well as local elected officials from Oakland to Sacramento, to the San Joaquin Valley and down in southern California as well.

And this, as you'll remember, is part of the continuing engagement that we've been pursuing in terms of ensuring that when we implement AB 32 that we are specifically made the promises in AB 32 to protect and
strengthen our most vulnerable neighborhoods.

What we heard as early as late summer 2008 was that the Legislature -- we heard this from both Cal/EPA and from ARB that the Legislature will be the one to make determinations on what to do with any of the funding related to AB 32 or any of the investments.

To that end, we worked with Assembly Member Kevin de Leon well as over 16 other legislators to co-author legislation to ensure that that promise was fulfilled. And we introduced that bill early last year. Received a lost momentum going through the legislative process. Went through several Committees, and we ended up holding it on the Senate floor last year because we can receive correspondence from this agency that, in fact, last year would not be timely considering that the Governor had established the Economic Allocations Advisory Committee in May of last year. At that time, we worked very closely with the EAAC, and you'll recall in their reporting earlier this spring they actually included among the recommendations the establishment of a community benefits fund. And specifically sited AB 1405 as a model for that. We're pleased that the Governor's own Committee endorsed this concept.

This year, we tried to work very closely with the agencies to secure support. And in the hopes of getting
this bill adopted, we felt very strongly. And, in fact, it was very timely considering that a lot of the key AB 32 regulations would be adopted, specifically cap and trade, later this year. And so we appreciate the efforts by both this agency and Cal/EPA to really try to work through language and try to explore opportunities to really get this chaptered into law.

Unfortunately, as Rob noted, our current Governor did veto that. And while we disagree with his message, we did want to include that veto message to you, because it in fact basically -- the Governor is saying that this ARB Board actually has that authority to implement many of the key provisions within that. And while we'll certainly look to explore the statutory changes that are needed, we look to you to really ensure this is adopted and fulfilled.

Thank you.

CHAIRPERSON NICHOLS: Thank you.

Shankar.

MR. PRASAD: Good morning. Sorry I missed the last time. I had to leave early. So good morning, Chairman Nichols and members of this Board.

It's always nice to come before the Board and reflect on some of the issues I strongly believe in.

AB 1405, as you know, basically took this step of
what's written in AB 32 to make sure it is followed through. AB 32 has in it that disadvantaged communities be benefited economically and protected in their health in their health impacts.

But AB 32 did not provide a definition of what a disadvantaged community was. Whereas, 1405 gave definition for what a disadvantaged community was and also said a portion of the money could be utilized not as a handout, but more as an emission reduction program focused in those identified areas.

It is unfortunate that we did not succeed, but I want to publicly acknowledge Secretary Adams and Chairman Nichols and who supported in trying to explore options if this could be moved forward.

We continue to acknowledge and are aware of these issues. But when it comes to the question of taking a specific action, we seem to be pushing this forward into a later time.

So I urge you to direct the staff to work with us in shaping the cap and trade regulation as it comes before you to see that some of the elements that were approved by all of the Legislature and supported by more than 40 groups across the state are kept in the regulation.

Thank you.

CHAIRPERSON NICHOLS: Thank you.
Evelyn.

MS. RANGEL-MEDINA: Good morning. My name is Evelyn Rangel-Medina. I'm Policy Director of the Green Collared Jobs Campaign at the Ella Baker Center for Human Rights. And along with the Coalition for Clean Air, we were co-sponsors of AB 1405 because the communities we represent will be hit first and worst when climate change -- when we see the impacts of climate change come into California.

So we not only see this bill as an opportunity to protect those communities, but also to promote local economic development in areas of concentrated poverty by connecting the people that need the most work to the work that most needs to get done in the areas with the highest levels of pollution.

So we're also here to remind the Board that it was -- this bill was a legislative priority of the Latino Caucus and we're here for the long run to ensure that AB 32 is implemented equitably and effectively along with you. And we'll be back for more hearings and to the Legislature to see the seeds of a Community Benefits Fund come into fruition and to ensure that our communities are protected in their health.

Thank you.

CHAIRPERSON NICHOLS: Thank you.
Martha.

MS. GUZMAN: Hi. I'm Martha Guzman. I'm with California Rural Legal Assistance Foundation and also here for the Center for Race Poverty and the Environment.

And really just to say that you have always had the authority to include this in your program. I think the EAAC is urging you to do that and would encourage you to actually take the leadership that the Governor has punted back to you to make it happen. And really that leadership is staying at the very forefront of this new innovative program that you're establishing, making a commitment to the most polluted and disadvantaged communities of the state that you're going to make that commitment early on and you can work and figure out and improve the program as it moves forward. But that commitment is going to be done in the beginning of the program. So we urge you to do that.

And certainly it makes it more difficult for us as we fight against Prop. 23 to not have that in our armour, but any words that you can share with us today I would be happy to take back to the field to make sure that your commitment stands with them.

Thank you.

CHAIRPERSON NICHOLS: Thank you.

We have one more witness signed up, Bonnie
MS. HOLMES-GEN: Chairman Nichols and Board members, first of all, I certainly agree with my colleagues on the importance of AB 1405 and the Community Benefits Fund.

But I want to congratulate you on the adoption of AB 2289, to finally adopt these long needed critical updates of the smog check program. And this is a tremendous victory. Thank you for your hard work on that.

And number two, I wanted to make sure you're aware that Senator Pavley worked very hard over the past two years to address the issue of motorcycle emissions. And some folks don't know that motorcycles emit ten times or more per mile than a vehicle depending on if the motorcycle has been tampered. But even a non-tampered motorcycle it's ten times more. This is a concern.

And as Senator Pavley's SB 435 was signed into law and establishes enforcement authority in California to ensure that motorcycle exhaust systems meet federal noise standards, and this will have a tremendous benefit in discouraging tampering of motorcycle exhaust systems, because these motorcycles are going to have to demonstrate compliance. And if they're not bearing these labels, they can be fined. So just wanted to make sure you're aware.

This is a step forward. It's a small but
important step forward on this issue of motorcycle emissions. And we hope it's going to make a difference in our state's air quality program.

Thanks.

CHAIRPERSON NICHOLS: Thank you for highlighting that bill, Bonnie, and for all of your support in this entire legislative session. It's very much appreciated. And thanks for having that piece of legislation.

I think we probably downplayed that a little bit, because we were a little concerned about whether the Governor would actually sign a bill that affected motorcycles, but we got it through. And I guess now since it's done, we can celebrate it.

Ms. D'Adamo.

BOARD MEMBER D'ADAMO: Well, I just want to thank Bonnie for your work on that. I know we've been talking about this for years. And when it comes before us, anything that staff can do to look at existing authority for motorcycles, because I think there may be more we can do with the authority we already have.

CHAIRPERSON NICHOLS: Great.

Any other comments or questions?

Just for the information of the other Board members, I have a meeting scheduled this afternoon with a number of groups to talk about how we are handling
health-related issues in the Scoping Plan. And I know
that this question is going to be coming up. We've
been -- we met yesterday with our colleagues from the
Department of Public Health to talk about the health
impact assessment. That is not obviously exactly the same
thing. But it helps to form the basis for the discussion
that we were having in 1405.

1405, of course, would have created a shell for
funds. But it left open most of the key details as to how
the program will be administered and didn't require any
specific level of funding. And so we thought it would be
helpful to have it in place.

The Governor obviously felt that it was premature
until we lay the groundwork for something like this.
And there was very significant opposition coming
from the business community for the idea that the Cap and
Trade Program was somehow a public health problem. And
they interpreted it that way, although that was not I
think correct. But never the also, it was a really quite
contentious at the end there.

And I do want to say how much I appreciate the
fact that we have had such strong support from other
health and environmental justice organizations on the
implementation of AB 32. We can't talk about propositions
of course here, but we understand that your support for
continued implementation of AB 32 has been a really
important element in making that a very important issue in
this election. So if the proposition is defeated, it will
be in substantial measure I think because of the great
organizing that's been done.

Dr. Balmes.

BOARD MEMBER BALMES: Well, just to respond more
directly to Ms. Guzman, the meeting that we had with CDPH
yesterday regarding the health impact assessment of the
Cap and Trade Program, even though specifics, as Chair
Nichols mentioned, aren't in that, it was seen by both
agencies as helping guide future actions such as
potentially the development of a Community Benefits Fund
and where that fund might be targeted to improve health at
the vulnerable community level. So I think in answer to
your specific question, we are trying to keep our eye on
that goal.

CHAIRPERSON NICHOLS: Thank you very much.

We'll move on to the next item on the agenda,
which conveniently is a staff update on the progress of
the implementation of AB 32 and the Scoping Plan. This is
one of our periodic updates so Board members can get a
sense of where we are and the time lines and the
trajectory that was called for in the legislation.

MS. BAUTISTA: Chair Nichols, I just want to
mention that we were informed that Senator Jenny Oropeza just passed away. And as you know, she's been a leading champion on air quality issues both, because of the personal struggles she had dealing with the pollution in Long Beach and what's often known as a diesel death. But I just wanted to make sure that your Board was informed of that.

CHAIRPERSON NICHOLS: Thank you very much for bringing that to our attention. I knew she had been very ill and absent from the Legislature for quite some time. Very sad news, indeed. She was a champion for clean air and for communities.

So we don't have a formal tradition of doing this like some bodies do, but I think we'll adjourn in her memory when it comes time to adjourn the meeting.

Thanks.

Okay. AB 32.

EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman Nichols.

This item was scheduled last month, but we postponed it due to time to this month.

Staff is going to provide a short overview on where we are with regard to progress in implementing the Scoping Plan. Bill NOx from the Office of Climate Change will give the staff's presentation.
(Thereupon an overhead presentation was presented as follows.)

AIR POLLUTION SPECIALIST KNOX: Thank you, Mr. Goldstene.

Chairman and Board members, it's a pleasure to be here today to provide an update on progress implementing AB 32 and the Climate Change Scoping Plan.

Today, I'll discuss our progress on the Scoping Plan and then focus on major climate change activities at ARB over the next few months. I will also provide a brief update on federal and international activities.

With your actions last month to approve the 33 percent renewable electricity standard and the regional SB 375 targets, the Board has now approved measures that will provide just over 40 percent of the emission reductions originally identified in the Scoping Plan.

Besides numerous regulations, the Board has also approved tool kits for small businesses and local governments and incentives that reduce greenhouse gas emissions. Meanwhile, our State agency partners have also been working to implement their Scoping Plan commitments,
particularly in the electricity sector, with increased energy efficiency programs and continued implementation of both million solar roofs and solar water heater programs. When you combine their efforts with ours, we have implemented measures to achieve over half of the emission reductions needed to meet our 2020 emission goals.

Currently, staff is evaluating our greenhouse gas inventory to determine the impacts of the economic downturn. As you’ve heard about in the case of diesel trucks, the downturn has reduced economic activity and emissions of criteria pollutants and greenhouse gases. We are evaluating how these changes will affect emissions both in order to set the starting point for the greenhouse gas emission cap in our upcoming cap and trade regulation and to calibrate our progress on Scoping Plan implementation.

These two things, adjustments to the inventory and progress toward Scoping Plan implementation, will be factors next year as we evaluate the need to adopt additional greenhouse gas emission reduction measures. This year, ARB deferred development of a few Scoping Plan measures to focus our resources on the big hitters, RES, SB 375, and cap and trade.

Next year, we intend to re-evaluate the remaining Scoping Plan commitments to determine whether, and on what
time frame, additional rulemakings may still be needed.
We will report to the Board on our findings in early 2011.
Let me now turn to upcoming climate change activities at the ARB.

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AIR POLLUTION SPECIALIST KNOX: One of the pillars of the Low Carbon Fuel Standard is its inclusion of the indirect land use impacts of transportation fuels. In approving the LCFS, the Board recognized that indirect land use change is important to the life cycle greenhouse gas emissions of some crop-based biofuels, and that to exclude its effects could encourage the production and use of biofuels that have carbon intensities on par with those of gasoline and diesel fuel.

When the regulation was adopted, the Board directed staff to convene an expert work group to assist with refining and improving the land use and indirect effect analysis of transportation fuels and to return to the Board by the end of this year with recommendations. The expert workshop has met six times this year and is currently completing its analysis. We expect to receive its recommendations in early November. These recommendations and staff's technical review will form the basis of ARB's informational report on LCFS implementation due to be completed early next month. The report will
also inform proposed regulatory revisions to the LCFS to be considered in 2011.

AIR POLLUTION SPECIALIST KNOX: The cap and trade regulation would set a firm and declining cap on most of California's greenhouse gas emissions. Cap and trade is only one of the many measures described in the Scoping Plan, but it is unique in that it both enhances the effectiveness of other greenhouse gas regulations and ensures that we will meet our 2020 emission goal.

By setting an upper limit on greenhouse gas emissions, instead of focusing on reducing the emissions intensity of specific activities, the cap and trade regulation provides assurance that California will meet the AB 32 targets in a way no other regulatory scheme can. If energy efficiency programs are not as effective as we predict, the cap and trade regulation ensures that we will still meet the 2020 goal. And if our economy and emissions grow faster than we anticipate, again the cap and trade regulations limit means our goal will be met. No other regulatory scheme can do this.

In addition, by putting a price on carbon, a cap and trade regulation provides the long-term economic incentive needed to move California to a low-carbon economy.
By placing a price on carbon, the cap and trade regulation encourages investment in green, efficient technology.

The regulation also makes other greenhouse gas measures, like energy efficiency and clean cars, more effective, because it prices the carbon in electricity, gasoline, and diesel fuel.

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AIR POLLUTION SPECIALIST KNOX: As we finalize the proposed regulation, staff have continued to meet with stakeholder groups, individuals, and organizations to better understand their ideas and their concerns as we design the Cap and Trade Program.

In developing our cap and trade regulation, we have been working closely with our partners in the Western Climate Initiative, or WCI. In July, WCI released its detailed program design document which provides a common design to guide states and provinces that are creating their own climate programs.

We are coordinating implementation of the climate programs in different jurisdictions to make it easier to link and form a larger market.

ARB and Cal/EPA were intimately involved in the development of the design document to ensure that it reflected our most current thinking. California, New
Mexico, British Columbia, Ontario, and Quebec, which represent 70 percent of total WCI greenhouse gas emissions, are all on track to begin programs in 2012.

Staff will release the initial Statement of Reasons and proposed cap and trade regulation late next week, initiating the 45-day comment period.

We will report to the Board on staff's proposal at the November Board meeting, and the Board will consider the regulation at the December Board hearing.

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AIR POLLUTION SPECIALIST KNOX: The Advanced Clean Cars Program unites a number of historically separate initiatives and integrates ARB's long-standing role of improving air quality with the Board's more recent focus on addressing climate change.

The Advanced Clean Cars Program brings together our efforts to reduce both smog-forming and greenhouse gas emissions, as well as the Zero Emission Vehicle Program, which serves as an incubator for emerging vehicle technologies.

ARB staff plan to release a staff proposal for advanced clean cars later this year, with Board consideration of the proposed regulation in January next year.

We're working closely with U.S. EPA to coordinate
state and federal standards. You'll hear more about this program in the next agenda item.

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AIR POLLUTION SPECIALIST KNOX: In addition to their work on clean cars, U.S. EPA is preparing to set greenhouse gas requirements for the largest industrial sources of greenhouse gases. These requirements incorporate the new source review and Title 5 requirements of the Clean Air Act. They will phased in over several years with only the very largest sources affected at first. The most substantive of these requirements will mandate best available control technology, or BACT, for new and significantly modified sources.

In California, local air districts will carry out the new federal requirements under their permitting authority. ARB, U.S. EPA, and the districts are working together to ensure a smooth transition, so that projects are reviewed and acted upon in a timely manner.

It's important to note that State permit requirements for criteria pollutants and air toxics will remain unchanged, continuing to protect and improve air quality.

Prospects have dimmed for a single comprehensive federal climate bill in Congress. We expect that the next Congress will focus on a more piecemeal approach to clean
energy policy. California's work to create a comprehensive climate program that protects resources from air to forests to water and encompasses all economic sectors, remains a benchmark against which a national program will be measured. By proactively designing a workable and fair greenhouse gas mitigation program, California is providing a model for a federal program that will recognize the progress we have already made.

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CHAIRPERSON NICHOLS: I just want to stop and underscore that point a little bit for the Board, because the work that we're doing now and that the Board will be taking up in December in terms of developing a cape and trade rule is probably the most controversial piece of any federal legislation. And one of the things that we've heard in meeting with a broad array of different sectors in California, California business, including some of the businesses that are most likely to have concerns about a state program because they are businesses that use a lot of electricity, trade exposed, et cetera, is that they are hoping that the program that we adopt will be something that's capable of being, in effect, a substitute for EPA's efforts to try to do something with the Clean Air Act. And we have had one of our top Clean Air Act experts, Lucille Van Ommering, who has been leading an
effort working with U.S. EPA to see what could be done in that area.

The Clean Air Act, as I think you all know, can be pretty difficult to work its way through the system. It is not designed to be flexible, adaptable, or to encourage people to substitute programs for one another. But because it is a new and evolving area and because EPA is working very closely with Western Climate Initiative and following our efforts also and providing actually support in some of the design efforts, we have -- we are I wouldn't say confident but encouraged that what we develop in California could be a model for something that could be done, but could be something that would be protective of the interests of California both in terms of the environment and of our business communities.

So just as you think about these issues, which I'm sure you all are, you know, as we move forward in this discussion, I just wanted to plant that seed, because I think it's an important element in our thinking about how to approach this issue.

I don't know if anybody wants to add anything for that. But sorry for the interruption. I couldn't let it go by and see you jump into international activities without making that comments. Thanks.

AIR POLLUTION SPECIALIST KNOX: Thank you,
Chairman Nichols. I appreciate the additional detail on what we're doing, the important collaboration with State and federal and with others as well.

But going ahead with international activities, the Governor's Climate and Forests Task Force, or GCF, is a unique collaboration between 14 states and provinces of United States, Brazil, Indonesia, Nigeria, and Mexico. GCF is developing compliance grade rules for REDD, which stands for Reducing Emissions from Deforestation and forest Degradation. REDD is the international system created to reduce GHG emissions from deforestation, which contributes over 17 percent of all greenhouse gas emissions.

Accurate accounting of these emissions from avoided deforestation is essential if these projects are to be accepted by market-based programs like California's cap and trade regulation.

GCF partners will attend the upcoming Governor's Global Climate Summit to be held at U.C. Davis on November 15th and 16th. This third international summit will be co-hosted by Governor Schwarzenegger and other subnational leaders in partnership with the United Nations Development and Environment Programs.

Several of our WCI partners will also attend this summit and stay for the staff's November Cap and Trade
Program update to the Board.

EXECUTIVE OFFICER GOLDSTENE: I'm going to add something to that too. Sorry.

We also expect members of RGGI, the northeastern states, to come to the Governor's Climate Summit as well as members from the Midwestern Governor's Accord.

And so I'm now the U.S. Co-Chair of the U.S. Climate Initiative and my partner and Co-Chair from Quebec will also be here. So we are working on making sure everybody is participating in all the different regions.

And one of our larger efforts is to link -- eventually link everything together in the absence of national action both in the U.S. and in Canada. We'll be seeing many of those people in the next couple months.

AIR POLLUTION SPECIALIST KNOX: Thanks. It's just so -- all this linking is so important, because we know that climate change is a global problem we have to face together.

At the upcoming summit, the International Climate Action Partnership will also be discussed. And California was a founding member and was first to Chair this partnership launched in 2007 to pursue the development of carbon markets through cap and trade systems. ICAP works to ensure that design compatibility issues are recognized at an early stage so systems can be harmonized across
borders. And that feeds into the collaboration with RGGI and the other groups.

Finally, in December, the global leaders will convene in Cancun, Mexico for the 16th Conference of Parties, or COP 16, to discuss the next phase of international climate agreements.

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AIR POLLUTION SPECIALIST KNOX: In the four years since the Legislature passed and the Governor signed AB 32, ARB has been working to meet both the statutory requirements of the legislation and most importantly our 2020 emission goal.

The Board has approved numerous research contracts, outreach activities, incentive programs, and regulations to support the State's climate change efforts. Recognizing that the Climate Change Program is unlike any other program at the Air Resources Board, we have devoted extra time to ensuring that the small businesses, local governments, and citizens who will be indirectly affected by our regulations have the tools to prosper as they become part of the solution to the climate challenge.

Over the next few months, the Board will consider the final components of California's Climate Change Program, the cap and trade regulation in December, and advanced clean cars in January.
It is important to note that the 2020 goal is a weigh station on the path to the more substantial reductions that scientists tell us are necessary to avoid the most severe impacts of climate change. Simply put, our work will not be done at the end of this year.

As with the smog program, ARB staff will continue to evaluate technology to determine whether additional measures should be pursued, with an eye toward the update of the Scoping Plan that is required by 2013.

This completes my presentation. And at this time we'll take any questions you have. Thank you.

CHAIRPERSON NICHOLS: Thank you, Mr. Knox.

Questions? Yes.

BOARD MEMBER SPERLING: That was a good overview.

I appreciate it.

You started off the presentation saying 40 percent of the reductions identified in the Scoping Plan have been secured through ARB actions. My calculation show it's much more than that.

What's left cap and trade is, what, 20 or 25 percent? Where's all the rest? We did renewable electricity standards. We did SB 375. We did LCFS and we did AB 1493 Pavley standards.

CHAIRPERSON NICHOLS: Good question.

BOARD MEMBER SPERLING: My math shows that's much
more than 40 percent.

CLIMATE CHANGE PLANNING SECTION MANAGER SEIDLER:

This is Chuck Seidler.

The 40 percent represents the ARB component of it. It is much more, you're correct, when you do the math and it includes all other agencies, such as energy efficiency programs with the CEC and CPUC.

CHAIRPERSON NICHOLS: So ARB is only taking credit for 40 percent.

CLIMATE CHANGE PLANNING SECTION MANAGER SEIDLER:

Of the total. When we looked at the 40 percent, it looked at only the measures the ARB Board has approved or has considered. The remaining looks at the other agencies work and what they've done, what they have contributed doing.

BOARD MEMBER SPERLING: But that still implies there's another 60 percent -- no, it doesn't provide. How much more is there to go?

CHAIRPERSON NICHOLS: Cap and trade. That's it.

AIR POLLUTION SPECIALIST KNOX: NOx cap and trade and advanced clean cars.

CLIMATE CHANGE PLANNING SECTION MANAGER SEIDLER:

Those are the primary two measures. And as we discussed, others will be considered in 2011.

CHAIRPERSON NICHOLS: This is sort of --
BOARD MEMBER BERG: I guess what I would be looking at, my understanding was for 2020 we were going to reduce by 173 million metric tons. Are we saying that we've only passed 40 percent towards that 173 million metric tons?

PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF CHANG: This is Edie Chang.

Of the total that we need to get, as we mentioned, cap and trade and advanced clean car are the two remaining pieces of that.

In the Scoping Plan, those measures accounted for about 40 million metric tons from that total.

So the remainder of it, as Chuck mentioned, some of it is energy efficiency programs. There are regulations that we do. A lot of that is through funding and other programs that the utilities fund through the PUC, the Energy Commission, things like that. But the two remaining pieces, if you look at it in comparison to the Scoping Plan, it's about 40 million of that 176.

CHAIRPERSON NICHOLS: I think you're being overly careful. For public consumption, really, we're 80 percent of the way to where we enhanced.

EXECUTIVE OFFICER GOLDSTENE: LCFS also gets us 15 tons and (inaudible) gets us 13 tons. So we've made very strong directional movement in the right direction.
BOARD MEMBER SPERLING: Maybe before next meeting we can get a better accounting.

EXECUTIVE OFFICER GOLDSTENE: Yes.

BOARD MEMBER SPERLING: Thank you.

CHAIRPERSON NICHOLS: That would be a good thing to do. Good point.

Any other questions, comments? If not, this segues very nicely into the discussion of advanced clean cars, but we did have a couple of people who asked to sign up and talk about the Scoping Plan update,

Nidia Bautista and Shankar Prasad.

MR. PRASAD: Good morning, Chairman Nichols and members of the Board.

Two years back when the scoping plan was adopted, we came here and supported you and also urged you to make a couple of changes. And we are thankful for the two directives you took. One was to put a listing of the communities, and two, the formation of the public health work group.

Over the course of time, the ARB has taken into consideration and has made some progress in identifying and producing a draft list of communities. When the list was produced and subsequently was presented, we made some comments and EJAC has recommended some comments about the shortcomings of the approach and how that list is flawed
and whether that list could be modified.

And we have been pursuing that effort for two or six month period now, but we have not had a chance to get any kind specific response on that aspect of it. So we hope that before you print out that cap and trade regulation that the list will be modified.

We do not want to see a repeat of revising it like the mortality remains and the kind of thing happening to this list again in the future.

And also we suggested a peer review of that methodology. And because it has that significant bearing on that aspect, we want to ensure that takes place. Otherwise, if somehow the NSA process that the issue gets resolved.

Secondly, I want to make sure there are two aspects of it, the health impact assessment and the listing are the quite often confusing, put in the same bin. The health impact assessment is more of the (inaudible) The rulemaking process where it impacts as a whole cap and trade rulemaking as a whole, whereas this list of the communities was meant to be a first step in the distribution of funds so that the economic piece of the promises made in the AB 32 are carried through.

So I want to make sure that those things are kept true. And we have pledged a lot of trust in the public
health working group process, as all of us know that it has not been simple and easy. It has been a little rough patch. And hope this afternoon's meeting will help us to move this and smoothen this part as we move forward. Thank you.

CHAIRPERSON NICHOLS: Thank you.

MS. BAUTISTA: Thank you, Chairman Nichols, members of the Board and staff.

As Shankar noted, our main concern is as we move forward with the Implementation of AB 32 that we do fulfill those promises in AB 32.

As we were talking about earlier the AB 1405 has specific language there regarding the proper identification of the neighborhoods. And a few key points we want to mention.

One, we want to ensure that that approach really encompasses a range of social economic variables. The current ARB process only looks at one.

Also, that we're looking at air pollutants cumulatively, not just figuring out which pollutant is high in what specific area and than just using that one pollutant, but rather all the pollutants.

And also it's a uniform approach across all of California and one that gets down to the neighborhood level. It's not enough to suggest that an entire city.
Some are big. Some are small. They're very different size of cities. Really needs to get down to the neighborhoods so we're specifically targeting and making the correct investments in the neighborhoods that most need it.

And lastly, just to ensure that that approach is a peer reviewed approach.

As Shankar noted, I think it is often confused that the health impact assessment it something we absolutely support. While the proper identification of the neighborhoods should be used to inform that health impact assessment, they are two separate things that action items the ARB does need to take and we'll be looking to ensure ARB follows in adopting the cap and trade regulation. Thank you.

CHAIRPERSON NICHOLS: Okay.

MS. RANGEL-MEDINA: Hello again.

We just want to echo the four asks that Nidia and Shankar have pointed out and reference the model we can use to ensure that we have the proper identification of most impacted communities when it comes to health impacts.

Thank you.

CHAIRPERSON NICHOLS: Thank you.

We will now move on to the next item, which is the update on the work going on the national clean car
standards from 2017 to 2025. Corresponds with our work on the next phase.

California has been working with U.S. EPA and the National Highway Transportation and Safety Administration. We were invited specifically by the President to join in this effort to assess the technology that could be used to significantly reduce greenhouse gas emissions from passenger cars in this 2017 to 2025 time frame. There was an assessment report issued on September 30th that is intended to help inform both the federal and California efforts, and it's an ongoing effort.

So I'm going to ask Mr. Goldstene to introduce the item and look forward to the staff presentation.

EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman Nichols.

The technical assessment report that Chairman Nichols just mentioned provides valuable information the staff is using to complete its development of proposed greenhouse gas standards for 2017 and beyond. We plan on presenting our proposal for your consideration early next year.

In the mean time, we continue to work with the federal agencies to gather more information and will complete several ongoing studies on mass reduction and energy efficiency. We plan on an ongoing relationship with
the federal agencies as they develop their greenhouse gas
and fuel economy regulations, which should be finalized in
2012. We hope the final rule will be close enough to ours
that we can accept federal compliance as meeting
California's needs as we have done with the 2012 to 2016
greenhouse gas standards.

Tom Cackette, our Chief Deputy Executive Officer,
will give the staff presentation summarizing the results
of the technical assessment and the implications for
national and clean car standards beyond 2016.

Also with Tom is Steve Alba who has led our
technical contributions to this effort and also on our
other efforts on LEV and Pavley. We refer to Steve as our
Chief Technology Officer, even though there isn't such a
classification in State service.

Tom.

CHAIRPERSON NICHOLS: We certainly don't pay him
accordingly. Okay.

(Thereupon an overhead presentation was
presented as follows.)

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Good
morning, Chairman Nichols and members of the Board.

I'm going to start off by talking very briefly on
the current greenhouse gas standard not because you don't
know them, but because people on the webcast may not be
familiar with this.

As you know, they were adopted in 2004. We got an EPA waiver to implement these in 2009 and the standards for new vehicles began in the 2009 model year.

Somewhat thereafter, EPA adopted similar standards for the 2012 through '16 models. And it was very interesting that the manufacturers agree that the standards were feasible. It was a contentious issue when we adopted them.

And the graph on the right shows you how the standards compared. You can see that our in the early years when ours were the only standards dropped fairly rapidly. The EPA standards are quite similar and end up at the same point by 2016 as the California standard.

And because of that, and of course because our standards apply to about 40 percent of the cars in the United States, but the national standard would apply to the entire U.S. fleet, we thought this was good for overall climate change emissions. And the Board approved allowing compliance with the federal standard to be in full compliance with our Pavley standards for the 2012 through 2016 issue. And, of course, what's at stake now on the issue is what happens after 2016.

CACKETTE: That's
what I'll talk about now.

As Chairwoman said, in May, the President directed EPA and NHTSA -- NHTSA is the safety agency, but they're also the people that are responsible for fuel economy standards in the U.S. -- to develop new standards for 2012 through 2015. And we were quite honored to be asked to participate in the technical assessment, which had the goal of producing a technology assessment report, which we call TAR, by September 30th.

The Governor, of course, accepted this offer from the President, and Chairman Nichols wrote back saying we'd be glad to participate in it. But there was a very valuable and important point in her letter and that was that it was our expectation that this technical review analysis would encompass improvements per year in greenhouse gas emissions of three to six percent. And I point that out because as you see in the charts, that's when we've done and not narrowed down to any number yet, but you'll see the results for these three to six percent annual improvements, possibly the 2017 through 2025 time frame.

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CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: So here's the first one that does that. On the left, you'll see the scenario as we call it, which is the improvement
for year the zero percent or 2016 standard is what's on
the books now for the national program.

And in the blue highlighted column, you can see
how the numbers would drop depending on the stringency of
the standards. They go anywhere from 190 grams for mile
to 143 grams for mile as the most stringent six percent
improvement for year.

To give you a metric that's a little more
familiar than grams per mile, I put the miles per gallon
equivalent in the next column. You can see it ranges from
35 miles per gallon, the base case for 2016, to as high as
62 miles per gallon. This is for the fleet of cars and
trucks combined.

And then one more number, which is on the right
that test number that is the compliance number, the 35 to
62, gets discounted by roughly 20 percent on the label
that you see on the new car. So when you look at the
window, you would see numbers not 35 but about 28 on
average. And under the most stringent standards 6 percent
improvement per year, by 2025, we'd be at a real 50 miles
per gallon average for cars and trucks. So this is what
the -- this doesn't say we can do this yet, but this is
what the goals were to explore this range of improvement
per year.

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CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: How do we do this?

The first thing we did is have a lot of meetings with stakeholders. This includes almost all the car manufactures, the Tier 1 suppliers, the Boschs, for example, of the world.

We met with states who are partners in this. We met with the NGOs, battery manufactures, et cetera.

We don't just, however, take what we learn from these stakeholder groups. We try to put this into some more analytically sound and consistent approach. And to do that, we did a lot of analytical work. The first one was drive train modeling. This is being done by Ricardo under contract with EPA. This was the same approach that we used in setting the Pavley standards. What do we think the emerging technology can do in terms of emission reductions and its practicality on various types of vehicles ranging from compacts to big SUVs.

We did a Lotus mass reduction study which showed what the potential is, take mass out of or weight out of the vehicles. There's good for fuel economy. And we're following up on that with the safety side, safety implications of that.

EPA funded vehicle tear downs. For engineers, this is like the best thing you can ever have happen is
going in a room and see a car torn down into its many
thousands of parts. And they looked at each one,
determined what its costs were, what its weights was, what
its function was, was it really needed in the future and
things like that, which gave us a lot of insight into the
cost of these technologies.

And then the Department of Energy did a new study
on battery costs, which was very valuable, because the
estimates of battery costs that you get from various
stakeholders are all over the map. And we're looking out
at the future for something that really doesn't exist in
any volume today. So the battery cost was a fundamental
look from the ground up to see what would batteries cost
when they're produced in very large volumes.

And then finally, we took all this information
and put it into a model that EPA has developed, and the
purpose of that model is simply to let you explore
scenarios. You could look at different technologies,
different assumptions of whether technologies will emerge
and how fast and what the emission reduction for each
technology, the model will select a fleet mix that could
satisfy the three, four, five and six percent per year
annual improvement in greenhouse gases.

We did this so far only as an industry average.
This is just one company selling cars, but we'll look at
this in the future on a manufacturer specific case. In fact, we're going back to meet with the manufactures right now to explore that question of individual companies impacts.

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CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: So when you boil down all the technologies -- and I think there might have been a couple hundred of them or so involved here, they fall into four categories.

First one is mass reduction. What we looked at was a range of about 15 to 25 percent mass reduction. And for reference, you can realize many mid-size cars of 3,000 pounds to something around that range. And that the SUVs are typically 4,000 pounds or heavier. So it gives you an idea of how much mass might come out of the vehicle.

There's the kind of the rule of thumb there that if you do an integrated engineering approach, a ten percent reduction in weight will give you six percent improvement in fuel economy.

We also looked at improved gasoline engines. We know gasoline engines are improving all the time. But these technical terms that you see on the second indented line can be boiled down to this in simple terms: It's making a gasoline engine as efficient as a diesel. We think that there is a lot of hope that this is a possible
outcome. So we're looking at how much of this can happen. How fast in the 2027 -- to 2017 to 2025 time frame. We also looked at hybrids, strong hybrids. We call these the Prius types a lot, but in fact they have some new names, P2 and two mode hybrids which are the ones that we think will dominate in the marketplace if hybrids are required to meet more stringent standards. And finally, we looked at the category of -- it's called plug electric vehicles. And we used battery vehicles and plug hybrid vehicles as the model that would also include in future fuel cell vehicles.

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: And we also know that vehicle manufactures aren't going to all be in the same place. And some simple examples -- contemporaneous examples are Nissan taking the leadership and putting the Leaf out there, the battery powered Leaf in significant numbers. General Motors is focusing on plug hybrid electric vehicles, the Volt. We have German companies advocating and making progress on diesels and having some of the most advanced current gasoline engines around. So we thought we better look at this from different viewpoints, put ourselves in the shoes of different manufacturers who have different technological
view of the future.

We looked at a hybrid focus. This is sort of the Toyota viewpoint that we should have hybrids everywhere.

We looked at advanced engines and mass reduction focus instead of electric drive.

We looked at a combination of the two, mix of A and C.

And finally, the electric vehicle focus which might be more of kind of the Nissan approach.

And for each one of these pathways, technological pathways, we looked at what would it take to approve greenhouse gas emissions by three percent, four percent, five percent, six percent. For, today I'm just going to look at the Pathway B. That's the mix of hybrids and advanced engines and mass reduction.

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CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: So here's a picture of the report that was issued on time on September 30th.

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CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: And here's what the technology would be required for this Pathway B depending on the stringency of the standard. This is what the model tells us. So if you look at the columns, the two columns labeled mass reduction, you can
see that they're all kind of the same. Take roughly 20 percent out, around 700 pounds out of the weight of the vehicle. And the reason they're all the same is twofold. One is in this modeling run, we said don't let the weight reduction get more than 20 percent. So we capped it. And second of all, the model always selected 20 percent weight reduction, because it turns out to be the most cost effective technology that you can use. And the next column called advanced engines, this is sort of a make the gasoline engine as efficient as a diesel, you can see that the model picked a lot of those types of vehicles, around 50 percent. And then what happens, depending on the stringency standard, is the model says, well, you fill in the rest, whatever is needed with hybrid electric vehicles. So at the three percent per year improvement, the first row, you see that only three percent hybrid electric vehicles are required. That's what's being sold in the United States today. So that basically says a three percent -- you don't even need to do any more hybrids than we have today. As you go down into the four, five, and six percent, you can see that the hybrids jump radically to around 50 percent almost of the new vehicles being sold. And again remember today they're only at three percent.
And on the right, it's very interesting to look at when does the model say you need to have electric drive vehicles that plug in order to meet these standards? And what you find is you don't need any until you reach six percent, and then it jumps to nine percent new vehicles. Only at six percent level do you need to start doing electric vehicles. This is not to say that people aren't going to do it for market reasons, and we see vehicles coming into the marketplace today.

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CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: So what did we learn from this? We learned technology is available to meet any of these percent improvements all the way up through and including six percent per year. The mass reduction is the most cost effective approach.

Highly efficient gasoline engines are on the edge now of becoming a potentially commercial product in the '17 to 2025 time frame. We're going to need hybrids if we go beyond three percent.

And that only EVs or plug EVs are only needed if we go to the six percent.

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CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: This is
starting to happen. Some pictures that help make this
ting come to reality.

Today, we have about 15 Prius-type conventional
non-plug-in hybrids on the road. Here's the number
they're coming in just 11 and 12, model years 11 and 12.
You can see there's at least a dozen more coming from
manufacturers that produces vehicles here for sale in the
United States.

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CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Here's
the plug hybrid electric vehicles. We have eight of them
coming in between now and the 2013 time frame.
Here's electric vehicles. I couldn't fit all of
them that have been announced. Here's almost a dozen of
them that will be offered for sale in the 2011-12 to 14
time frame.
And finally, fuel cell electric vehicles, of
which at least four -- I think even Hyundai would make
five, are planning commercial introductions in certain
regions, one of those being southern California in the
2015 to '16 time frame. So the market is starting to say
that these advanced technology vehicles are going to take
a try at commercialization.

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CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: So what
about the economics of all of this?

Here, again, are the three or the four stringencies ranging from three to six percent. And I've broken down what the incremental price to the consumer would be to meet these various stringency standards.

You can see the car range, it's under a $1,000 to as much as $2700. And for trucks from 1,000 to about $4300 incremental price.

So again for reference, when we did Pavley 1, the numbers were around $1,000 per vehicle. So this gives you an idea that these technologies are likely to be somewhat more expensive than we experienced in doing the 2009 to 2016 greenhouse gas standards.

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CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: This is the interesting part though. The low greenhouse gas emissions, of course, translates into very high fuel economy, as I showed on the other charts.

In the third column over, you can see what the fuel savings over a lifetime of operation of the vehicle are compared to the incremental price on the left. The one on the column two, I just combined cars and trucks, which is why it doesn't match the previous chart.

You can see that the fuel savings greatly exceed the capital cost increase to make vehicle -- on the right
is the breakeven point where the fuel savings actually
equal the higher cost of the vehicle. And you can see
that even at the six percent level there under 40 years,
meaning the first owner typically keeps the vehicle for
five years, would at least break even and subsequent
owners would benefit over the rest of the life of the
vehicle.

---o0o---

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: So our
conclusions and observations at least on this is life fuel
savings are far in excess of new vehicle price increase.
The first owner breaks even.

---o0o---

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Let's
move on to the real challenge now.

The real challenge, of course, is how do we get
an 80 percent reduction from vehicles by 2050. This is
the number that the Governor has set out as the target for
California for all sources. And given that passenger
vehicles are about a quarter of all the greenhouse gas
emissions, we've made the assumption here that we'll have
to get an 80 percent reduction from passenger vehicles as
well.

So what this chart shows is that gasoline
vehicles will decline, even the efficient ones, over the
years as we head towards 2050; that hybrids and plug hybrid electric vehicles will take a growing piece of the market share, but they will also not grow very large and it will be battery electric vehicles and fuel cell vehicles. And we don't know the actual mix here. This is just a guess. This is what is needed, not predicting what will happen. But this is what is needed to get an 80 percent reduction.

It says the future to meet a climate challenge of 80 percent is going to be electric drive vehicles that are fueled on fuels that have a low carbon content and those are petroleum. That's what the message is.

So what I thought I'd do is try to figure out is the effort of establishing standards for the 2017 through 2025 time frame in any way on track with this fairly -- I shouldn't say fairly -- this very challenging picture that's presented by this curve. So that's what we're looking at in the red circle.

--o0o--

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: This shows you what could happen with the 2016 through -- or '17 through 2025 standards.

This case in the first column, I have taken the six percent annual GHG reductions, which is the most stringent standards we looked at, and in the right hand
column is the 2020 plan, the 80 percent reduction.

What you have to have in 2025 to be on the path from the previous chart.

And we looked at it for HEVs, the kind of Prius type vehicles and for electric drive vehicles represented by plug in EVs and fuel cells.

So for the first row, I've sort of coded it yellow, which says we're not quite on track but pretty good. You know, we get four million of these vehicles rather than roughly six million that the previous chart would suggest. But because the electric drive vehicles don't seem to be required at any high rate, even at six percent, we find that we only have roughly half a million of them compared to 2.7 million. So we'd only be a quarter of the way to the goal, which could be the launch point for achieving that greater 80 percent reduction.

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: So what that tells us is that we're going to have to be at the upper end of the stringency range that we've assessed in order to keep on track for the 2050 goal, that the ZEV program is going to have to come in and compliment these greenhouse gas tailpipe standards in order to help jump start the commercial market for these more advanced electric drive vehicles, because the tailpipe standards
alone probably will not force them in this upcoming decade
and a half.

And that beyond 2025 is going to have to be very
rapid change to electric drive vehicles, and the
electricity and hydrogen that runs them is going to have
to be very low carbon intensity in order to have any
chance of meeting the 2050 goal.

--o0o--

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: What
are the next steps? We're continuing to work with EPA and
NHTSA. They announced they're going to put out another
document called the "Notice of Intent" in the end of
November to sort of update what we did at the end of
September. So we're working with them on that.

We're meeting with all the car manufacturers and
various stakeholders again to see what they think about
the technical assessment report. And we're going to take
all of the information, refine the analysis, and put it
into a proposal that we hope to bring to you in early 2011
that would set the greenhouse gas standards for the 2017
to 2025 time frame. Would also set more stringent
tailpipe standards for smog emissions, which I've not
mentioned here. And also reset the ZEV program for 2018
and beyond all as one package.

So we -- under this schedule, ARB would be
setting what we believe the future should look like for that ten-year period. And then EPA and NHTSA are continuing to work through their much more lengthy rulemaking process, and they will finalize that some time in 2012. So at that point, we'll see whether the results are close enough, that once again, we can bring to the Board a proposal to say let's let the national standards govern -- all the car companies would like because it means one fleet for the nation. That's what we have now for the current standards and what we would hope would occur for the later standards. But quite frankly I think it will come down what is the stringency of the two programs and how they match up. So that completes my presentation.

CHAIRPERSON NICHOLS: That's a very succinct presentation of something that's very complex. I really appreciate what you've done.

Are there questions now at this point? Or do you want to just absorb it? I see down at the end.

BOARD MEMBER ROBERTS: Could I ask just one? Because it's a big part of the future projection. Hydrogen fuel, not the fuel cell, but the fuel, is there something in the works that produces hydrogen fuel for low costs?

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Yes.
When you say low cost, I have to caveat that in that I think the goal is to see the hydrogen fuel be about the same price as petroleum fuels. But because the fuel cell vehicle is more efficient, that would drop the cost of operations cents per mile to at or below what the vehicles cost to operate when we're talking about fuel prices in the 2025 time frame, which is probably closer to five dollars a gallon. So yes, it's there. From a greenhouse gas standpoint --

BOARD MEMBER ROBERTS: Could you just stick with that for a minute? What is happening with respect to that fuel? What do you foresee happening?

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Where is it going to come from?

BOARD MEMBER ROBERTS: Yeah. Where is it going to come from?

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Right now, the main source of it is from natural gas. It's called steam reforming of natural gas. And the result of that is a 50 percent reduction in greenhouse gas as compared to petroleum today. That's at least a good first step towards this.

Ultimately, all these fuels have to come from some manner in which there's very little carbon used to produce them and for which you don't have a source where
the carbon is already sequestered. The carbon has already
sequestered in the form of gasoline, even natural gas. So
ultimately it's going to have to be some kind of renewable
source if we're going to get to these 80 percent
reductions.

But even a 50 percent reduction is a good first
start. And the efficiency of the vehicle can take that
resulting hydrogen a long ways. It's extremely efficient.
These fuel cell vehicles are 100 mile per gallon plus
vehicles. It's a big challenge. I mean --

BOARD MEMBER ROBERTS: There's why I'm asking.

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Where
are all these clean fuels? How are we going to do all
this is -- there's not a real clear picture yet. But
there are pathways that one can see that if we're lucky
we'll go down those pathways. Maybe it's going to come
from algae. Maybe it's going to grow dedicated crops and
farmlands to make some of these things. Maybe it's taking
coal and sequestering all of the carbon and producing
hydrogen out of it, which you can do today if you have a
way of transporting it from the coal fields, of course.
It big ifs. But all of those things are possible ways of
getting non-carbon and low-carbon fuels for these
vehicles.

CHAIRPERSON NICHOLS: Mrs. Riordan.
BOARD MEMBER RIORDAN: Yes. Thank you for an excellent report.

Quick question on fuel cell, which is so very important towards those later years. Were you apprised of the development and research that the major auto firms were doing? And do you feel it's an adequate amount of effort being placed on fuel cell? Because you're going to be relying on them heavily.

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Well, relying on them heavily in the post 2025 time frame, but not relying on them very much at all through 2025. What the car companies are basically saying is there are probably half of them of the major companies that are investing very, very large amounts of money in fuel cells. And what they're saying is, you know, if we're going to keep doing this, you guys have got to come up with the infrastructure. So what everyone is circling around is the Southern California cluster concept of setting up hydrogen fueling in the western part of Los Angeles so the initial cars on the orders of low tens of thousands of them could be brought into the marketplace in 2015 to test it all out. That's kind of the way it's starting.

The other path of the car companies I'd say are focusing more on only electric battery type vehicles and sitting back a little bit to see what happens with the
other ones who are going to try out the fuel cells.

They're all trying everything, but it is a matter of a focus.

So I think that if you look at the timing, battery electric vehicles could enter this early commercialization stage where they're selling fairly large numbers of them by at least a few manufactures in the -- by the 2015 time frame and that fuel cells are more like the next staff of the decade, where they're going to be trying to go through the same growth spurt to figure out whether people will like to use them or not.

They are always going to face the more difficult challenges that we have infrastructure for batteries. It's called the plug in your garage. And for $2,000, you can get a fast charge in your garage set up. We don't have that for hydrogen. So it's going to have to expand through the nation for fueling infrastructure in order to be a dominant vehicle as I showed. It's probably needed out in the 2050 time frame.

CHAIRPERSON NICHOLS: Well, even with all the enthusiasm and talk about electric vehicles now, we're not yet at the point where we've demonstrated we can have a successful commercialization. We're just at the very beginning of that. There is an exciting effort underway in California with a plug-in collaborative that's bringing
utilities together with the OEMs and cities and trying to get -- to be helpful but not get in the way of the process here.

But it's a challenge just to accommodate the new technology that the manufacturers already have available that they're going to be bringing to market and make sure that the experience of the drivers is one that's a real success and that we don't get hung up on arguments about how clean the electricity is, but actually are you cleaning the electricity. So all of those things are just -- I wouldn't take it for granted we're just going to -- we can assume we're going to have all these plug-in vehicles that we hope for.

Yes?

BOARD MEMBER SPERLING: I have two comments and a question.

The first comment is that, you know, we should recognize that ARB and California have been the leader both in terms of the zero emission technology electric drive technology through the ZEV program and more recently the 1493 Pavley rules that's implemented that were adopted nationally.

Number two, this extraordinary. For those of us that have been around and watched this for a long time -- and of course Tom Cackette has been the leader of all this
since the beginning and before. But it's extraordinary to see that here we're talking about these three to six percent per year reductions, when a few years ago we were talking about not any reduction at any time in the future. In CAFE standards were stuck for 25 years, 20 years.

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE:

Negative reductions.

BOARD MEMBER SPERLING: So I think we should honor and be impressed by the opportunities that now exist that the auto industry really is seeing these opportunities. And ARB working with EPA is showing -- doing the analysis, working with the industry to show that these large reductions are cost effective.

So the question though I have is that, you know, the tables you have showing the different percent reductions by 2025, I assume they do not include any credits that many people are talking about, including us, including here credits for advanced air conditioners, for the use of electric vehicles. Are these excluding those credits? Because if that's true, then that's even more impressive, that these kinds of percentage reductions --

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE:

Unfortunately, the answer is yes and no. On the greenhouse gas numbers that we showed for each percentage reduction, those include air conditioning -- improvements
to the air conditioning. So that doesn't actually effect the tailpipe. It effects global warming. And there's about 15 grams per mile in that.

For reference, the miles per gallon number we assumed you met the standard only with the tailpipe reductions. And so those with the air conditioning going on, that would -- improvements going on, that means those numbers would actually be a little bit lower.

BOARD MEMBER SPERLING: And digging a little bit more, but relating it to ARB actions, we had a program that I thought we decided to implement in 2016 that would be a performance-based approach to using better glasses and so on. Is that rolled into this program in some way?

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: It will be. But it's not in any way shown in the numbers I used today.

And there's other things in there. For example, there is a lot of discussion about not counting the upstream emissions from electric vehicles in the compliance approach. Sort of the idea is the car manufacturers can't control the cleanliness. So they're going to get zero grams per mile credit for meeting a fleet average, but there will be greenhouse gas emissions that come from the generation of the electricity.

But that's being treated not as an inconsistency,
but it's being treated as kind of a credit. It's a way of providing incentive for some electric vehicles to be used. The implication of that, of course, is that because it's a credit and not a complete real reduction, you'll have slightly higher greenhouse gas emissions from -- true greenhouse gas emissions from the fleet. But those kinds of things are being explored, but not showing at this level of detail. That will all be in the rulemaking packages. And our goal there is a lofty one of trying to make transparent what's really happening without getting caught in the weeds and the details. And these regulations which I know you all keep saying make it simple, please.

CHAIRPERSON NICHOLS: Thanks.

Ms. D'Adamo.

BOARD MEMBER D'ADAMO: I agree that this collaboration is really significant, and I think it's exciting as we go forward to see that at least everyone can agree on the numbers.

So what I'm wondering going through these slides here, is there a point where you break off from representing what's in the report and providing your conclusions? Looking specifically at slide 15 and beyond, is that -- are the federal agencies on the same page with
you with regards to observations as to the challenge to
meet the 2050 target?

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: All
through slide 16 including the observations, those are all
from the technical assessment report, and that's the joint
report authored by all three agencies. So I would say
they agreed to the facts.

Beyond that, you know, the federal government has
not really established any post 2025 goal. Lots of talk
about the 80 percent reduction in countries and states
many have adopted, but we don't have that as a firm goal
for the country as a whole. So I think they have not
looked quite as formerly at what does this mean beyond
2025, all though I think they all have it in their minds.

So it's something -- we try to emphasize it more
to put a context for the Board and for the public to see
what does this all mean. When we look at one little
snippet of time, how does this fit into the bigger
picture?

And the one thing I do want to say. In terms of
the agreement on the three, four, five, six, I don't think
the car companies all agree with that. The range of
numbers -- that tentative kinds of numbers -- I can't give
any names -- but I would say it ranges from under three to
as much as five as to what they say is possible by 2025.
CHAIRPERSON NICHOLS: No one is actually signing up for six percent yet.

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: No.

No.

CHAIRPERSON NICHOLS: Having a little bit of anecdotal experience just in the last few days, chatting with a few people out here, I would certainly agree with that.

I think the biggest challenge which I would highlight -- it I may be obvious here, but I want to make sure I say -- people obviously are facing serious investments decisions now for compliance future standards. And they're in a very challenging environment as we know, just as everybody is, but it's been particularly difficult specifically since they're operating at a global market.

But the issue about how hard we push in the direction of the ZEV mandate versus just allowing greenhouse gas emissions standards to continue to push in the direction of cleaner and cleaner conventional gasoline engines seems like that's a place where there could be some conflict with our federal partners, because EPA doesn't have a ZEV mandate. They don't have the ability to do what we do. They don't have that tool available to them. And yet, at the same time, the companies probably left to their own devices, unless the market forces really
get compelling, are going to put more money into
continuing to make the gasoline engines more efficient to
meet any standards that would be set. Isn't that a fair
assessment?

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Yeah.

I think the most common comment I hear from the car
companies related to that is when we get to these higher
percentages and the question is: Are electric vehicle
needed? For some of the companies where we say 9 percent,
they say 50 percent. So there is a difference in what
will it take to get to these numbers.

But when they do talk about that, they almost
always say, well, these other ones are zero, but we're not
doing -- we're doing it either for competitive reasons or
because ARB has a ZEV mandate. There's why they're -- I
think right now it's competitive. It is the ZEV mandate,
but it is competitive. When a few of these companies
stepped out on advanced technology vehicles, everybody had
to do it. They just can't risk being left behind.

CHAIRPERSON NICHOLS: Well, there's certainly
some exciting cars on the way.

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Yeah.

They are. If you get a chance to drive any of them,
please do, because they're fun to drive. And the ones
I've driven -- and the challenge of all these things, we
talked about infrastructure and getting clean hydrogen,
the immediate challenge is really the public, the
consumer. Will they buy these cars. Even the most
optimistic cost estimations are five to $10,000 more
expensive than a comparable vehicle today.

So the public is going have to see the value in
the fuel savings, and we're going to have to figure out
some policies at the state and federal levels to help put
this all together so that you're not just facing five or
six, seven-thousand dollar increment, but there's some way
that you can capture some of the fuel savings up front.
Doing that, like with financing for solar panels and
things like that, is being discussed. There needs to be
some I think kind of mechanisms beyond just the federal
$7500 tax credit right now.

CHAIRPERSON NICHOLS: I agree. And I do think
that although ARB is certainly a key player in this
discussion that it's becoming clear that other agencies
and other entities are going to have to play a role in
this transformation. It's not something we can do
completely from here.

Other questions, comments? If not, thank you
very much for the preview of coming attractions.
And we can move on to the consideration of
proposed amendments to the Airborne Toxic Control Measure
for stationary diesel engines.

EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman Nichols.

As with any regulation adopted by the Board, ARB staff continually tracked implementation and other related efforts of our rules. The information becomes available that would indicate amendments are warranted. We propose amendments for your consideration.

This is the case for the stationary diesel engine ATCM. Two years after you approved the ATCM, U.S. EPA promulgated new performance standards for stationary diesel engines.

Throughout our presentation today, we'll be referring to these regulations as the NSPS. In most cases, the NSPS requirements are similar to those in the ATCM. However, there are some provisions, particularly those for new emergency standby engines, which are different. Because of these differences, ARB staff conducted an evaluation to determine if it's appropriate to align the ATCM with the NSPS.

ARB staff worked closely with the local district staff and other stakeholders on this issue. Based on our evaluation, we believe it is appropriate to propose amendments to closely align with the federal NSPS.

Proposed amendments will retain the health protection
provided by the ATCM while resulting in significant future
cost savings.

I'd now like to have Mr. Ryan Huft of the
Stationary Source Division present the staff's proposal.

Ryan.

CHAIRPERSON NICHOLS: Could I just ask a
question? I apologize. But I know we have not taken a
break this morning, and our court reporter hasn't had a
break. I'm wondering how much testimony we have, whether
it would be smarter to take an earlier lunch break.

ASSISTANT CHIEF COREY: The presentation is about
ten minutes. And in terms of two to testify.

CHAIRPERSON NICHOLS: Only two speakers. Let's
go ahead and finish this item then.

(Thereupon an overhead presentation was
presented as follows.)

AIR RESOURCES ENGINEER HUFT: Good morning, Madam
Chairman and members of the Board.

Today, I will present the proposed amendments to
the Airborne Toxic Control Measure for stationary diesel
engines.

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AIR RESOURCES ENGINEER HUFT: The proposed
amendments are narrow in scope. Because of this, I have a
short presentation that is designed to provide you with
background on the ATCM, summarize the proposed amendments, and discuss the expected impacts.

AIR RESOURCES ENGINEER HUFT: First, a quick primer on stationary engines. Stationary diesel engines are generally categorized as either emergency standby or prime engines.

Emergency standby engines are those that are only used in emergency situations, such as the power outages, fires, or floods. These engines are generally operated less than 30 hours per year, and most of these hours are for maintenance and testing purposes.

Prime engines are used in many applications, such as compressors and cranes, and these can operate hundreds of hours per year.

AIR RESOURCES ENGINEER HUFT: In 2004, the ARB adopted the Airborne Toxic Control Measure for stationary diesel engines. The ATCM was part of the Diesel Risk Reduction Program and began implementation in 2005. It establishes emission standards along with operating, fuel use, and reporting requirements for emergency standby and prime diesel engines.

The local districts implemented the ATCM, and
compliance with the ATCM has been excellent, with most all
in-use engines already in compliance. As a result, PM
emissions have decreased by about 40 percent and NOx
emissions by about 20 percent between 2005 and 2010.

AIR RESOURCES ENGINEER HUFT: After the adoption
of the ATCM, in 2006, the U.S. EPA approved the new source
performance standards for stationary diesel engines, or
NSPS for short. The NSPS establishes requirements for new
stationary diesel engines. Most of the requirements are
very similar to those in the ATCM.

However, for new emergency standby engines, there
are key differences. The federal NSPS does not require
emergency standby engines to meet after treatment-based
emission standards, while the ATCM does.

Under the ATCM, beginning in 2011, operators will
need to purchase engines equipped with diesel particulate
filters for PM control, and in some cases, also selective
catalytic reductions systems for NOx control.

In developing the federal requirements, U.S. EPA
staff concluded that after treatment was not cost effective
for emergency standby applications due to the low hours of
operation.

As a result, under federal law, engine
manufacturers are not required to manufacture new
When we developed the ATCM, we assumed that emergency standby engines with after treatment would be available off the shelf as engine manufacturers produce engines to meet the progressively more stringent off-road standards. Since this is no longer the case for emergency standby engines, we re-evaluated the requirements in the ATCM to see if it would be appropriate to align with the federal requirements.

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AIR RESOURCES ENGINEER HUFT: Over the past several months, we have conducted our own independent analysis on the feasibility, costs, and availability of emergency standby engines with after treatment controls. We came to the same conclusion that U.S. EPA did: Given the low number of hours that emergency standby engines operate, in most circumstances, it is not cost effective to require after treatment-based emission standards. As a result, we are recommending that the ATCM be amended to more closely align with the NSPS.

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AIR RESOURCES ENGINEER HUFT: Now I will move on to the proposed amendments. However, before I go over them, I would like to emphasize three points.
First, the amendments we are proposing primarily affect the requirements for new emergency standby engines used in non-agricultural operations.

Second, we worked closely with the local districts, the engine manufacturers, and other stakeholders in developing this proposal. Based on the feedback that we have received to date, we believe that there is broad support for the amendments.

Third, the ATCM allows the districts to be more stringent than the ATCM if they believe the requirements are not sufficiently health protective for a particular situation.

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AIR RESOURCES ENGINEER HUFT: For new emergency standby engines, wither proposing to remove the requirement in the ATCM they meet after treatment-based emission standards beginning in 2011.

Consistent with the NSPS requirements, we are also proposing to require that new emergency standby engines to be certified to U.S. EPA's non-road standards.

These changes will closely align the requirements for new emergency engines with those in the federal NSPS.

However, we intend to keep the current provision in the ATCM that requires emergency standby engines that operate more than 50 hours a year for maintenance and
testing to have a diesel particulate filter. This will
ensure that the risk from these engines that operate a
higher number of hours is mitigated.

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AIR RESOURCES ENGINEER HUFT: We are also
proposing some other amendments to clarify requirements to
further align with the NSPS.

For prime engines, we propose to modify the prime
standards to correlate more closely with the NSPS.

However, this amendment does not really change the
requirements in the ATCM. Basically, these engines will
still be required to have a DPF installed to meet the
standards.

We propose to modify the sell-through provision
to be consistent with the NSPS requirements for prime
engines and remove the sell-through provision for
emergency standby engines as it will no longer be
necessary.

Minor changes to the definition and use of
emergency standby engines are being proposed to more
closely align with the NSPS.

And finally, we are proposing to modify the
reporting requirements for demand response programs so
that ARB will receive annual reports of their operations.

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AIR RESOURCES ENGINEER HUFT: Now I will move on to the environmental and economic impacts of the proposed amendments.

The proposed amendments retain the public health protection provided by the ATCM. Emissions from stationary diesel engines will continue to decline over the next decade. And in most cases, compliance with the ATCM will ensure the emissions and risk from stationary diesel engines are mitigated.

However, if there is a unique situation where additional controls are necessary, the districts can require them, either through a provision in the ATCM or via the Hot Spots Program and district new source review evaluations.

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AIR RESOURCES ENGINEER HUFT: The charts on this slide show the projected PM and NOx emissions over the next decade. The red line is the current ATCM and the blue line is the results of the proposed amendments. As you can see, the proposal retains the majority of emission reductions and emissions continue to decline over the next ten years.

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AIR RESOURCES ENGINEER HUFT: The proposed amendments will result in significant cost savings for
operators looking to purchase a new emergency standby engine. We estimate about 46 million will be saved annually between 2010 and 2020, with about half the cost savings going to public agencies and half to private businesses.

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AIR RESOURCES ENGINEER HUFT: In conclusion, the proposed amendments will ensure the ATCM will continue to protect public health. And at the same time, will result in significant future cost savings to the end users. We also believe that this proposal represents the best available control technology for emergency standby applications.

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AIR RESOURCES ENGINEER HUFT: That said, we recommend that the Board adopted the proposed amendments. Assuming the Board approves the proposed amendments, we also recommend that you direct staff to issue an implementation advisory. Some businesses may be in the process of purchasing new emergency standby engines that may be delivered next year. It is important to let them know that in the time period in which the amendments are being finalized, it will be permissible to purchase an emergency standby engine without after treatment.

Thank you. At this time, we will answer any
questions that you may have.

CHAIRPERSON NICHOLS: Any questions?

If not, they have two witnesses signed up to testify. The first is Timothy French from the Engine Manufacturers Association and Randal Friedman from the Department of Defense.

MR. FRENCH: Good morning. My name is Tim French. I'm here on behalf of the Engine Manufacturers Association.

EMA fully supports the proposed amendments to closely align the ATCM requirements for new stationary emergency engines with the federal NSPS requirements. The proposed harmonization will result in cost effective regulations that result in savings while still preserving the ATCM's public health and air quality benefits.

As you've heard and as you've read in the Initial Statement of Reasons, Tier 4 after treatment controls are not well suited or cost effective for emergency engines.

In addition it will not be economically viable for engine manufacturers in the future to produce a separate line of emergency standby engines solely for in California market.

Thus, the amendments at issue are both necessary and well justified in that regard. And as you've heard, the amendments will potentially save up to $46 million per year, and again will not cause any substantial significant
impact on any of the relevant emissions inventories. Accordingly, we fully support these amendments. And I also especially want to express EMA's significant thanks and appreciation for the work of your staff in this undertaking. When we came to them in 2009, we were foreseeing the NSPS was creating a misalignment in the creation of a sub-category of engines. We expressed those concerns to your staff, and they dove in. As you've seen, they've looked at the technologies. They've looked at the costs. And they've looked at the emission impacts and have come back with a very thorough, well-reasoned, carefully thought out proposal. And they've done it in a very timely basis in advance of the transition to Tier 4 in 2011. And we sincerely appreciate the good efforts. Their work here has been exemplary on your behalf. We thank you very much for your attention to this as well.

CHAIRPERSON NICHOLS: Well, thank you very much for that.

Mr. Friedman.

MR. FRIEDMAN: Madam Chair, Board members, today I'm wearing my Department of Defense Regional Environmental Coordination, as this is an Air Force issue. I just want to thank the staff for their recognition of our unique operational requirements and new mission requirements for something coming into California
regarding the military space planning and to say we're in support of this. And we look forward to continue working with you on our unique mission requirements.

Thank you.

CHAIRPERSON NICHOLS: Thank you very much.

All right. That's all the witnesses we have signed up.

Are there any concluding remarks from the staff? I don't know how you can top that. You can try.

DEPUTY EXECUTIVE OFFICER FLETCHER: I have just one comment. And that is that I think this is -- of all the regulations that Dan Donohoue has championed through this Board, this is the first one where there is not a 15-day package associated with it.

CHAIRPERSON NICHOLS: Congratulations, Dan.

EMISSIONS ASSESSMENT BRANCH CHIEF DONOHOUE: This is the first one out of 22 regulations that have I've come before the Board on and I haven't had to do a 15-day change on. So I can be hired now.

BOARD MEMBER RIORDAN: Madam Chair, I know you have to do some ex parte, but I would certainly at the appropriate time like to move the staff recommendation and issue the direction to the advisory to the appropriate companies.

And just as a comment, those of us who have
operated facilities, I'm thinking of hospitals, Boards of
Supervisors, operate hospitals, I'm thinking of
Ms. Kennard who's operated airports, and I assume there
are these emergency engines, and maybe even Ms. Berg has
one in her facility, but this makes such good sense.
Those are only turned on just to rev them up to be sure
they're going to work in an emergency and turned off. And
I just think this is the nicest way to go. And it makes
good sense. And I want to thank the staff for pursuing
it. Thank you.

CHAIRPERSON NICHOLS: You will be the maker of
the motion.
We will close the record at this time.
And we do need to ask for any ex parte
communication. Are there any Board members who have ex
parte communication to disclose? No. Nor do I.
Okay. Then we have a motion. Do we have a
second.
BOARD MEMBER BALMES: Second.
CHAIRPERSON NICHOLS: Second.
There anybody need to look at the resolution?
It's number 10-3-3. If not, I think I will just call for
a vote.
All those in favor, please say aye.
(Ayes)
CHAIRPERSON NICHOLS: Any opposed?

Motion carries unanimously.

Thank you. And congratulations to all.

We will take a lunch break, and we'll resume at 1:00.

CHIEF COUNSEL PETER: We're having a closed session today.

CHAIRPERSON NICHOLS: Yes, thank you for the reminder. There will be during the lunch break a report from our counsel on the litigation. Thank you.

(Thereupon a lunch recess was taken at 11:49 a.m.)
AFTERNOON SESSION

1:10 p.m.

CHAIRPERSON NICHOLS: We have some of our Board who are finishing their lunch in the back room and will be making their way accordingly.

I need the amounts we did hold an executive session over lunch, and we were briefed on pending litigation, but there were no Board decision or actions that were taken.

So we will move into our one remaining item for this meeting, which is diesel issues. And this is minor amendments to the Periodic Smoke Inspection Program in response to the inclusion of diesel vehicles in Smog Check, the title of this discussion.

And I'm pleased to say that as a result of reviewing the staff report that we're on track to implement our ever-other year inspection program for this category of diesel trucks, which is great. But the staff has also looking at the existing smoke inspection program and trying to figure out a way to reconcile these two programs.

So I'm going to turn this over now the staff for discussion.

EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman Nichols.
ARB's Periodic Smoke Inspection Program, or PSIP, has been in place for the past 12 years. It requires diesel-powered trucks greater than 6,000 pounds residing in California fleets to conduct annual smoke testing and perform repairs where necessary.

In 2007, legislation was signed into law that requires 1998 and after diesel-powered vehicles weighing 14,000 pounds and less to be included in the biennial smog check program starting in 2010.

As a result, the two laws required that the owners of approximately 76,000 diesel-powered vehicles would have to perform both the PSIP and smog check inspection on some portion of the vehicles in any given year. While each program has slightly different focuses, both are expected to result in reduction of diesel PM emissions by controlling visual smoke. However, we don't believe there is a PM emission benefit from conducting both testing programs in a single year.

Staff has developed a proposal to require only one type of smoke test, either PSIP opacity or smog check visual smoke, to be performed in any one year. This will remove the duplicate testing and maintain the requirement of annual testing consistent with the larger trucks not subject to smog check.

Mr. William Sobieralski will present the proposal
AIR RESOURCES ENGINEER SOBIERALSKI: Thank you, Mr. Goldstene.

Good afternoon, Chairman Nichols and members of the Board.

I will be presenting staff's proposal to amend the Periodic Smoke Inspection Program in response to recent legislation that incorporates smaller diesel trucks, as illustrated on this slide, into the smog check program.

As mentioned by Mr. Goldstene, this results in unnecessary and duplicate test requirements for a small portion of the diesel trucks which we are proposing to correct with this action.

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AIR RESOURCES ENGINEER SOBIERALSKI: First, I would like to present some background on the two programs, the Periodic Smoke Inspection Program, or PSIP, and the Diesel Smog Check Program.

The PSIP is required by statute and has been implemented by regulation since 1998. The PSIP requires annual smoke opacity inspections on diesel trucks, weighing over 6,000 pounds and residing in a California
fleet. A fleet is defined to consist of two or more diesel trucks. We estimate that approximately 379,000 trucks are subject to the PSIP in 2010.

Trucks determined to have excessive smoke must be removed from service, repaired, and re-tested before being put back into service. Fleet maintenance records and smoke test results must be kept for two years and are subject to ARB audits. The average cost of PSIP smoke test is $55.

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AIR RESOURCES ENGINEER SOBIERALSKI: The second program was established by Assembly Bill 1488 mandating the addition of diesel vehicles into the Smog Check Program. All 1998 and newer diesel vehicles weighing 14,000 pounds or less were pulled into the program this year.

Diesel smog check is a registration-based biennial program which will affect approximately 511,000 vehicles, half of which will require a smog check in 2010. The vast majority of these trucks in smog check are privately owned and not subject to the proposal before you today.

A diesel smog check inspection consists of a visual tampering inspection, an on-board diagnostics check, and a visual smoke test. The estimated cost of the
Since the implementation of diesel smog check, this past January, approximately 77,000 commercial fleet trucks are now subject to both the PSIP and Smog Check Program, with approximately 38,500 trucks subject to both smoke tests each year. Staff estimates that this duplicative testing will cost fleet owners $2.1 million annually.

This slide shows graphically the current situation where a fleet owner is required to perform both an annual PSIP and a diesel smog check inspection every other year. Approximately 77,000 trucks are subject to both programs. Keep in mind that both programs require a truck to pass some form of a smoke test. We are proposing to eliminate the duplicative test, saving the industry $2.1 million a year.

Staff is proposing to allow the mandatory smog check test to be substituted in place of the PSIP smoke test. This would result in only one test being required per diesel truck in any one year as illustrated in this slide.
All other diesel vehicles not covered by smog check would still be subject to an annual PSIP test.

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AIR RESOURCES ENGINEER SOBIERALSKI: To evaluate the air quality impacts of the overlapping test requirement, staff performed an air quality impact assessment. These trucks emit lower emissions per mile and travel less miles than the larger line haul diesel trucks.

Therefore, while the 77,000 commercial trucks represent about ten percent of the diesel truck population, they account for less than one percent of the PM emissions.

In addition, staff's evaluation of the PSIP opacity testing and smog check smoke visual test leads us to believe the PM benefits will be similar with both types of testing. Therefore, duplicative emissions tests in a single year are not expected to provide any additional PM benefits.

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AIR RESOURCES ENGINEER SOBIERALSKI: Staff considered two alternatives. The first alternative is to leave the PSIP regulation as currently written. However, this option results in unnecessary costs to fleet owners.
The second alternative considered is to exempt the 77,000 trucks that are now subject to smog check from PSIP. This alternative provides a cost savings of $4.2 million annually to fleets, but would have a small adverse PM emission impact of approximately 0.01 tons per day or 3.65 tons per year.

AIR RESOURCES ENGINEER SOBIERALSKI: We have received some comments on the staff's proposal. While none are against the direction of staff's proposal, some feel that staff should go further to alleviate the inspection costs to industry by exempting the 77,000 diesel trucks entirely from PSIP.

The agricultural community is also concerned that their members were not aware of PSIP and feels the smog check program is sufficient to control emissions while not adding any undue burden to truck owners.

AIR RESOURCES ENGINEER SOBIERALSKI: In closing, staff recommends that the Board adopt the proposed amendment to the PSIP regulation to allow a passing diesel smog check inspection to be used in place of a PSIP smoke test for those years when a diesel smog check is required. This would allow for a $2.1 million cost savings for California fleets without any compromise to emissions.
Finally, staff will commit to further public outreach to the affected industries and will enhance its outreach efforts through fleet visits, presentations, and through our existing truck stop website.

This concludes the staff's presentation. We would be happy to answer any questions. Thank you.

CHAIRPERSON NICHOLS: Thank you.

I want to ask one question about your concern or your suggestion that alternative two -- actually, I'm not sure there is alternative two. You're looking at an alternative which exempted all of the trucks that are in the program from -- didn't raise the suggestion that we would eliminate the PSIP for all the trucks that are subject now to smog check; is that right? That's not included at all. It is alternative two.

But you're recommending -- I'm sorry. Excuse me. I misread the slide. I apologize.

In alternative two, I really wanted to focus on the question of whether your assumptions about the emissions that would be increased as a result of that, what that was based on. Does that assume that we are enforcing or we would be enforcing the PSIP program for all of those trucks that were subject to -- is that how you got that number?
Annette Hebert, Chief of the Mobile Source Operations Division.

I think our primary assumption is based on the original regulatory development for PSIP and heavy-duty smoke in that it was shown that having an annual smoke test provided a greater benefit than not having an annual smoke test. So with that assumption, exempting the vehicles would mean you go back to only having a smoke test every other year. So we assumed if you don't have the annual smoke test, you would probably lose some of those emissions that expected from a smoke test in that year.

CHAIRPERSON NICHOLS: But we do believe that the smog check test is considerably more effective, right, than a visual smoke test.

MOBILE SOURCE OPERATIONS DIVISION CHIEF HEBERT: We believe in the year that the smog check test is performed it would be as effective if not more effective as an OBD interrogation and tampering inspection.

The concern comes in the second year how effective will it be in the second year and how long would it hold out versus have an annual inspection. I think the way we see it is having annual tests more often leads to greater benefit.

CHAIRPERSON NICHOLS: Well, obviously the concern
here is a tradeoff of whether the cost is worth the benefit that we're getting. Because I'm questioning the number in terms of the benefit that we assign to the program, when we don't actually have any data based on any enforcement to know whether that works or not.

Supervisor Roberts.

BOARD MEMBER ROBERTS: That's I wanted to pursue that. I mean, if I'm reading this correctly and listening to you as intently as I can, it's over a million dollars a year per ton. And, I mean, I can't remember anything with that kind of performance.

You're saying we're going to actually -- the cost savings is 4.2. So I presume that's what's would be paid for those tests that are going to be held every other year. And we're looking at a total of 3.65 tons for year.

MOBILE SOURCE OPERATIONS DIVISION CHIEF HEBERT:

There's correct. It's because the savings is from not having the smoke test in a year, which roughly half the vehicles will not be smoke tested at all every other year. And then half the vehicles will go through a smog -- you see, it's like the total 77 any one year only 38,000 trucks would be tested.

BOARD MEMBER ROBERTS: The point I was getting to, it seems like there was a lot of money involved with a minuscule benefit here. And that's my concern.
CHAIRPERSON NICHOLS: I think the problem, of course, is always we hate to do backsliding. So I'm just trying to figure out if this really does represent backsliding. In my mind, it's somewhat questionable whether there actually is that much of a loss.

Ms. D'Adamo.

BOARD MEMBER D'ADAMO: Well, I'm concerned on a number of fronts.

First of all, on the issue of outreach -- and I've spoken with staff about this. And I do believe that staff did make efforts with respect to outreach.

But for whatever reason, the folks I've been talking with in the ag community, it just hasn't filtered on down to them. And initially when I started looking into this reg, I was picturing a medium-sized truck. But the 6,000 pound truck is -- every farmer has got one of those, and many of them have two or more. So I can see where things may have slipped through the cracks.

So at a minimum, I think if we continue this, we'd have to go back and do some significant outreach.

Most people I talk with don't even know what a smoke test is. Smog test, you know, that's in the realm of everybody knows about anyway.

With respect to alternative one versus alternative two, a couple questions.
First of all, when I spoke with staff about this, I thought the emissions increase, I was told was on the .01. And now it's gone up significantly. And just wondering why the change, first question.

And then second question has to do with cost effectiveness. Where would this fit in with our other regulations? And I know staff have given me some information. But rather than me reporting it to the Board, it would probably be better to hear from staff how this compares to our other diesel rules in terms of cost effectiveness. Because I think this might be out of whack.

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Let me first say the 01 versus three, that's the tons per day versus tons per year. I's just a calculation.

You know, the difference -- I'm not sure I can do the calculation in my mind and get it right.

But the difference here is the PM, the costs per pound of PM reduction is substantially numerically higher than it is for what we normally think of for HC and NOx.

So, for example, the diesel rules are something on the order of 60, 80, to $100 a pound for PM, and they're one dollar, five dollars a pound for NOx. That's just what they are. And so what I have to do is try to calculate it by pound here to figure out whether --
BOARD MEMBER D'ADAMO: I think Annette had something.

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: They're saying it's 287, which is at the upper range of the -- we had a rule. I believe that was in the $200 per pound of PM reduction that the Board adopted.

I think it was one of the retrofit rules for municipal fleets or something like that that was -- that was an example of one that was at the upper range.

There's no absolute value for dollars per ton. It's a relative thing. It is a lot worse or better than things we've done in the past. This would be at the upper range.

BOARD MEMBER D'ADAMO: I'll just read what I had and what I got from Annette made a little bit of sense to me anyway, that this rule would result in $287 a pound.

And the truck fleet rule is $40 a pound. And the public fleet rule is about 160 a pound. So if you have a chart? It looked like you had a chart over there. Is that something that you could put up on the board?

BOARD MEMBER BERG: Ms. D'Adamo, did you see that the original smoke opacity program was $1.12 a pound?

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Those are the numbers that -- was that for PM per pound?

BOARD MEMBER BERG: That's what I was given.
CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Does it say for PM?

BOARD MEMBER BERG: It doesn't say. It just says for the 800,000 trucks impacted.

MOBILE SOURCE OPERATIONS DIVISION CHIEF HEBERT:

Yes.

CHAIRPERSON NICHOLS: While we're gathering the information, maybe we should go to the witnesses and hear from the public on this one and then we can draw this back together again.

CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Let me just say the $1.12 includes NOx which makes it hard to compare the other numbers.

BOARD MEMBER BERG: I appreciate that additional information.

CHAIRPERSON NICHOLS: We had three witnesses who had signed up on this item: Cynthia Cory from the Farm Bureau Federation, followed by Kendra Daijogo from the Gualco Group and Bonnie Homes-Gen.

MS. CORY: Good afternoon, Chairwoman Nichols and members.

Cynthia Cory, California Farm Bureau.

I've been thinking about this for a while, and I'm going to forget everything I was going to say.

First off, I agree with a number of the comments
that have been made. This was not on my radar screen. As you know, because talked to me many times about the truck rule, was very involved, heavy-duty and agriculture does not mean pickups. I've kind of heard about this rule. I never ever, ever, ever thought it belonged to my community. And I would have been very happy to talk to my community about it, if I had known that.

And I don't blame that completely on ARB. If you look at Vehicle Code, there's 25 million definitions of heavy duty and medium duty and light vehicle. I can show you all of them, and they're all over the place. Heavy duty does not mean pickups to a farmer.

It was off my radar screen until about a month ago when I got a call from a Salinas rancher who got a $16,000 fine for the smoke test. And so it caught my attention big time.

And so I put that article out. And I want to tell you, I've been working for the Farm Bureau for 20 years. I've never gotten so much feedback.

One thing I'm going to do for sure next time is put a frown on my face instead of a smile, because one of my farmers called and asked to quit the Farm Bureau because he thought that my smiling face was denoting that I thought it was a great idea. All I was trying to do is say here is the facts. You need to comply. I didn't
mention anybody being fined. I just said here's what's going on. By next time I know I have to put a frown on the compliance.

One of the things I wanted to bring to your attention -- I'm glad you're talking about this. In one of my discussions with the Board members, this was mentioned. I'm an ergonomist. I'm not an economist. When I look at the cost savings that have been put forward, the 4.2 million, the savings is the fact that you don't have to do two smoke tests in a year. To me, that's just common sense. So now I don't have to do two smoke tests in a year. So I can save a savings of $4.2 million. That's because they're using 55 dollars as the cost of the test. And that's it. They're not taking into account that I know it's going to take a half an hour to do that. So let's say $10 for my time. And that's very conservative. $10 for my half-hour. So you say that $10 times 4.2, I think that's 42 million. Right.

What about the fuel? I know in northern California you have to travel quite a ways to find a diagnostic center that will do this test. So let's round it off to 50 million. That makes a difference to me. It's much bigger than the 287 you're looking at. Double it. Triple it.

I can assure you that September 1st, I have
already gotten you .01 tons per day already. Already. I can vow it. If you do -- I've already called the staff. I said I will work with you. You know me. I will do anything to get the word out and get my guys in compliance. But I was not ever called and told, hey, you need to do this.

And I've already got in place with one of the staffers we're going to do outreach with ARB -- outreach with ARB to my membership and that I -- I ask that you pick alternative two, which is to do PS -- only do smog check and not have to do PSIP also for 1998 and newer vehicles.

Thank you.

CHAIRPERSON NICHOLS: Thank you.

MS. DAIJOJO: Madam Chair and members, I'm Kendra Daijogo on behalf of the Gualco Group on behalf of the California Council for Environmental and Economic Balance. We appreciate the work that you've done and staff has done on this issue.

And I agree that although it says minor amendment, it is a major concern to our membership. Our membership crosses over -- is business, labor, and public members. And I can tell you our business members are statewide. We have folks who regulate at the local level and provide services at the local level and state level
publicly and privately. They are all concerned about this.

We agree with the staff alternative number two. We agree that this would be almost straightforward approach, and we would urge you respectfully to take that into consideration.

And one of the -- one more point. I think that there is confusion out there not just in the agriculture community, but in the business community as well as to what doing one test or the other or both tests would mean in a single year or every other year.

So I would add to your burden of if this does move forward, if there is outreach, that you continue to do outreach to not just agriculture, but urban folks as well.

One of the unintended consequences that we do see if this does move forward is there will have to be some type of internal recordkeeping. And so that means a whole new system that needs to be created within these businesses in order to ensure compliance.

So thank you so much for your time.

CHAIRPERSON NICHOLS: Thank you.

Bonnie Holmes-Gen.

MS. HOLMES-GEN: Good afternoon, again Madam Chair, Board members.
And I'm Bonnie Holmes-Gen with the American Lung Association of California.

And we were a strong supporter of the legislation that brought diesel vehicles in the smog check program and we continue to think that both the smoke test and the smog check are very important components. And we do remain concerned about the public health impacts of diesel emissions. And annual smoke inspections do play an important role in keeping vehicles maintained and therefore reducing public exposure to diesel pollution.

You're looking at numbers that frame the total emission impact of these two alternatives, but we are concerned that you also think about the near source impacts. These vehicles are traveling through communities and neighborhoods, and there are a lot of people who are impacted just because they live close to highways or facilities where these vehicles are operating.

So we're just considering the fact these requirements have been on the books for 12 years and fleets have been, as far as we understand, under legal obligation to conduct the smoke checks every year. So it seems reasonable to us to blend the two requirements and have the smog check one year and smoke test itself implemented. So they don't have to take it to a smog check station.
I just think that there are, again, some near-source impacts that aren't being taken into consideration. There are still a lot of information that we're learning about diesel vehicles and the smog check program, getting a better understanding that the durability and the consistency of the diesel smog -- of the equipment on the diesel vehicles that's reducing emissions. And I think there is a lot of uncertainty about how these vehicles are going to operate over time.

So from our perspective, we feel it would be a better safety net to keep both programs going, the smoke test and the smog check.

CHAIRPERSON NICHOLS: Thank you.

Does the staff have the chart up? Are you ready to talk about that now?

EXECUTIVE OFFICER GOLDSTENE: Do you want to explain it?

CHAIRPERSON NICHOLS: Do you want to explain it?

MOBILE SOURCE OPERATIONS DIVISION CHIEF HEBERT: Just keep in mind on that first one, which is misspelled, there may be an error I made also include NOx, the 112 per pound. The rest we're pretty confident that that was PM-related cost effectiveness numbers. And as you go down the list, you'll see different ones.

Probably the highest one is a public fleets rule
that was adopted quite some time ago, which is really one of the few that go below the 14,000 because we have to keep in mind that the smaller the truck, the less emissions they're going to emit per mile and have less VMT, so there's less tonnage coming out of them.

CHAIRPERSON NICHOLS: Well, I wasn't given his proxy, but I did have an opportunity to talk with Dan Sperling, who had to leave to go teach his class, but who expressed his view that the smog check program that is going to be now effecting this category of vehicles that we're talking about here and which is OBD based is so much more effective than any possible smoke test that we could do, but especially at least in his view the current smoke test, which he is not very fond of I guess or not very impressed by that he was recommending that we simply waive the smoke test for the vehicles that are in this biennial smog check program. It's a brand new program. So we're predicting how effective it's going to be.

But I think it is rather hard to say that a program that we have not really been enforcing at least in certain communities is getting us a lot of reductions. Now, whether we should be enforcing this smoke program is a different question. I know I've seen enforcement actions coming across my desk for fleets that were urban-based fleets. It's not like this rule is a dead
letter. We do smoke checks on different vehicles. But I think on this particular category of vehicles that hasn't been the focus. It hasn't been considered the most important.

So I'm open to the proposal that we simply -- that we simply go with option two, if others are inclined in the same direction.

BOARD MEMBER ROBERTS: Yeah, Madam Chair, I mean, I feel that's not an unreasonable thing to be doing. And I think we'll find that 1/100th of a ton somewhere, but at the cost and the confusion of these programs themselves. I think we want to simplify things. At the end of the day, we want to get real results. And I think this is an example of alternative two I think is a good suggestion.

CHAIRPERSON NICHOLS: If we do go in that direction --

BOARD MEMBER ROBERTS: I would move that.

CHAIRPERSON NICHOLS: I would like to see the staff come back to the Board not only with some results on the smog check program, which we probably won't know for a couple years given it's brand-new, but also maybe some mechanism for follow up on some of the trucks that do go through smog check to see if we're experiencing this kind of fall off in emissions benefits from the program that we have seen on the light-duty side where we know that
cars that fail once are likely to fail again the next year.

Yes?

BOARD MEMBER BALMES: I just want to echo what Ms. D'Adamo said about outreach. I mean, obviously the staff has tried getting the word out.

But I think based on the communications we've all gotten various letters and testimony today, we have to do a better job at outreach. I'm not a communications expert, so I'm not sure how that should be done.

But it seems like it would be easier to do it on smog check, because everybody knows about smog check for their cars. So it would seem it would be easier to have effective communications about smog check for a new class of vehicles then to have to try to bring the smoke test back up to speed communications wise. So I guess I'm leaning towards doing away with the smoke test.

CHAIRPERSON NICHOLS: Other Board members have any comments this point or a second?

BOARD MEMBER RIORDAN: I'll second the motion.

CHAIRPERSON NICHOLS: We have a motion and a second to substitute -- I guess it would be a suspension of the smog check.

BOARD MEMBER BERG: Take alternative two.

EXECUTIVE OFFICER GOLDSTENE: We should do ex
CHAIRPERSON NICHOLS: Yes, we should before we vote on anything. Absolutely correct.

Any down at this end? Any meeting that anybody has?

BOARD MEMBER D'ADAMO: Yes. Day before yesterday I spoke with Justin Olfield with the California Cattleman's Association.

And then I think it was prior to the 45-day period, but I'll just mention it anyway that I spoke with Cynthia Cory regarding the same issues that she brought up today.

CHAIRPERSON NICHOLS: And I had a meeting with that included staff and also included Justin Olfield from the California Cattleman's Association, Cameron King from the California Association of Wine Grape Growers, and Kendra Daijogo in which they covered the same points that they raised here.

Any others?

BOARD MEMBER BERG: On October 19th, I had a phone call with Kendra Daijogo and also Justin Olfield and Cynthia Cory, and our conversations mirrors their testimony today.

BOARD MEMBER ROBERTS: I do have one to report. On October 15th, I had a telephone conversation with Eric
Larsen who's with the San Diego County Farm Bureau, and he expressed his concern of the confusion that results from these two different tests.

CHAIRPERSON NICHOLS: I suspect that the staff doesn't feel very strongly about this issue one way or the other, although I think they've done a valiant effort to explain the reasons why we might want to keep the smoke test in effect in the alternate years. And I think you know there is -- it's hard to simply waive a program that you had in effect, even if you don't think it's getting much in the way of results. But hopefully this will enable us to focus our very limited resources in the enforcement and outreach area on the program that we think is the one that's likely to get us the best results.

BOARD MEMBER BERG: I think that's a very important point, Chairman. And I would like to re-affirm that the smoke test is in place for all diesel vehicles 14,000 pounds or greater every year.

EXECUTIVE OFFICER GOLDSTENE: That's right.

MOBILE SOURCE OPERATIONS DIVISION CHIEF HEBERT: And those under 14 that are older than 1998.

BOARD MEMBER BERG: And those that are under 14. So I think that's an important --

CHAIRPERSON NICHOLS: Very limited slice of vehicles that are actually covered by this new program.
BOARD MEMBER RIORDAN: And the vehicle that is going to probably be more problematic is covered. And we would hope that with good care newer vehicles are going to pass these tests and not have any problems.

EXECUTIVE OFFICER GOLDSTENE: We'll be able to monitor that more closely and keep you posted if we see the need to make any adjustments and let you know what the results are over time.

CHAIRPERSON NICHOLS: All right. Then we do have a motion and a second. I think everybody understands what we're voting on.

Would all in favor please say aye?

(Ayes)

CHAIRPERSON NICHOLS: Opposed?

Okay. It carries.

The only other item we have left is public comment. We have two people who signed up for the general public comment on matters that are not in front of the Board for any action at this time. So no action can be taken. But we will listen to what they have to say.

So would Hank DeCarbone and Betty Plowman please come forward. Thank you, staff. Good job.

MR. DECARBONE: I'm going to pass.

CHAIRPERSON NICHOLS: All right. Ms. Plowman, come over to this one because of the mike on it.
MS. PLOWMAN: Once again, good afternoon.

You know, I identify myself as being with the California Dump Truck Owners Association, and today I've written down I'm with the Ad Hoc Working Committee. And I've come before you today to ask you to direct staff to separate the on- and off-road diesel rules, which would give staff more time to reduce the requirements for the on-road trucks.

The Ad Hoc Working Committee commissioned an independent study because staff has repeatedly refused requests for the underlying data and the emission models and inventories prepared in the run up to the 2008 truck and bus rule.

The group has also been persistent in asking for an independent science studies on CARB's public health determinations.

We have had no response basically, and we felt it was necessary to form this group. This was made up of individuals in the trucking business, because we did get such little help from staff. So we did have our own report. And once again, it appears that you've overestimated the truck and bus emissions.

So I would like to just finish up by saying that this was released today to the press. The study was done by 12:30 this afternoon. This study was done by Sierra
Research. And we ask you for time and can we please get it right. Thank you.

CHAIRPERSON NICHOLS: Okay. Thank you, Ms. Plowman. I'm sure the staff will take a look at this Sierra Research report and let us know what it says and factor it into their recommendations.

We're expecting we believe in December to have the staff recommendations on both the on-road and off-road, but I certainly would encourage staff to look at the Sierra Research results before that and let us know if there's anything that needs to be changed.

EXECUTIVE OFFICER GOLDSTENE: We will.

CHAIRPERSON NICHOLS: Okay. Thank you. And with that, if there are no more public commentors, we will be adjourned.

(Thereupon the California Air Resources Board meeting adjourned at 1:46 p.m.)
CERTIFICATE OF REPORTER

I, TIFFANY C. KRAFT, a Certified Shorthand Reporter of the State of California, and Registered Professional Reporter, do hereby certify:

That I am a disinterested person herein; that the foregoing hearing was reported in shorthand by me, Tiffany C. Kraft, a Certified Shorthand Reporter of the State of California, and thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said hearing nor in any way interested in the outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 3rd day of November, 2010.

TIFFANY C. KRAFT, CSR, RPR
Certified Shorthand Reporter
License No. 12277