APPEARANCES

BOARD MEMBERS
Ms. Mary Nichols, Chairperson
Dr. John Balmes
Ms. Sandra Berg
Mr. Hector De La Torre
Mr. John Eisenhut
Supervisor John Gioia
Mayor Pro Tem Judy Mitchell
Mrs. Barbara Riordan
Supervisor Ron Roberts
Supervisor Phil Serna
Dr. Alex Sherriffs
Professor Daniel Sperling

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Mr. Richard Corey, Executive Officer
Mr. Alberto Ayala, Deputy Executive Officer
Ms. Edie Chang, Deputy Executive Officer
Ms. Lynn Terry, Deputy Executive Officer
Ms. Ellen Peter, Chief Counsel
Ms. La Rhonda Bowen, Ombudsman

Ms. Violet Martin, Air Pollution Specialist, Compliance Assistance and Outreach Branch, Mobile Source Control Division
APPEARANCES CONTINUED

STAFF

Mr. Mike McCarthy, Vehicle Program Specialist, Mobile Source Control Division

Mr. Jim McKinney, Manager, Alternative and Renewable Fuels and Vehicle Technology Program, CEC

Ms. Marcele Surovik, Air Pollution Specialist, Energy Section, Stationary Source Division

Ms. Anna Wong, Air Pollution Specialist, Zero Emission Vehicle Implementation Section, Mobile Source Control Division

STATE REPRESENTATIVES

Deb Markowitz, Vermont Representative

Anne Gobin, Connecticut Representative

Ashley Horvat, Oregon Representative

Kathy Kinsey, Maryland Representative

Christine Kirby, Massachusetts Representative

ALSO PRESENT

Mr. Alan Abbs, Tehama County APCD

Mr. Jason Barbose, Union of Concerned Scientists

Mr. David Barker, Subaru

Mr. Will Barrett, American Lung Association

Ms. Gretchen Bennitt, Northern Sierra AQMD

Mr. Robert Bienefeld, Honda

Mr. Kirk Blackburn, California Tow Truck Association

Mr. Clinton Blair, Jaguar/Land Rover
ALSO PRESENT

Mr. Constance Boulware, Yolo Solano AQMD
Dr. Rasto Brezny, MECA
Mr. Ryan Briscoe Young, The Greenlining Institute
Mr. Jack Broadbent, Bay Area AQMD
Mr. Rick Bosetti, Mayor of Redding
Mr. John Cabaniss, Jr., Global Automakers
Mr. Bud Caldwell, Alliance of California Business
Mr. Frank Caponi, LA County Sanitation Districts
Mr. Tim Carmichael, CNGVC
Ms. Angela Casler, Sustainability Alliance for California Business
Mr. Bob Cassidy, Nissan
Ms. Cynthia Cory, California Farm Bureau Federation
Mr. Matt Cox, Senator Ted Gaines
Ms. Pat Cramer, Pat Cramer Ins. Agency
Mr. Marlin Skip Davies, Yolo Solano Air District
Mr. Hank De Carbonel
Ms. Tanya Derivi, SCPPA
Mr. Steven Douglas, Alliance of Automobile Manufacturers
Ms. Mary Jo Dutra, SAFE-BIDCO
Mr. Evan Edgar, California Refuse & Recycling Council
Mr. Allen Faris, Allen Faris Trucking
Mr. Greg Furlong
ALSO PRESENT

Mr. Douglas Gearhart, Lake County AQMD
Mr. Larry Greene, Sacramento Metropolitan AQMD
Ms. Morgan Hagerty, CE2 Carbon Capital
Ms. Claire Halbrook, PG&E
Mr. Frank Harris, Southern California Edison
Mr. Michael Hartrick, Chrysler Group, LLC
Ms. Vicki Helmar, Tuolumne APCD
Mr. Paul Hernandez, CCSE
Mr. Tony Hobbs, BTI
Mr. Henry Hogo, South Coast AQMD
Ms. Bonnie Holmes-Gen, American Lung Association
Mr. Raymond Horspool, Omstar International LTD
Mr. Steven Jones, Garden City Sanitation
Ms. Trish Kelly, Applied Development Economics
Mr. Jamie Knapp, Clean Cars Campaign
Mr. Paul Larking, Co-Chair Port of Oakland Truck Work Group
Ms. Barbara Lee, Northern Sonoma County Air Pollution Control District
Ms. Julia Levin, Bioenergy Association of California
Mr. Michael Lewis, Construction Industry Air Quality Coalition
Mr. Richard Lokey, Lokey Trucking
APPEARANCES CONTINUED

ALSO PRESENT
Mr. Michael Lord, Toyota
Mr. Tony Luiz
Mr. Ian MacDonald, Clean Diesel Technologies, Inc.
Mr. Bill Magavern, Coalition for Clean Air
Mr. Mike Manna
Mr. Paul Mason, Pacific Forest Trust
Mr. Joe Matlen, Valley Farm Transport
Ms. Erika Morehouse, Environmental Defense Fund
Mr. Edward Moreno, Sierra Club
Mr. Ken Morgan, Tesla Motors
Mr. Simon Mui, NRDC
Mr. Diarmuid O'Connell
Mr. Justin Oldfield, CA Cattlemen's Association
Mr. Dave Patterson, Mitsubishi
Ms. Tanya Peacock, Souther CA Gas Company
Ms. Karen Pelle, Truck Drivers
Mr. Charlie Peters, Clean Air Performance Professionals
Ms. Betty Plowman, CCTA
Mr. Michael Quigley, CA Alliance for Jobs
Ms. Tiffany Rau, Hydrogen Energy California
ALSO PRESENT
Ms. Julia Rege, Global Automakers
Dr. David Reichmuth, Union of Concerned Scientists
Ms. Mary Rose Taruc, Asian Pacific Environmental Network
Mr. Daniel Ryan, Mazda
Mr. Seyed Sadredin, San Joaquin Valley APCD
Mr. Chris Shimoda, CTA
Mr. Don Siefkes, E100 Ethanol Group
Mr. Richard Skaggs, Omstar Environmental Products USA
Mr. Matt Solomon, NESCAUM
Mr. Blain Stumpf
Ms. Tara Thronson, Valley Vision
Mr. Chris Torres, F&L Farms Trucking, Inc.
Ms. Eileen Tutt, CalETC
Mr. Jim Wagoner, Butte County AQMD
Mr. Michael Wang, WSPA
Mr. Chuck White, Waste Management and sWICS
V. John White, Center for Energy Efficiency & Renewable Technologies
Ms. Katherine Yehl, Volvo
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CHAIRPERSON NICHOLS: We will now come to order. And ask everybody to stand so that we can say the Pledge of Allegiance. 

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

CHAIRPERSON NICHOLS: Madam Clerk, would you please call the roll? 

BOARD CLERK JENSEN: Dr. Balmes? 

BOARD MEMBER BALMES: Here. 

BOARD CLERK JENSEN: Ms. Berg? 

BOARD MEMBER BERG: Here. 

BOARD CLERK JENSEN: Mr. De La Torre? 

BOARD MEMBER DE LA TORRE: Here. 

BOARD CLERK JENSEN: Mr. Eisenhut? 

BOARD MEMBER EISENHUT: Here. 

BOARD CLERK JENSEN: Supervisor Gioia? 

BOARD MEMBER GIOIA: Here. 

BOARD CLERK JENSEN: Mayor Pro Tem Mitchell? 

BOARD MEMBER MITCHELL: Here. 

BOARD CLERK JENSEN: Mrs. Riordan? 

ACTING CHAIRPERSON RIORDAN: Here. 

BOARD CLERK JENSEN: Supervisor Roberts? 

BOARD MEMBER ROBERTS: Here. 

BOARD CLERK JENSEN: Supervisor Serna?
BOARD MEMBER SERNA:  Here.
BOARD CLERK JENSEN:  Dr. Sherriffs?
BOARD MEMBER SHERRIFFS:  Here.
BOARD CLERK JENSEN:  Professor Sperling?
BOARD MEMBER SPERLING:  Here.
BOARD CLERK JENSEN:  Chairman Nichols?
Madam Chair, we have a quorum.
CHAIRPERSON NICHOLS:  We sure do. Practically a full house. This is wonderful.

A couple of announcements before we get started this morning. First of all, just a reminder for anybody who's new to the process here, if you wish to testify and you didn't sign up online, we would like you to fill out a request to speak card. They're available in the lobby outside the room. You turn it into the Clerk of the Board here, please, as soon as possible.

Secondly, if you did sign up online, of course you don't need to fill out a request to speak card, but you do need to check in with the Clerk so she knows your here or your name is removed from the speakers' list.

The Board does impose a three-minute time limit on speakers. So you can make your three minutes go further if you state your name when you get up to the podium and then summarize your written testimony.

Particularly if you did submit testimony in advance, you
don't need to read it into the record. It will be entered into the record automatically.

We are required to remind you that there are safety exits, emergency exits at the rear of the room as well as on either side of the podium here. And if there is a fire alarm, which does happen from time to time, we need to evacuate the room immediately and go downstairs until we hear the all-clear signal. We gather out in the park across the street. I think that's it for advance announcements. We have a very full agenda.

So let's get started. The first item on today's agenda is a status report on the Advanced Clean Cars Program. This program was adopted by the Board in its current form in January 2012, and it sets ambitious but achievable standards for reducing criteria pollution and greenhouse gas emissions from passenger vehicles through the 2025 model year.

This program also fosters the commercialization of the cleanest zero emission vehicles that will be needed to achieve our ongoing criteria pollutant and greenhouse gas goals, which as everybody knows are very challenging.

When the program is fully phased in, California consumers will be driving the cleanest and most efficient vehicles available, while at the same time saving thousands of dollars over the lifetime of the vehicles.
So we believe that this is a good deal, a really win-win situation.

The zero emission vehicle rule continues to be a driver for technology development and market growth in California for some of the cleanest most advanced vehicles. And of course, other states that have adopted the ZEV program are also sharing in that and we're going to be hearing from them in a bit, too.

It's important that California provides certainty for auto makers to guide their investment and marketing strategies and to support them in bearing what we know is a financial risk to accelerate the market development for these vehicles. Our commitment is clear and it's guided by both science and federal law. In order to meet our federal air quality requirements, we need as many zero emission vehicles as we can get to be on our roads as quickly as possible. In fact, we may even need more than our zero emission than our mandates call for. For that reason, we really need to be working together with all stakeholders, including the auto makers and consumers in order to enable the market to succeed, to make sure that our rule is not a ceiling but is, in fact, just a floor. We're doing a lot. And as we heard this morning, our partners are equally committed to this program and to its targets.
Because this program is ambitious, when we had the hearing on this at the conclusion of the 2012 hearing, the Board drafted the staff to examine a number of issues related to advanced clean cars, including the progress towards a midterm review, which we and the federal government are working on together, and to report back to the Board on their findings. As you'll recall, the midterm review was built into the program as a way to check up on market development both for the ZEVs and other technologies for improving conventional vehicle efficiency in order to make sure that we knew how things were going in advance of accelerating the targets in 2018.

While the progress to date has been programming, both for the efficiency technologies and for zero emission vehicles, we're going to be better able I think in a few more years to assess the market development than we are today. For example, we have a number of new vehicles that are about to enter the market as well as those already out there. There are going to be some second generation models that we think will be available. There's going to be more data about why and how customers purchase, lease, or use their electric vehicles and how they value them, what's important to them. And we're going to have a better sense about which of the various incentives that California and our state partners are employing really
helpful in expanding the market and what we could do better.

So today, we're going to be hearing from staff on a couple of items related to advanced clean cars. It's an update on the progress that's been made to date in addressing the Board's questions. And then we will hear minor amendments to the ZEV regulation.

So to those in the audience, if you're planning on commenting on the proposed amendments, we ask that you hold your comments until the next item, because that's when they're going to be more directly relevant.

Also this morning I particularly want to welcome a number of representatives from states that have adopted California's Advanced Clean Cars Program, including Connecticut, Massachusetts, Maryland, Oregon, and Vermont. These states have recently signed -- their governors have signed along with our Governor a Memorandum of Understanding to do more to support the commercialization of ZEVs in their states. And as part of that item, we are going to invite representatives of the state to address the Board specifically on their work in support of this program. I did introduce them later individually in advance of the presentation.

At the this point, I'm going to turn it over to Richard Corey, our Executive Officer, to introduce the
DEPUTY EXECUTIVE OFFICER COREY: Thank you, Chairman Nichols, and good morning.

As the Chairman mentioned, today staff will be providing the Board with an update on the progress we've made on the Advanced Clean Cars Program. And as you know, in addition to greenhouse gas standards, the Advanced Clean Cars Program includes the Low Emission Vehicle III, or LEV III program, and the zero emissions, or ZEV program.

Because the LEV III greenhouse gas requirements were developed through a coordinated effort with the federal government, California agreed to participate in the midterm review that the Chairman referred to with U.S. EPA and the National Highway Traffic Safety Administration to evaluate the appropriateness of the standards for model years 2022 through 2025. Included in that assessment is whether the standards should be more or less stringent, accelerated, delayed. As staff will explain, the Board asked for updates to that assessment and a report back on other aspects of California's light-duty regulation, including updates on the PM standards and the ZEV regulation.

Mike McCarthy of the Mobile Source Control Division will now give the staff's presentation. Mike.
(Thereupon an overhead presentation was presented as follows.)

VEHICLE PROGRAM SPECIALIST MC CARTHY: Thank you, Mr. Corey.

Good morning, Chairman Nichols and Board members. First up for you today is a brief update on our Advanced Clean Cars Program.

--o0o--

VEHICLE PROGRAM SPECIALIST MC CARTHY: I'll start off with a few background slides to refresh everybody's mind about where we are, how we got there, and then we'll talk about upcoming technical review that we often refer to as the midterm review.

After that, I'll highlight a few items related to the implementation of our Zero Emission Vehicle Program, and Jim McKinney, seated next to me, of the California Energy Commission, will give us an update on the status of the ZEV infrastructure in the state.

--o0o--

VEHICLE PROGRAM SPECIALIST MC CARTHY: The driving force behind the development of the Advanced Clean Cars Program was two-fold. First is our meeting our air quality goals. While California has made remarkable progress towards achieving ozone attainment, more reductions in criteria pollutant emissions are needed to
meet health-based federal standards. Along with ozone attainment, the program ensures we keep particulate matters emission low to reduce localized exposure risks.

--o0o--

VEHICLE PROGRAM SPECIALIST MC CARTHY: The second driving force is achieving the state's climate change goals. California is committed to reducing greenhouse gas emission 80 percent below 1990 levels by 2050.

--o0o--

VEHICLE PROGRAM SPECIALIST MC CARTHY: To help put things in perspective for today, this slide shows the relative contributions of the transportation sector, specifically light-duty vehicles such as passenger cars and sport utility vehicles. Their contribution to statewide greenhouse gas emissions and oxides of nitrogen, one of the key smog-forming components, is significant.

For greenhouse gases, the transportation sector as a whole is responsible for nearly 40 percent of the state's emissions, with light-duty vehicles alone representing nearly 30 percent of the statewide emissions. For NOx emissions, nearly 90 percent comes from mobile sources, all together with light duty vehicles alone representing over 20 percent of the emissions.

--o0o--

VEHICLE PROGRAM SPECIALIST MC CARTHY: Based on
the relative contribution from light-duty vehicles, reducing emissions from vehicles is a critical element to achieving California's long-term goals.

In January 2012, ARB approved the Advanced Clean Cars Program, or ACC program, a coordinated package consisting of three strategic areas which ushered in the next generation of light and medium duty greenhouse gas and criteria pollutant emission standards known as Low Emission Vehicle III, or LEV III, and included increased zero emission vehicle, or ZEV, requirements through the 2025 model year.

The LEV III element focuses on achieving significant reductions in criteria and greenhouse gas emissions by encouraging the development of the advanced conventional vehicle technologies.

The ZEV element acts as a focused technology-forcing piece of the Advanced Clean Cars Program by requiring manufacturers to produce increasing numbers of pure ZEVs and plug-in hybrid electric vehicles in the 2018 to 2025 model years. This will help to establish a commercial market for these technologies in California.

--o0o--

VEHICLE PROGRAM SPECIALIST MC CARthy: For criteria pollutants, LEV III will reduce fleet average
emissions from light-duty vehicles to super ultra low emission vehicle or SU LEV levels by 2025, a reduction of about 75 percent from today's level.

Noticeably, it will eventually bring the standards for full-size pickups and SUVs down to the same levels as passenger cars and increases the emission control durability requirements to 150,000 miles to ensure vehicles are designed to remain clean throughout the vehicle's useful life.

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VEHICLE PROGRAM SPECIALIST MC CARTHY: For particulate matter, LEV III includes a 90 percent reduction in the PM standard and does so in a two-step process by dropping first to three and then eventually to one milligram per mile in the 2025 time frame.

While PM emissions from gasoline vehicles have historically not been much of an issue, some newer engine technologies such as high pressure direct injection fuel systems can cause increased emissions if there is insufficient attention to detail during design and calibration. As you'll hear in a few minutes, this is an area where staff will be tracking industry's progress and reporting back to the Board to confirm we are on track.

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VEHICLE PROGRAM SPECIALIST MC CARTHY: For
greenhouse gas emissions, the LEV III standards take over where the previous greenhouse gas standards left off in 2016 model year.

For 2017 through 2025, the standards incrementally push vehicles' GHG emissions downward by a little more than four-and-a-half percent per year. This will bring the certified new vehicle fleet down to an average of 166 grams of carbon dioxide equivalent per mile in 2025. For the fleet, this means by 2050, greenhouse gas emissions are cut by a third.

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VEHICLE PROGRAM SPECIALIST MC CARTHY: While the adopted ACC program only covers standards for vehicles through the 2025 model year, ARB's long-term GHG goals of an 80 percent reduction by 2050 were a fundamental consideration.

During the development of the ACC program, several evaluations of future scenarios were considered that could get us to the 2050 goal, while taking into account both vehicle emissions and upstream emissions associated with providing fuel for those vehicles.

This slide shows one illustrative scenario staff developed for the light-duty vehicle sector that achieves this target and shows that we need nearly 90 percent of the on-road vehicle fleet in 2050 to be zero emission
That would mean nearly every new car sold in California in 2040 would need to be a pure ZEV, which in turn leads to needing commercialization of ZEVs beginning in the 2020 time frame.

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VEHICLE PROGRAM SPECIALIST MC CARTHY: As part of the Advanced Clean Cars Program, the ZEV regulation was revised to increase the vehicle manufacturers' obligation each year starting in model year 2018 and continuing through model year 2025 to achieve the volume of vehicles and cost reductions needed for commercialization and to put us closer to achieving the 2050 target.

While flexibility in the regulation allows manufacturers to meet their obligation with a variety of ZEVs as well as with some plug-in hybrids, a typical manufacturer could end up with a mix represented by this graph, which translates to just over 15 percent of annual sales by 2025.

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VEHICLE PROGRAM SPECIALIST MC CARTHY: During the development of the ACC standard, the vehicle manufacturers agreed to the proposed standards with the key stipulation that there be a three agency midterm review to reassess the appropriateness of the standards.

Subsequent to that agreement, the Board adopted
the standards in January of 2012 and the U.S. EPA and the National Highway Traffic Safety Administration, or NHTSA, followed suite and finalized their rules in October.

In November, the Board approved an update to the program to effectively allow nationwide compliance to the GHG standards in lieu of separately meeting the California and federal programs.

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VEHICLE PROGRAM SPECIALIST MC CARTHY: That brings us to today where I'd like to talk about our future activities regarding the implementation and review of the Advanced Clean Cars Program.

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VEHICLE PROGRAM SPECIALIST MC CARTHY: In adopting ACC, the Board committed to conduct a comprehensive midterm review of the light-duty greenhouse gas standards for 2022 and later model year vehicle. This includes collaborating on a technical report with U.S. EPA and NHTSA.

The purpose of this report is to reassess the GHG standards, including technology and cost projections, and to start the process to make any midcourse corrections that may be necessary to ensure we get the maximum feasible benefits. And to that end, we've already begun regularly scheduled meetings with our partner federal
agencies.

Additionally, there are a couple of California-specific items that we plan to review in the same time frame.

When the Board adopted the one milligram particulate matter standard, the Board also directed staff to report back on a couple of issues. The first part of this will be on laboratory measurement capability and refinements to ensure accurate measurement at low PM levels.

The second part will involve reassessing the appropriateness of the standard, including both the technical feasibility for future vehicles to meet the standard and the possibility of accelerating the implementation date of 2025 model year.

As a quick side note, to date, we've made quite a bit of progress on refining measurement capability and are participating in industry and EPA work group to collaborate on measurement techniques.

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VEHICLE PROGRAM SPECIALIST MC CARTHY: The review will also include the ZEV regulation. For that, we will continue to evaluate the market response and consumer acceptance to ZEVs and plug-in hybrids, as well as technology and infrastructure developments to ensure we're
on track to transition the light-duty fleet.

In support of that, we've already begun a number of activities involving consumer purchase decisions and how different types of ZEVs and plug-in hybrids are being used within a household.

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VEHICLE PROGRAM SPECIALIST MC CARTHY: Given the substantial number of items involved, we plan to periodically update the Board throughout the midterm review process over the next few years. On the top half of this time line, I've highlighted several ARB milestones. One of the first reports back to you will be a ZEV infrastructure assessment late next year.

Our PM team is currently evaluating and refining measurement techniques and plan to provide an update to the Board in 2015. We also plan to return with a status update to the Board in 2016 on any changes in the vehicle fleet that are occurring and may alter the projected GHG benefits as well as general sales and consumer response of GHG and ZEV technologies.

On the bottom half of the time line, I want to point out a couple of noteworthy dates for our role with the work in EPA and NHTSA. First a joint technical report from all three agencies must be published for public comment no later than November 15th, 2017. Out of that
report, EPA is required to publish a joint decision no
later than April 1st, 2018, as to whether the adopted
standards will remain as is or whether a new rulemaking
will revise the standards will be undertake. And of
course, staff will be back to the Board in the same time
frame with ARB's review to address any necessary revisions
for GHG, ZEVs, or PM.

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VEHICLE PROGRAM SPECIALIST MC CARTHY: We've
received comments requesting a commitment to review the
ZEV regulation in early 2015. Staff's assessment,
however, is that it would not be feasible to conduct a
full review of the ZEV requirements within the roughly one
year from now until early 2015.

First, new data is needed about how the market
and consumers are responding to these vehicles to conduct
a meaningful review. While we already have some contracts
in place to further our knowledge in these areas, results
from those studies are not expected until the 2016 time
frame.

Additionally, as Chairman Nichols mentioned,
there are new vehicles representing different market
segments and technologies coming in the near future with
several announcements already made for the 2015 model
year, including fuel cell vehicles and advanced battery
electrics. In that same time frame, there are also significant infrastructure installations expected. Analyzing how the market responds to these new activities will be essential to informing future policy decisions.

Further, ZEVs are an integrated part of meeting California's ongoing criteria pollutant and long-term GHG goals, which is why the review is planned to be part of the overall Advanced Clean Cars Program review.

That said, I do want to note that we plan to update the Board every year on the status of the Advanced Clean Cars Program, including the ZEV element, and expect to use those opportunities to discuss any issues that arise or need further attention in the earlier time frame.

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VEHICLE PROGRAM SPECIALIST MC CARTHY: Now I'd like to highlight some of the efforts that have been undertaken to promote the successful implementation of zero emission vehicles here in California.

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VEHICLE PROGRAM SPECIALIST MC CARTHY: Since the adoption of ACC, Governor Brown signed an Executive Order to support the commercialization of ZEVs through 2025. The Executive Order outlines specific goals in the set time lines, including a target of 1.5 million ZEVs and plug-in hybrids in California by 2025, sufficient
infrastructure to support one million ZEVs by 2020, and specific percentage-based goals to begin to turn over the State-owned vehicle fleet by 2025.

In February, the California Action Plan was finalized which focuses various State agencies to work together on promoting ZEV technology, establishing infrastructure, and building the ZEV industry throughout California.

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VEHICLE PROGRAM SPECIALIST MC CARTHY: Currently, 15 different plug-in hybrid and ZEV models are being offered to California consumers, with more models to come. As you can see, there are a variety of makes and models available ranging across different vehicle size categories.

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VEHICLE PROGRAM SPECIALIST MC CARTHY: There are a variety of incentives currently available for California consumers. As part of the Clean Vehicle Rebate Project, a $2500 rebate is available for the purchase of a pure ZEV, and a $1500 rebate for purchase of a qualifying plug-in hybrid. A second incentive available is carpool lane access or HOV access. Rebates are also offered for installation of home charging stations.

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VEHICLE PROGRAM SPECIALIST MC CARTHY: As you can see indicated here by the number of rebates awarded monthly, ZEV sales have been increasing at a substantial rate and are expected to continue. And while the rebate program does include zero emission motorcycles and neighborhood electric vehicles, the green and blue bars show the vast majority of the rebates go to pure ZEVs and plug-in hybrid electric vehicle purchasers. This sales growth is a positive market indicator that shows we are headed in the right direction on ZEV policy.

Now I would like to introduce Jim McKinney, Manager of the Transportation Energy Office at the California Energy Commission to give an update on ZEV infrastructure in California.

CHAIRPERSON NICHOLS: Thanks. Welcome.

PROGRAM MANAGER MC KINNEY: Good morning, Chair Nichols and members of the Board.

I'm very pleased to be here to help support our statewide efforts to promote ZEV technologies in California.

I'm Program Manager for the Alternative and Renewable Fuel and Vehicle Technology Program at the Commission. I think as most you know, this program was established by the State Legislature in 2007 through the passage of AB 118. It allocates up to $100 million a year
through our program and another 30 to 40 million a year through the Air Quality Improvement Programs administered by the Air Board.

Most recently, this past summer, we were all pleased to see the reauthorization of this program through AB 8. That's going to allocate over one billion dollars in funding through 2023 between our two agencies and the joint program.

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PROGRAM MANAGER MC KINNEY: This slide and this chart, this is a snapshot of where we are today for EVSE charging installation. As you can see, primarily spread through southern California and the northern California Bay Area metropolitan areas, we have over a thousand level two and three chargers installed, which results in 2800 charge points or connectors. We also have about 67 quick chargers or level three DC fast chargers in the state.

Most recently, our program awarded $2.5 million for another 39 quick chargers primarily in the southern California area.

And another really important development for EVSE installation in the state is the settlement between NRG and the California Public Utilities Commission. As a result of this settlement, NRG is going to install 200 fast chargers -- so this is level three -- and two combo
chargers in publicly accessible places throughout the state and also 10,000 level two what we call make ready stubs. This will be the conduit and pedestal platforms whereby other companies can come in and install level two chargers throughout multi-housing areas, workplaces, schools, and hospitals.

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PROGRAM MANAGER MC KINNEY: In terms of the program I'm representing today at the Energy Commission, we've invested nearly $25 million in EVSE support since 09-10 when we started issuing grants. So today, we have over 7600 level two and three charge points available in the states. This includes over 3,000 publicly accessible chargers in commercial environments; 3,800 residential chargers; and 558 workplace chargers.

As you can see from the status chart, two-thirds of our level one and two chargers are already installed with the other third well underway. Fast chargers are a little harder to insight and install, so we have more modest progress there. But we've funded 77 fast chargers in total.

Another important part of our program is what we call the Regional Readiness Planning Grants. These are a series of grants to local metropolitan agencies in California really to enable them to become EV ready. This
goes with the philosophy that local agencies best know their locales and environments. We've had a lot of good success with these grants and look forward to issuing more money in those areas.

Slide, please.

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PROGRAM MANAGER MC KINNEY: This slide shows current and future investment in EVSA through our program. As you can see, we plan to spend another $33 million to support ZEV technology infrastructure in California. For our 12/13 plan, we have six million allocated for destination charging, commercial, and multi unit dwellings. We expect that solicitation to hit the street in the next month.

In our 13/14 investment plan, we allocate $7 million in funding. A lot of this will support the ZEV Action Plan measures. We also have some new grants with both State and federal agencies to get more chargers into public garages for the public and State and federal employees.

We've just posted our draft 2014 investment plan this week on the Energy Commission website. As you can see, we've more than doubled the proposed funding allocation for EVSA to continue supporting the ambitious goals of the ZEV mandate and the Governor's Action Plan.
This will include funding for destination charging, workplace charging, multi-unit dwellings, and ongoing fast charger development and perhaps even developing a network of fast chargers across major freeways and highways across the state.

Some other items that are really important to support the technology deployment, one is a statewide infrastructure plan. This was identified in the ZEV action plan to the Governor's office. So we've contracted with NREL to develop this plan. It will show their recommendations for how many chargers, what categories, what locale will be needed to meet the one million dollar ZEV support target in 2020 and the $1.5 million target in 2025. We're working closely with ARB staff on the review and development of this, and it will be available for public review later this year.

ARB staff is also doing an EV infrastructure needs assessment under your direction, and that document should be available in 2014.

I want to highlight in the green text, we'll allocate another $5.6 million for regional readiness grants for both EVs, hydrogen fuel cell vehicles, and other low carbon technologies that are available in California.

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PROGRAM MANAGER MC KINNEY: I'm going to turn to our investments in hydrogen station funding to support fuel cell vehicle deployment and the commercial launch expected in the 2015/16 window.

The California Fuel Cell Partnership issued an important report last year calling for a network of 68 stations in California in the 2015-17 time frame. Through initial investments through DOE and the South Coast AQMD, the Five Cities Program, and then your $15 million investment through the hydrogen highway, we now have nine operational hydrogen stations in California.

Through our investments, we've issued $27 million thus far for 17 new stations and a recent grant to the South Coast AQMD of $6.7 million to upgrade a series of stations in southern California. So that will bring the total with these investments up to about 50 stations by 2015. We have another $30 million we're going to allocate later this year in our solicitation. Through AB 8 directives, we'll allocate $20 million or up to 20 percent of our annual fund until we reach a goal of 100 hydrogen fueling stations in California.

Another thing I wanted to highlight here is our grant to the California Department of Food and Agriculture Division of Weights and Measure to develop retail fueling standards, protocols, and regulations so we can sell
hydrogen fuel at a retail basis.

That concludes my remarks. I'm going to turn it back over to Mike.

VEHICLE PROGRAM SPECIALIST MCCARTHY: This concludes staff's presentation. I'd like to turn it over to Chairman Nichols who will discuss the multi-state Memorandum of Understanding.

CHAIRPERSON NICHOLS: Thank you. I had the honor of participating in a press announcement of the Memorandum of Understanding that's been signed by eight states, including ours. Today, at this meeting, we have representatives of five of the states who are here to give us a presentation on the work they're doing and on that document.

My primary partner in this effort in the press side of it was Secretary of Natural Resources in the state of Vermont, Deb Markowitz. The two of us share in common a need for some type of riser to use at events like this, because although we are mighty, we are not necessarily tall. But it's particularly true for the state of Vermont. And I do want to call them out for the simple reason that Vermont has been a state that has been part of California's Zero Emission Vehicle Program from the very beginning and has borne the brunt of some of the difficulties that that presented in the early days. So
it's really a delight to be able to welcome them here today in better times and at a point where we have an opportunity to really be moving forward with this effort that we've been a part of for a long time.

She is joined at the table here down in front by Ashley Horvat of Oregon, Kathy Kinsey of Maryland, Anne Gobin of Connecticut, and Christine Kirby of Massachusetts. But they've organized their presentation among themselves, so I'm just going to let them do it.

Thanks.

Welcome, Deb.

MS. MARKOWITZ: We're actually starting I understand with a video from Dan Este, who's the secretary of the Connecticut DEP, the Agency of Energy and the Environment.

(Whereupon a video presentation was made.)

CHAIRPERSON NICHOLS: That's terrific. It's a great pleasure for anybody that might have missed the backdrop for that visual, Dan Este is a law Professor at Yale Law School and also the Commissioner for both Energy and Environment for the State of Connecticut. And he's an old friend of mine. But I really loved seeing him in that video.

MS. MARKOWITZ: He's a pro, isn't he. And married to a Congresswoman from Connecticut. That's his
claim to frame.

I want to thank you for the opportunity to be here and I want to particularly --

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MS. MARKOWITZ: -- thank you for your leadership as a Board. Your longstanding efforts have really led the nation in developing innovative and ground-breaking motor vehicle emission control programs. Ad it's made a difference.

We have a saying in Vermont: As goes Vermont, so goes Vermont. Right? But in California, it's as goes California, so goes the nation. So I want to thank you for that.

Like California, many states in the northeast and mid-Atlantic have aggressive climate change goals. Vermont's goals includes a 50 percent reduction of greenhouse gas emissions from the 1990 levels by 2028 and a 75 percent reduction by 2050.

In addition, we have a goal to obtain 90 percent of our total energy from renewal sources by 2050. These are really audacious goals.

So next slide.

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MS. MARKOWITZ: What I want to point out here in these slides is that, like California, transportation is
the largest contributor to greenhouse gas emissions in Vermont. And this means that, for us, the ZEV mandate is critical if we're going to meet our 2050 goals.

In deed, in Vermont, the transportation sector accounts for nearly half of our greenhouse gas emissions and more than a third of our total energy consumption. So unlike California, Vermont is prohibited -- Vermont and other states, as you know, are prohibited under the Clean Air Act from establishing motor vehicle emission standards. Because of this, the Board is in a unique position to enhance or impede our state efforts to achieve our greenhouse gas reduction goals as well as to realize the many benefits that ZEV programs can offer to our states.

We know that electricity is a low cost, lower carbon domestic alternative that currently costs two-thirds less than gasoline or diesel on a per mile basis. The ZEV program will help reduce vulnerability of our citizens to the price swings of imported petroleum by diversifying the transportation fuel supply and providing consumers with choice.

We think that -- actually, we know that by switching from imported petroleum products, gasoline, fuels, diesel, to renewable energy through electricity, it's going to have a positive effect on our local economy.
It will keep more money in the pockets of consumers. And
it will create a multiplier effect of jobs, personal
become, and our gross state product.

I'm proud to say this morning the Governor of
eight states, as Chairman Nichols said, signed a joint MOU
committing to intra and interstate actions to ensure the
successful implementation of our ZEV programs. The MOU is
more than just an agreement that's going to sit on the
shelf. It identifies specific actions that each Governor
will promote within their state and joint cooperative
actions that signatory states will undertake to help build
a robust national market for ZEVs.

By committing under the ZEV MOU to join forces,
share expertise, and exchange information, we're all in a
better position to realize substantial economic and
environmental benefits of the successful implementation of
the ZEV programs within our states.

With the weight of our governors behind us, this
MOU creates a framework for cooperation that will help us
promote effective and efficient implementation of the ZEV
regulations. The market demand created by our state
programs can further lower ZEV costs through economies of
scale and expand the range of product lines available to
consumers in our states and throughout the United States.

Accelerating the ZEV market will help us reduce
transportation-related air pollution and greenhouse gas emissions. It will enhance energy diversity, save consumers money, it and will promote economic growth.

To support and facilitate the commercialization of ZEVs and to ensure the successful implementation of this program, our states are working to develop and implement consistent standards to promote ZEV consumer acceptance and awareness, industry compliance, and economies of scale, including, for example, adoption of universal signage. Adopting common methods of payments and interoperability of electric vehicle charging networks. Establishing reciprocity among states for ZEV incentives, such as preferential parking and HOV lanes.

And we're together going to be addressing some of what's perceived as the barriers to ZEV adoption in our states and across the country. And I'm going to pass this part along to my colleagues. In their remarks, they're going to address three of the off-sided challenges to successful implementation of State ZEV programs, consumer acceptance, the cost of ZEVs, and fueling infrastructure.

Thank you.

CHAIRPERSON NICHOLS: Thank you.

Next, Anne.

MS. GOBIN: Thank you.

As you heard from my Commissioner, both
Commissioner Este and Governor Malloy are fully committed to the innovation and success with cheaper, cleaner transportation, and our energy future, and most importantly, to the ZEV future. We're all counting on it.

I'm going to give you a little background on the consumer acceptance of plug-in electric vehicles. A recent National Academy of Science report concluded most potential plug-in electric vehicle customers have little knowledge of plug-ins and almost no experience with them. Lack of familiarity with the vehicles and their operation and maintenance creates a substantial barrier to widespread deployment.

Some dealers have even been reluctant to aggressively market electric vehicles, citing greater time commitment to sell the plug-ins compared to a conventional vehicle because of the need for increased consumer help, lower profit margins relative to conventional vehicles, and even more unfortunately the lack of availability at the dealerships is also an issue.

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MS. GOBIN: For those who buy them, the new generation of plug-in electric cars is receiving high grades for consumer satisfaction. Plug-ins are rated higher in nearly every single category of overall quality, performance, and comfort than comparable internal
combustion engines according to data collected by JD Powers and Associates.

In 2011, the Chevy Volt was named Motor Trend Car of the Year, with Motor Trend stating this automobile is a game changer. The Volt has also won Automobile Magazine's Automobile of the Year and North American Car of the Year Awards and was included in the Car and Driver 10 Best list.

The Nissan Leaf was named the World Car of the Year and European Car of the Year in 2011 and was noted in the Popular Mechanics breakthrough awards of 2010, which stated the real triumph lies in its family car practicality and normalcy.

The Tesla Model S was named Automobile of the Year by Automobile Magazine and the Motor Trend Car of the Year in 2013.

In its 2013 review of the Model S, Consumer Reports awarded the highest score any automobile has ever received, stating the Tesla Model S outscores every other car in our test ratings. It does so even though it's an electric car. In fact, it does so because it is an electric car.

More electric vehicles have been purchased in the past year than in all previous years.
combined. Full year 2012 sales more than tripled to about 52,000 from 17,000 in 2011. Motorists bought more than 40,000 plug-in cars in the first and second quarters of 2013, up from only 17,500 a year earlier.

In 2002, there were only three hybrid vehicle models commercially available for sale in the United States. Ten years later, that number has grown to 38.

In 2006, there were no plug-in vehicles on the market in the United States. Now, only six years later, there are at least 13 different models. These advancements illustrate the importance of the State ZEV requirements. ZEV requirements spurred the development of the new low and zero-emission vehicles and demonstrates the automobile industry's ability to innovate in a very short period of time. Plug-in market share in ZEV program states is more than three times that in other states.

As the Governor signed the MOU, they're looking to lead by example. And one of the ways they're looking to lead by example is looking at fleets. And things we've committed and are going to do are provide information State fleet managers about the available ZEVs and their benefits, explore the feasibility of pooling purchase of ZEVs with other jurisdictions, including local and regional governments, as well as across state lines and
with the federal government.

We're also assessing the feasibility of pooled purchasing amongst private fleets. So we see these vehicles as our future and see them rapidly being deployed. And we hope the manufacturers continue to help us and innovate to make this reality. We're convinced it will happen.

CHAIRPERSON NICHOLS: Great. Thank you.

Next we're going to hear from Ashley Horvat from Oregon, who has a wonderful title, Chief Electric Vehicle Officer. I think we need one of those in California.

MS. HORVAT: It's unique, but maybe not for long.

Chair Nichols and members of the Air Resources Board, thank you for having me all the way from Portland, Oregon. I'm glad to visit here. In fact, I think I may have spent more time in your state than my state so far this month.

As goes Portland, so goes Oregon in our state.

In Oregon, we set the stage for EVs to prosper in deployment and policy initiatives. As a state, we recognize the need and the importance to build the momentum. In keeping with the spirit of the ZEV MOU, we intend to accelerate ZEV adoption through careful planning and coordination, as well as sustained investment and leadership.
We believe that rapid adoption of ZEVs will strengthen our local economy, while moving us closer to zero emission and an oil-free transportation future.

Every dollar saved at the gas pump and spent on other goods and services creates 16 times more jobs in the economy. In fact, in our state alone, the EV industry has generated gross economic activity of $266.56 million. The number of public and shared residential electric vehicle charging stations has increased four-fold in the past year.

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MS. GOBIN: There are currently 20,000 charging stations distributed across 8200 sites and more coming online every day. It's hard to believe just two years ago there were only about 2,000 recharging stations scattered throughout the U.S. and Canada. This is equivalent to one EV charging station for every eight gasoline retail stations in the U.S.

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MS. GOBIN: Like other Section 177 states, Oregon is investing heavily in infrastructure. We have the most DC fast chargers of any other region in the country, which according to your slides, is going to be quickly surpassed by California, with over 100 DC fast chargers installed in the Pacific northwest, thanks to the Pacific Highway.
They're installed along major highway systems, along I-5 and radiating out from that corridor to the coast, the Oregon coast, Columbia River Gorge, Mount Hood and beyond.

Since building this robust network, Oregon Department of Transportation has partnered with Travel Oregon to develop an EV tourism initiative. In initiative will encourage EV owners in markets that travel to Oregon using an EV by utilizing the network of fast chargers along the Oregon coast, wine country, Mount Hood, southern Oregon and more.

We are in the final stages of partnering with a major airline, a major OEM, and a top tier retail partner, in fact, to launch a national EV tourism campaign in summer 2014.

In addition, the state of Oregon petitioned federal highway to use an alternative gas pump highway sign, which is now an approved national standard. It's on our highway and going to be in California and the other states in the ZEV MOU.

Next slide, please.

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MS. GOBIN: All of these initiatives have one important aspect in common: Visibility. The state of Oregon believes EV visibility is key to market acceleration. That includes hosting a wide distribution
of places to charge visible to the traveling public, a
plethora of EVs available, easy to read EV highway
signage, EV drivers partnering to spread the word in their
workplaces and communities to hear from them who are like
them, ride and drives, workplace charging and many, many
more creative initiatives.

Other ZEV states are similarly investing in
infrastructure deployment. For example, Rhode Island has
installed 50 level two charging stations, including 25 at
State Parks and Beaches. Connecticut incentives will
result in 50 new public charging stations by early 2014
and fast chargers are being installed at highway service
plazas with free charging.

New York has several thousand charging stations
throughout the state. And Governor Cuomo's Charge New
York Program calls for installation of 3,000 additional
stations by 2018.

Massachusetts is providing EV and charging
station incentives to municipalities and all stations are
open to the public.

Vermont is collaborating with Quebec to build an
EV charging station corridor from Berlington to Montreal.
They're also offering incentives for publicly accessible
charging stations.

Maryland now has 430 public charging stations in
the state, of which 350 are publicly funded. And over the next year, through both state and private investment, they expect between 150 to 20 new charging stations, about half of which will be fast chargers.

The Governor's MOU will support these individual state's efforts by facilitating the exchange of information about best practices, standardization of signage, and coordination of EVSE site selection to ensure the broadest coverage throughout our states and our regions.

I'm happy to be here today to represent the state of Oregon and the Governor's office and looking forward to the continued collaboration.

At this time, I'm going to turn it over to my colleague from Maryland, Deputy Secretary Kathy Kinsey.

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

Expanding the plug-in electric vehicle market in Maryland is a very high priority for our state. And we have very ambitious climate goals in our state. We are striving for a 90 percent reduction in greenhouse gas emissions in our state from 2006 levels by 2050. So we recognize that transitioning our fleet to electric vehicles is critical if we're going to achieve our air quality goals and our climate goals.
So I want to thank you all for the opportunity to be here today with you to highlight some of the initiatives that are underway in our state. And I'd like to focus my remarks today on some of Maryland's initiatives to address one of the primary challenges I think we face today in expansion of the PEV market, and that is the initial purchase price of the vehicles. We know now -- next slide, please.

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MS. GOBIN: We know now overall lifetime cost of PEVs are, in fact, lower than conventionally fuel vehicles. This is due to the significantly lower cost of the fuel electricity and also lower maintenance costs. That is reflected in the slide that you see on the screen now.

In 2012, for example, for the first time ever, the cost of gasoline for the average family in the United States exceeded the cost of owning the vehicle. That is the loan costs, the loan payment cost, plus the maintenance cost. Clearly, this is a really important selling point for plug-in vehicles. But the higher initial sales price continues to be a barrier to expansion of sales in our state and in others.

So the purchase price of plug-in electric vehicles is definitely trending downward. And this trend
is widely projected to continue as battery prices come
down over time. In fact, EPRI predicts that lithium ion
battery costs will decline by roughly 50 percent by 2020.

Until that happens and until initial purchase
prices come down and become more competitive, purchase
price incentives are an important tool to increase plug in
vehicle sales. So Maryland is currently offering a
one-time excise tax credit of up to $1,000 for both
purchase or lease of a qualifying plug-in vehicle. And
commercial fleet operators are eligible for this tax
credit for up to ten vehicles.

Our state credit is also in addition to the
existing federal credit. These two credits together we
think make plug-in vehicles much more competitive. We are
also are offering a tax credit and income tax credit for
charging stations, up to $400. In commercial operators,
they are eligible for a credit for up to 30 individual
charging stations. So these credits were all extended by
our Legislature last year, and we expect that these
credits will continue to be available going forward.

Our Maryland Energy Administration also has a
number of very popular grant programs that are supporting
development of the infrastructure in our state.

We're also exploring other ways to lower costs to
consumers through maximizing fuel savings in the state
through the implementation of some time of use charging
initiatives at the direction of our Public Service
Commission in Maryland. Our two largest utilities that
are launching separate time of use demonstration projects,
pilot demonstration projects, with our plug-in electric
vehicle rate payers. So they are at the same time
targeting a lot of outreach to vehicle owners about the
potential savings from time of use charging programs. And
I think this is a very important outreach consumer help
that they're doing in our state.

Finally, two other incentives that we're offering
I want to mention, free charging at all State-owned
charging stations and HOV lane access for electric
vehicles, regardless of the number of passengers. So in
the Washington metropolitan area, which is I think
understood to be one of the most congested areas in our
country today, HOV lane access is a very significant
benefit to car owners.

And finally, I just want to mention that we have
eliminated what we consider to be an important potential
regulatory barrier to the expansion of infrastructure.
Two years ago, the State Legislature exempted the owners
and operators of electric vehicle charging stations from
regulation as electricity suppliers under our public
service laws. So they are not subject to tariff
requirements or to the other regulatory requirements they
would otherwise be subject to. And in doing that, we
removed a significant potential barrier through that
action.

In closing, I would just like to say how
important this multi-state MOU is to us, to our efforts to
both exchange information and experiences with the other
ZEV states. And even though those states that aren't ZEV
states now but that are working to develop infrastructure
and incentive programs. And we expect that this MOU is
going to help us refine our incentive programs going
forward, promote regional coordination and implementation
on the entire range of initiatives that our states
together are moving forward with.

So thank you again for being here.

CHAIRPERSON NICHOLS: Thank you for that.

Somebody already sent me this morning an article from the
Washington Post, which quotes your Governor on this issue.
So it's already raising public awareness. Great. Thanks.

Last I guess, Ms. Kirby.

MS. KIRBY: Thank you. Good morning, Chairman
Nichols and members of the Board.

It's nice to be back in Sacramento. I've been
here many times. It's great to see the progress we're all
making together and advancing the ZEV market.
I'm here to introduce a video made by Commissioner Ken Kimmel of the Massachusetts Department of Environmental Protection. And in the video, you'll see the progress that we're making in Massachusetts, the work we're doing on the regional level, and the work we want to do in advancing the MOU that we announced this morning.

Before that, I want to give a summary of the panel's remarks, and then we'll kick it over to the video.

The ZEV mandate is critical to ensuring that automobile manufacturers deliver electric vehicles to Massachusetts and other ZEV states. History has shown a robust regulatory driver is necessary to ensure the transition to cleaner vehicles.

The automotive industry has demonstrated its ability for incredible innovation and mass market commercialization of new technologies to meet demands of strong regulatory requirements. We've certainly seen this through LEV I, LEV II, LEV III, the hybrid market, and also now the ZEV market.

The rapid improvements in fuel economy have occurred since the passage of the new greenhouse gas and CAFE standards implemented by both EPA and ARB. And it's a testament to the innovative capacity of the automobile market.

The fact these developments are taking place...
after two decades of little change in fleet economy
demonstrates the importance of a strong regulatory driver
with clear long-term goals. As you will hear from
Commissioner Kimmel, the Governor's ZEV MOU represents a
strong commitment from the signatory states to ensure the
success of our ZEV programs.

We look forward to working with California, the
automobile industry, our electric utilities, our fueling
infrastructure providers, and other key partners to
deliver a robust ZEV market in our states and across the
country. Thank you.

(Whereupon a video presentation was made.)

CHAIRPERSON NICHOLS: Ken is a media star, too.
All these Commissioners. It's wonderful. Do we have more
from the State presentation? I think that's it as far as
the staff report is concerned. As you know, this is not
an action item. It's a status report.

We do have some public comment, however. We do
have a number of speakers who signed up. If my Board
members would like to ask a question or comment at this
time, you're invited to do so.

BOARD MEMBER BERG: Thank you very much, staff
and our invited guests. It was a great presentation. And
it is a really, really exciting time for the ZEV mandate.

In looking at our staff slide number ten where we
show meeting the 2050 greenhouse gas goals, it really becomes apparent to me how important between now and 2020 things like infrastructure, customer acceptance, and really dealership participation is quite frankly more critical because we know we have the vehicles. The OEMs have done an incredible job if you look at even five years ago and where we are now. It is so exciting actually to meet with them one on one and see what is coming to the marketplace.

I'm not quite feeling as comfortable in the other three areas. And now it's just the perfect time to tackle these things. So I would be interested in a similar chart as we have on slide ten in those areas to see what benchmarks and what criteria are we looking at in these other three crucial pieces of the puzzle to, in fact, get commercialization of these alternative vehicle cars.

With that, there was a comment on slide 14 that we're looking at California ZEV regulation and evaluation of market response and consumer acceptance. We also have from our side an action plan. Then from the CEC side, you know, they are doing a yeoman's job at looking at the infrastructure. And we hear all of these numbers, but again, looking at an overall plan which now they're getting involved with a consultant for a nationwide infrastructure plan, how does this all come together in a
very short period of time that allows us to truly evaluate where we are and are we on track. There is no question that we've got a strong mandate for the OEMs and we need to stay there.

But I would like to say, Chairman, that I think we also need to take an additional role in these other areas to help us see side by side that we're making progress in all things in this area.

CHAIRPERSON NICHOLS: I think that's a very good point. And perhaps Dr. Ayala may want to respond briefly.

But my understanding is that that is a part of the discussion that's going on with the MOU states as well is how we can develop some metrics that we can work with as a group. So we are taking this to the national level.

DEPUTY EXECUTIVE OFFICER AYALA: That is right on target.

I think the only thing I'll do is echo that the new efforts we are putting before you today have a real practical value for us. Because at least from our point of view, we do have to come back to you with the assessment of the market development as well as consumer acceptance and some of the other important factors that come into play in terms of allowing us to meet our target. So we have a commitment.

The Board directed us to come back to you and
actually answer those critical questions. And that's why it's so critical for us to continue to work with our partners, not only the Energy Commission here in the state, but also the partners in the other states because we see them as a critical element in our ability to meet our own goals.

So we have a commitment to come back to you and bring you that assessment. And everything that you heard today is going to be absolutely essential for us to be able to do the best job we can in that assessment.

BOARD MEMBER BERG: Thank you very much.
CHAIRPERSON NICHOLS: Any other -- yes.
Dr. Sherriffs.
BOARD MEMBER SHERRIFFS: Thank you. Boy, thank you very much for that presentation. Thank you for coming to California. We know what a burden it is to visit California. So we appreciate your doing that.

And clearly, what great collaboration in the presentation. I mean, the MOU is obviously succeeding and we can get these people to put this together this way. So thank you very much.

One -- we need to support the public infrastructure. We really need to emphasize that. It's clearly a big barrier to people who are unfamiliar with the technology, lack knowledge to do that. It strikes me
that one important thing that can be done very simple in
terms of the individual technology is that there shouldn't
be a community that doesn't have a building code that
requires 220 in the garage. Period.

When we look at chart ten, you know, that's at
least a third, maybe 40 percent of household. Now that
may be every household has one of their two cars or it may
be 40 percent of households have an electric car. But the
building code should be in place that no new structure
goes up that hasn't considered this. And in fact,
accommodates. And I saw in the slide on the Oregon EV
initiative, the statewide building codes. I don't know
what that was referring to. Maybe you want to expand on
that. And hopefully some of the witnesses may have some
comments about how to, in fact, get that statewide code
achieved.

MS. HORVAT: We do have a statewide building, and
it's innovative in how it makes it easier in the
stream-lining process. We don't have a requirement that
all new construction does include wiring. We do have a
pilot project going on right now that is more permissive
that allows local jurisdictions to opt in to require
themselves. We would certainly like to have a statewide
requirement that does have at least a certain percentage
of the parking spaces dedicated to EV charging. It's been
somewhat difficult to get that done at the outset, but I think in the future that would certainly be something we could do, especially if we see success with the pilot projects and get the homeowners associations on board.


BOARD MEMBER MITCHELL: Welcome, all of you. I can't help but noting that all of the presenters from the states are women. CARB has traditionally been a man's world, so I think we've received.

BOARD MEMBER BALMES: I think we need to replace the Talking Heads with women.

BOARD MEMBER MITCHELL: It's noteworthy that in the last year the growth of the sales of these vehicles has been tremendous. And we've seen growth we wouldn't have believed could happen three years ago. I think we are on the rise and we are getting to the goals we've set for ourselves.

I also noted the Building Code reference in the Oregon plan, because I think that is something that all of us can address. My city, in fact, has a requirement in the Building Code that all new construction or remolds over are 50 percent of the existing construction must include infrastructure for EV vehicles. And we note this has been a problem particularly with multi-unit buildings. And we are at a place here in California where because of
the SCS sustainable community strategies that we adopted, a lot of cities are in the process of building multi-unit residential structures near transit-oriented station. So we haven't adopted such a requirement in the State Building Code. We do have a State Building Code. It could be considered as maybe an agenda item for us to think about in the next year or so. But certainly local jurisdictions can do it, and some have. I know the city of Los Angeles has such a code, and that's where I got the idea from my city. Stole it.

The other thing I noted was how important visibility is. We need to get people in these cars. We need for people to see these cars. And the visibility element of I think it was your plan in Massachusetts is the key part of our mission going forward.

So thank you for coming and collaborating with us. We know that in California we are really working toward this goal.

But the other thing is that the manufacturers that I've talked to -- and I'm sure many of us have talked to them -- say California is moving on, but the rest of the country isn't. And so it's very difficult for the OEMs to get the market penetration they need, unless we can bring the rest of the states along with us.

So thank you so much for being with us, for
helping us reach that goal. And we truly welcome all of your ideas and your collaboration. Thank you.

CHAIRPERSON NICHOLS: Thanks, Judy.

I think we should probably turn to the witnesses who have signed up to speak. So I'll just call out their names beginning with Michael Hartrick from Chrysler and then John Cabaniss from the Global Automakers.

Mr. HARTTRICK: Good morning. I'm Mike Hartrick, Senior Planning Engineer at Chrysler Group, LLC.

I'd like to briefly comment on the elements of the midterm review under discussion today. The advanced clean cars regulations are by far the most comprehensive and challenging set of environmental regulations to be levied on the automobile industry at one time.

In the spirit of cooperation, Chrysler worked with ARB staff on the LEV III criteria emission regulation, endorsed the One National Program to reduce greenhouse gases and support the development of the 2018 and later model year ZEV regulation.

The collective advanced clean cars regulations add clarity and certainty for manufacturers with necessary lead time and flexibility provisions. The LEV III program will bring the tailpipe emissions from all new passenger cars, light-duty trucks, and medium-duty vehicles to near zero levels, significantly reducing the light-duty
transportation sectors contribution to air pollution.

The emission levels set in the LEV III regulation are challenging, especially for larger vehicles. But the standards provide the necessary certainty as we consider new and emerging technologies to meet the greenhouse gas requirements.

We urge staff to conduct the essential research, provide sufficient lead time, and to carefully consider manufacturers' investments and the emission tradeoffs in new and emerging greenhouse gas technologies before proposing any changes to the particulate matter standards adopted about in LEV III rule.

Chrysler supports the One National Program to reduce greenhouse gases with the understanding that a midterm review will measure performance to assumptions made by the agencies in setting the standards. All parties understand the enormity of the task and the ultimate success will hinge on technology achieving desired results, the cost of those technologies, and customer willingness to purchase them.

We look forward to working with the agencies to conduct a thorough, objective, and transparent evaluation to inform the 2022 through 2025 model year standards.

In addition, Chrysler maintains that reducing emissions from vehicles is not enough to realize the 2050
greenhouse gas reduction goal. Reducing the carbon content of transportation fuels is absolutely necessary to achieve our common goal. The transportation fuels industry has a significant role to support the vehicle and fuel system needed for success.

Finally, we support the Board's consideration of a ZEV review which will be described by the Alliance of Automobile Manufacturers. The ZEV mandate is a significant resource challenge on top of the One National Program, and we need to collectively continue developing the best path forward to ensure customer support to achieve its stated goals.

Thank you. I'd be happy to answer any questions.

CHAIRPERSON NICHOLS: Thank you.

Next is John Cananiss.

Mr. CABANISS: Good morning. I'm John Cabaniss. I'm with the Association of Global Automakers. Thank you for allowing me to speak.

Our members support the goals of the Advanced Clean Cars Program and understand the importance of electric drive vehicles in achieving California's goals for 2025 and 2050.

We are fully committed to the development of ZEV technology, including batteries and fuel cell cars. Auto makers -- as you heard today, auto makers have done a
great job. 13 PEV models already on the road and across the country actually and many others already announced with over 30 miles expected by 2016, including several fuel cell models.

But as we've already heard from staff and the states, there are clearly more challenges to face with consumer incentives, addressing infrastructure needs, and also addressing the differences in the markets across the country.

We are committed to working with all of you, ARB and also EPA. We think they have a role in this, the Section 177 states, of course. We want to work with everyone to make the ZEV technology program successful.

As you know, the current roles requires the ZEV roll out to significantly ramp up in model year 2018. And with the optional compliance path for pooling in the northeast and northwest regions, some requirements began even earlier in model year 2016. Our companies are working hard to prepare for these requirements, but the many market differences are beyond manufacturers' controls and certainly in some cases beyond state controls as well.

To support our efforts, we believe a regular review of technology and market development is needed. We want this technology to be successful, and we agree it's imperative that we all work together going forward. I'm
glad to hear all of you are committed to that as well.

I do want to mention one other thing that's going
on just for information for those of you that aren't
aware. We've been working for the past two years with the
Fuel Cell and Hydrogen Energy Association and the U.S.
Department of Energy to develop and initiate a project
which we call Hydrogen USA or H2 USA for short. This
project is focusing on development of hydrogen refueling
infrastructure across the U.S.

One major focus is to share the experience gained
here in California with the fuel cell partnership and also
in DOE's hydrogen fuel cell projects and expand the other
markets around the country. We would greatly value ARB's
and Energy Commission's interest in that.

So in closing, just want to say we're committed
to the technology and its success. We need regular
reviews to make that happen. We want to work with
everyone going forward to address that. And we'll hear
more I think under the next item about the potential for
reviews. But we look forward to working with the staff on
the annual updates and any needed adjustments to the
program.

CHAIRPERSON NICHOLS: Thank you.

Okay. Diarmuid O'Connell.

MR. O'CONNELL: Madam Chairman, members of the
Board, my name is Diarmuid O'Connell with Tesla Motors.

Thank you very much for the opportunity to speak today.

We understand the ARB is under constant pressure to weaken the ACC program and related ZEV rules. Specifically, some manufacturers are saying they need more time and it's too expensive to comply with the ZEV mandate, especially as we approach 2018.

In addition, some manufacturers are asking for relief with respect to 177 state compliance due to perceived challenges of selling EV ZEVs in those markets.

With respect to manufacturers' claims for relief, Tesla has demonstrated that the goals of the mandate are achievable quickly and at reasonable cost.

On timing, Tesla went from a garage start-up to EV on the road in less than five years. We also launched the RAV 4 with Toyota in less than 24 months.

In short, there is plenty of time for manufacturers to complete the programs.

In terms of investment, Tesla is significantly smaller than even the smallest of the IVMs. We are able to launch a Tesla Roadster for only $125 million and the Model S for less than half the cost of a typical OEM program.

As a side note, while many people may criticize
Tesla for making money on credit sales, the truth is that our credit revenue funds R&D that puts more and better EVs on the road in California and elsewhere every day, the very goal of these programs.

Moreover, smaller manufacturers buying credits obtained operating flexibility and can wait and see how the market and competing technologies develop while credit earners take on the business risk of commercializing ZEV technology.

Lastly, and with respect to the commercial viability of EVs in the section 177 states, we're seeing amazing customer reception for our electric vehicles in the 177 states. Our sales in these states already represent over 40 percent of our California volume. And that figure is increasing each month. The northeast is one of our strongest markets, representing roughly 30 percent of our California volume, where we already have on the road over 1200 Model S in addition to over 100 Roadsters.

In most of these markets, we only have one store. And in some, we don't even yet have a physical presence. We simply cannot see a justification for further concessions based on arguments it's too difficult to sell ZEVs in these states.

In view of the above, we ask the Board to not...
just hold the line on current program requirements, but go
to further and strengthen these programs and the mandate in
particular. The goal of zero emission is finally in
sight. I thank you for your efforts.

CHAIRPERSON NICHOLS: Thank you.

Mr. Reichmuth and then Bob Cassidy.

MR. REICHMUTH: My name is David Reichmuth. I'm
here on behalf of the Union of Concerned Scientists.

I'd like to thank you for the opportunity to
comment on the progress of ARB's Clean Car Programs that
are reducing air pollution and global warming emissions.

The zero emission vehicle regulation is an
important part of this effort. The ZEV regulation is
working. We are seeing a growing number of ZEV models and
substantial number of ZEVs and low emission vehicles on
California roads.

In just the last three years, almost 40,000
plug-in electric vehicles have been sold. Avoiding the
burning of millions of gallons of gasoline each year. In
addition, over 10,000 pure ZEVs have been sold in
California this year to date, over double the number for
all of 2012.

Currently, all manufacturers are meeting the ZEV
requirements. The ZEV regulation is flexible, allows
different vehicle manufacturers to meet the requirements.
in different ways, including through direct sales of ZEVs, the purchase of credits, the use of regulatory structures and incentives, such as the travel provision, transit connections, and shared use programs.

Increasing ZEVs sales are due to the complementary effort of government, industry, and concerned citizens. Auto makes have made the vehicles available. Government has provided incentives for ZEVs and for purchase and infrastructure, and customers are truly interested in the vehicles.

Popular programs like the Clean Vehicle Rebate Program and the High Occupancy Vehicle Lane Access will continue to have a positive impact. And new funding for hydrogen refueling stations will ensure even more of the ZEV options in the future.

Less than two years ago, this Board adopted updates to the ZEV regulations. In the short period of time since the ZEV market has gone through rapid growth. Despite that, some auto manufacturers are suggesting an extraordinary early review is needed. The justification offered is largely based on Section 177 sales. However, we believe such a review is premature and unwarranted.

The Governor's of eight states have committed to supporting the ZEV regulation in their states with vehicle and infrastructure incentives similar to the successful
efforts California has employed.

In addition, the existing regulation also has travel provisions that allow for manufacturers to move credits between states and regions. The states are stepping up their efforts and auto makers need to do so also by offering and marketing a full range of ZEV vehicles in those states.

The ZEV regulation was carefully crafted. It is working. And premature review is not needed. Thank you for the opportunity to comment today.

CHAIRPERSON NICHOLS: Thank you.

Mr. Cassidy.

MR. CASSIDY: Good morning, Chairman Nichols, members of the Board. I'm Bob Cassidy. It's my privilege to represent the Nissan companies this morning.

Certainly, the midterm review is an excellent endeavor, and we are participating in that. We applaud the inclusion of the Advanced Clean Cars portion as well. That, of course, includes the PM and ZEV.

I attended the press conference this morning. Fantastic. I don't know if a corporation can be delighted, but we're delighted. We're thrilled. We think this is just a great next step.

I guess on behalf of Nissan, we are ready to support you in any way that we can, both in terms of your
action plans and implementing those plans. So thank you.

I'd like to talk about Atlanta, Georgia, as a reference. Atlanta, Georgia, of course, has the federal tax credit. There is a state income tax credit. They've done an excellent job of providing other incentives such as a car pool mechanism. And they have a toll road as well that they're providing incentives. To many of the Board's comments, they have addressed infrastructure in multiple ways that have both entities incentive for consumer installation, for aiding businesses in their installation. They've also developed and are continuing to develop a public infrastructure network. This is currently in its infancy, but is including DC fast charge.

Why do I bring up Georgia and Atlanta? Atlanta is currently the best selling metropolitan market for the Nissan Leaf. It managed to surpass San Francisco here recently. And as a corporation, we're delighted.

I think my point is really to go back to some of the things that were said this morning. If we look at the Atlanta's, if we look at some of the various success stories in the 177 states and California, we really do understand best practices. We really don't need to reinvent a lot of things. I think we really need to pull them together and implement them.

In closing, the Secretary challenged the car
companies to step up to the plate. I think we have done so. We would like to hit it out of the park, if you will, and sell a lot of these 3.3 million cars we're trying to place. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Jamie Knapp and then Bill Magavern.

MR. KNAPP: Good morning, Madam Chair, members of the Board. Thank you for the opportunity to speak today. I'm Jamie Knapp with the Clean Cars Campaign.

Thank you, staff, for your update. Thank you friends from other states for being here to tell us about your work and your landmark initiative to support ZEVs.

This is the time for us all to work together to support the ZEV market and help create that pole. At the same time, you, the Board, need to continue to maintain that push on the auto makers. You must continue to send that firm regulatory signal.

Just last year, as you acknowledged when you adopted the ZEV program and that Clean Cars Program effecting model years 2018 and beyond for ZEV, you established a very reasonable time line and you committed to a ZEV midterm review, as you indicated you would. This was as part of the federal Greenhouse Gas Program. This is something the auto manufacturers asked for. You said you would do it, and you must keep to that time line.
You also acknowledged that the ZEV program numbers are a minimum goal, and they are the minimum that we need to meet our long-term climate and air quality goals.

I wanted to quickly address one of the Board member's questions this morning regarding what the state is doing for building codes and standards. AB 1092 passed and the Governor signed this year an update to the building standards code. And it is to adopt, approve, and publish, mandatory building standards for future charging installations. It includes work in multi-unit developments and part of Green California Code update. I don't know all the details. But I wanted to acknowledge that this is happening.

I guess the point here is we're at the very beginning of the market. It's real. It's fragile. It's an infant as these new models, new plug-in models, fuel cell models come to market and become available in the next couple years. We need to stay the course. California and states across the country are planning your fueling infrastructure. You're making many, many plans, incentives. Local governments are actively working with states and other stakeholders. We're all working to tear down these barriers to zero emission vehicle adoption.

The auto makers are investing in technological
marvels. And they are technological marvels. They are fun to drive. They are great cars. And drivers are discovering that wow factor. They get behind the wheel and they suddenly realize what we're talking about here. Families are realizing savings. As we all benefit from the cleaner air and low carbon environment, as this continues to happen, you're playing an important role by keeping that message strong and staying the course. Thank you very much.

CHAIRPERSON NICHOLS: Thank you, Mr. Magavern and then Bonnie Holmes-Gen.

MR. MAGAVERN: Good morning. Bill Magavern with the Coalition for Clean Air. We are strong supporters of California's Advanced Clean Cars Program. Recently supported two bills in the Legislature that will put more funding into the rebates that we think at this point are an essential part of the program.

And we're very happy that the ZEV program really is working now because it's essential to clean up our air and stabilize our climate and break our addiction to oil.

And I congratulate the eight states, the big and small and their leaders, both short and tall, on the MOU that brings you together. Really appreciate the visits from the other states. And it's important that this effort really does go well beyond California. We've seen
this pattern, of course, many times before that this Board sets standards for motor vehicles that then are followed by the more enlightened leaders in the other states and then eventually become national standards. So it's great to see that happening again.

I also wanted to congratulate the manufacturers for supplying consumers with a range of attractive vehicles, both full battery electrics and plug-in hybrids. And that's really a tremendous accomplishment.

The problems that we are hearing about at this point are more on the dealer side, that drivers are showing up asking to buy or lease an EV and finding the dealers are not prepared to sell or lease them, that they're trying to discourage people from EVs. Or they have one on the lot, but, oh, no, you can't test drive that because it's not fully charged.

So I would suggest that the focus be there on making sure that dealers are more willing and able to actually get drivers into these cars. When it comes to the rules, we think it would be premature to make any changes because they're working. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Bonnie Holmes-Gen and then Simon Mui and that is the last of the list.

MS. HOLMES-GEN: Bonnie Holmes-Gen with the
American Lung Association in California.

I'm very pleased to be here on behalf of the Lung Association to reiterate our longstanding support for the Advanced Clean Cars and Zero Emission Vehicle Programs and the importance of staying the course with these life-saving roles. And to applaud the efforts of our seven partner states.

And I so appreciate the presentation of these dynamic women and others who are here today representing these programs.

The Advanced Clean Cars Program and Zero Emission Vehicle Programs are critical to our mission to improve lung health and prevent lung disease. The solid action plans that are developing across the country are exciting and reaffirm the success of California's leadership here.

For the millions of people who are suffering in California from lung illness, the benefits of these regulations are vital. Every cleaner car on the road contributes to reducing premature deaths and asthma attacks, chronic lung illness from vehicle pollution.

And the American Lung Association, as I may have mentioned, has done some research and released some reports that confirm the health and economic benefits of our clean vehicle future that we're moving towards. And according to our analysis, a complete transition to zero
emission vehicles will allow the state to avoid $13 billion in annual health environmental and societal damages. That's compared to conventional vehicles on the road today. This is a huge avoided cost. We know this is important for our health, but it's to have that quantification just underscores the tremendous benefits that we're achieving.

There could be no doubt that these health and economic benefits and the consumer savings are huge and far out weigh the up-front costs.

We applaud again the State compact announced today. This builds on California's leadership and shows there's real action happening to grow ZEV markets around the country. We are please our national Board Member Susan Griffin was able to be here and participate in the press event today. And she talked about her grandson Mateo with asthma and how he will benefit from these new technologies that are bringing cleaner cars and clean up our community.

The bottom line is that we are in a wonderful position right now. There are over 50,000 plug-in vehicles on the roads in California today, and the market is growing dramatically. The health and air quality benefits are clear, and the transition to clean energy that we're undergoing is critical to our greenhouse gas
reduction efforts. There are valuable partnerships the ARB has with the CEC, other state agencies, the AB 118 program. Funding has been renewed. We're so thankful that that happened and the commitment now from the state, another decade of clean vehicle incentives.

This enhanced partnership with other states is again growing the market, and all signals are go. We just need the car companies to produce more cars for all these states.

We urge you to reject any proposals to relief regulatory requirements or move up the midterm review and stay the course. We applaud your leadership. Thank you. And we continue to look forward to our work with you.

CHAIRPERSON NICHOLS: Thank you.

Mr. Mui.

MR. MUI: Good morning, members of the Board as well as our friends from the clean car states.

First off, I'm Simon Mui with the Natural Resources Defense Council. I just want to say congratulations. This is an historic landmark milestone moving forward together in partnership like this. This, in our opinion, is helping create a tipping point in the electric fuel vehicle market.

It's a partnership that will enable the early market leaders we've heard from today, such as Diarmuid
with Tesla and Bob with Nissan as well as the fast
followers to really expand the market and have the support
from the states.

I bring some good news as well in addition to the
great news we heard today. The current market data as you
look at it as well as the credits generated from the ZEV
program is showing that the auto industry as a whole is
not only meeting the mandates, but they're well exceeding
them. Our analysis is showing that the California sales
have quadrupled since 2011. Over 50,000 vehicles are now
on the road. The auto industry has exceeded the 2009 to
2013 requirements by over two times. In 2013 alone, the
auto industry has exceeded the standards by nearly four
times. So it's important as we go forward that the Board
and others here are assured that we are moving in the
right direction, that now is not the time to reach for the
brakes, but to go forward with the program and the market
deployments.

And I'd just like to flag some of the additional
from last year's unanimous Board vote in support of
accelerating the market in accelerating the ZEV program.
Really, there were many considerations added to help the
industry transition to those larger 2018 and beyond
standards. But those volumes are what's driving the
industry now, many of the market followers, to really
expand their product lineup and to continue their investment. And we know it can be done.

So going forward, I think now is the time. Clearly, the evidence supports staying the course and continuing the great momentum and success. Let's accelerate the good. Let's move forward. Thank you.

CHAIRPERSON NICHOLS: Thank you. Thank very much. This has been a really wonderful moment in the Board's efforts to move forward with advanced clean cars in California. It's nice to be able to take a pause and take some soundings on where we are. Obviously, there is a lot of work to be done, challenges ahead. No question about it.

But with the energy and good will that is being brought to this effort, I think we're in very good shape. We will be moving on to specifically focus on some proposed tweaks, amendments to the ZEV program, and that's what's coming next on the agenda. But I'm wondering does the court reporter want to take a break at this point? No.

In that case, I think we can just forge ahead. While you're changing some of the staff that are doing the presentation, I'm going to second since the issue of the wonderful lineup of women from the States was brought up, I want to say two things. First of all, you don't...
actually have to be a woman to be a clean car advocate.

And in fact, we have in the audience representation from
an organization which has done a tremendous amount to help
move us forward, the Northeast States Coordinated Air
Management Group. Arthur Marin and Matt Solomon are here
from NESCAUM. I'm not going to call you out, but you can
wave. Thank you so much for all that you've done to help
to move this agenda forward.

And I'm also going to tell a story, which I
learned in my days as a professor at UCLA about electric
cars, which is there is history on early, early efforts by
auto companies to sell electric cars back in the days when
there was really a question about what shape and fuel the
vehicle was going to use. And someone has done a Ph.D.
thesis which has been turned into a chapter in a book
which shows how in those days the oil industry primarily,
although in collaboration with some of the auto
manufacturers, decided to take on the electric vehicle and
to smash it. That was sort of the first version of "Who
Killed the Electric Car," chapter one. This is, you know,
back in the days of the 20th century. But they did it by
portraying as EVs as women's cars because they were too
clean and they were too quiet.

And real men drive cars that put stuff out of the
tailpipe and that make a lot of noise. And you didn't
have to crank them either. Thank you, Dr. Sperling, who probably knows this better than I do. But anyway I think it's just worth pointing out we've made progress.

All right. Time to move on to the next item. And I don't think I need to introduce this. I'll turn it back to staff.

DEPUTY EXECUTIVE OFFICER COREY: All right.

Thanks, Chairman Nichols.

As you noted, the zero emission vehicle, or ZEV, regulation continues to be essential for transforming California's light-duty fleet. These regulations ensure that we're on track to achieve emission reductions to meet air quality and greenhouse gas targets.

Today's proposal would make minor regulatory changes to ensure provisions adopted as part of the 2012 advanced clean cars package work as intended.

Staff's presentation will provide an overview of the proposal. And Anna Wong of the Mobile Control Source Division will now begin the presentation. Anna.

(Thereupon an overhead presentation was presented as follows.)

AIR POLLUTION SPECIALIST WONG: Thank you, Mr. Corey.

Good morning, Chairman Nichols and members of the Board.
I'm here today to present minor amendments to the
ZEV regulation.

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AIR POLLUTION SPECIALIST WONG: Adopted in 1990, the ZEV regulation is an element of ARB's light-duty regulation. As Mr. McCarthy has just presented, this Board adopted the Advanced Clean Cars Program in January 2012, of which a re-vamped ZEV regulation is a key element.

I'm here today to recommend minor changes such that the ZEV regulation works to ensure advanced technology vehicles are on the road in increasing numbers through 2025 model year.

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AIR POLLUTION SPECIALIST WONG: The Board adopted the final version of the advanced clean cars regulations, including the ZEV portion, in November 2012.

The United States Environmental Protection Agency granted ARB a waiver for the advanced clean cars regulations earlier this year in January. However, due to the compressed time frame of the rulemaking schedule last year, essential amendments are needed to ensure the provisions work as originally intended and close potential loopholes.

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AIR POLLUTION SPECIALIST WONG: Before I get to staff's proposed amendments, let me first explain how the current ZEV regulation works. A manufacturer's obligation is determined by how many vehicles it sells in California. Each manufacturer's obligation is a credit requirement. Each vehicle produced by a manufacturer is given a credit. Where pure ZEVs typically earn more credits than near-zero emission vehicles.

The largest manufacturers must produce pure ZEVs, meaning battery electric vehicles or hydrogen fuel cell vehicles. Additionally, manufacturers may produce other near-zero emission vehicles technologies, like plug-in hybrids, conventional hybrids, and clean gasoline vehicles or PZEVs in lieu of ZEVs to offset some of their overall requirement.

Nine other states have adopted California's ZEV regulations, requiring manufacturers to place pure ZEVs and near-zero emission vehicles in those states as well.

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AIR POLLUTION SPECIALIST WONG: As Mr. McCarthy pointed out, the Board adopted the requirements shown in this slide in 2012 as part of the advanced clean cars rulemaking. The revised ZEV regulation will increase manufacturers' obligations each year starting in 2018 through model year 2025 to achieve cost reductions needed
for commercialization and prepare California to achieve 2050 greenhouse gas reductions.

Based on a likely compliance scenario we developed, this increased requirement could result in 15 percent of annual scales in 2025 being pure ZEVs and plug-in hybrids.

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AIR POLLUTION SPECIALIST WONG: Today, I will explain staff's three main amendments. The first is adjustments to the optional Section 177 state compliance path. The second amendment establishes a new cap on all non-ZEV credits when used to meet a manufacturer's minimum ZEV requirement. And the third excludes battery exchange as qualifying under the fast refueling definition for type four and five ZEVs. Staff is also proposing further conforming and clarifying changes which are outlined in staff's Initial Statement of Reasons.

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AIR POLLUTION SPECIALIST WONG: Before I explain staff's proposed changes to the optional compliance path, I'll give everyone a refresher on the travel provision. Section 177 of the Clean Air Act allows other states to adopt California's air quality regulations. Nine states, many of which you've heard from earlier today, have adopted the ZEV regulation. I'll refer to
these states as the ZEV states. Because of the other states' adoption of the ZEV regulation, for every 100 vehicles a manufacturer must produce for compliance with the California regulation, they must produce 140 vehicles in compliance with the ZEV states' regulation requirements.

A provision called the travel provision allows manufacturers to count ZEVs placed in California towards meeting requirements in the ZEV states. However, this provision was modified as part of the 2012 rulemaking and expires for battery electric vehicles after 2017 model year.

The states wanted to create a viable path forward for the manufacturers to enter into the ZEV state markets and provide some incentive for producing ZEVs prior to 2018 model year.

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AIR POLLUTION SPECIALIST WONG: The Board adopted the optional Section 177 State compliance path as pardon of the 2012 ZEV rulemaking. The way this provision works is in exchange for early battery electric vehicle placements in the ZEV states, manufacturers would get some relief on their plug-in hybrid and ZEV requirements in the ZEV states for a limit time.

Additionally, manufacturers who took this path
would also be allowed to pool amongst the ZEV states their plug-in hybrids credits beginning in model year 2015 and their battery electric vehicle credits starting in 2018. Pooling will allow manufacturers to distribute their required plug-in hybrids and ZEVs reflecting market demand across each geographic region.

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AIR POLLUTION SPECIALIST WONG: Since adoption, manufacturers in ZEV states have continued discussions surrounding this provision and have requested a number of changes to ensure its success. From this, we have jointly developed the following proposed amendments.

One incentive offered to manufacturers choosing this path is the ability to pool credits across states. This means, for example, that manufacturers can use excess credits in their New York bank to meet obligation in Maine. California is excluded from the pools.

Staff is proposing to allow manufacturers to pool ZEV and plug-in hybrid credits earned in 2012 and subsequent model years. This differs from the current language which only allows manufacturers to pool one model year credits, starting in 2016, to meet the same model year requirements. Expanding this provision will allow manufacturers greater flexibility in complying with increasing ZEV State requirements. Staff is also
proposing to add provisions specifying how this optional
compliance path applies to intermediate volume
manufacturers, still allowing the use of PZEVs to fulfill
their remaining requirement.

Staff is also proposing to remove the requirement
to provide vehicle identification numbers, or VINs, prior
to 2018 model year and substitute a requirement that
manufacturers provide VINs upon request. These changes as
well as other clarifying changes and simplification of the
language will help ensure manufacturers are adequately
incentivized to take this path while protecting the ZEV
states from potential gaming and reducing the number of
vehicles that would be produced.

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AIR POLLUTION SPECIALIST WONG: The second
proposed amendment deals with credit caps. In 2012, the
Board adopted various caps for new types of credits
introduced and for historical ZEV program credits. First
let me briefly review these various credit types.

Extended range battery electric vehicles, or
BEVs, are battery electric vehicles with limited gasoline
range after the battery has been depleted. Manufacturers
may meet up to 50 percent of their pure ZEV requirement
with these credits.

Greenhouse gas overcompliance credits are awarded
when manufacturers overcomply on their LEV III greenhouse gas fleet average standard and use that overcompliance to comply with the ZEV regulation. Those credits are also capped at 50 percent of their pure ZEV requirement.

Prior to 2018 model year, manufacturers can place plug-in hybrids and ZEVs in transportation system credit programs which are car sharing programs to help promote the technology. There are caps placed on the use of these transportation system credits within the pure ZEV portion and plug-in hybrid portion of a manufacturer's requirement.

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AIR POLLUTION SPECIALIST WONG: In 2012, the Board agreed to remove PZEVs and hybrids from the ZEV regulation starting in 2018 model year. However, due to these vehicle's success in the marketplace, staff predicts manufacturers will continue to have credits in their ZEV compliance banks from PZEVs and hybrids. These old credits may be converted to plug-in hybrid credits and may meet up to their 25 periods of their plug-in hybrid category of their requirement with these converted credits.

Bottom line, whenever a new type of credit is introduced, other than a pure ZEV credit associated with a vehicle, a cap is typically placed on the new type of
credit to ensure pure ZEVs are still delivered in any
given model year. However, these credits and caps work
with each other -- how they work with each other was never
defined in the regulation. This could potentially lead to
zero pure ZEVs being produced in a given model year, which
is the opposite of the intention of the cap.

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AIR POLLUTION SPECIALIST WONG: Staff is
proposing to set an overall 50 percent cap on non-ZEV
credits which a manufacturer uses them towards their pure
ZEV requirement. This proposal does not effect individual
caps already adopted by the Board, but only applies to
non-ZEV credits used in combination to meet a
manufacturer's ZEV requirement.

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AIR POLLUTION SPECIALIST WONG: Our last proposal
effects the fast refueling definition. Adopted in 2001,
ZEVs with the ability to refuel of 95 percent of full
capacity within 15 minutes are allowed to earn more
credit. Some battery electric vehicles have been
qualifying under the fast refueling definition by means of
battery exchange. However, this refueling mechanism isn't
a battery electric vehicle's primary method of fueling and
actual use of this mechanism has been sparse. Though
staff does recognize the potential for a battery exchange
to help market the vehicle, other vehicles earning this
fast refueling credit, like hydrogen fuel cell vehicles,
depend on fast refueling for vehicle operation and
success.

    Staff is proposing to remove battery exchange
from qualifying under the fast refueling definition
starting in 2015 model year. This would mean battery
electric vehicles that were qualifying as fast refueling
capable in 2014 model year and earning seven credits each
will earn four credits each in 2015 through 2017 model
year. In 2018 and subsequent model years, there is no
additional credit for fast refueling capability, and all
credits will be based on the vehicle's all-electric range.

    AIR POLLUTION SPECIALIST WONG: In summary,
staff's proposed minor amendments will help ensure the ZEV
regulation adopted in 2012 will work as intended.
Modifying the optional Section 177 State compliance path
will allow manufacturers greater compliance flexibility,
while maintaining meaningful provisions to protect the
number of vehicles delivered in the ZEV states.

    Setting a new cap on non-ZEV credits will also
ensure that existing caps are meaningful and loopholes are
prevented in future model year. And modifying the fast
refueling definition will help ensure only vehicles in
which fast refueling is realized on a regular basis are
rewarded with the greatest amount of credits.

This concludes my presentation.

CHAIRPERSON NICHOLS: Thank you.

I see there are a number of people here who are
wanting to talk about the issue of the intermediate volume
manufacturers. And I want to be clear that that is not a
part of the recommended changes that you're making today.
It's an item where concern is being raised and we
understand the concern. But what they would be seeking
would be some sort of direction from the Board to the
staff to go and work on those is the items. Thanks.

And any other items that we're aware of that are
being raised -- well, I guess this issue of early review
of the ZEV mandate is going to come up again. But that is
not again part of a recommendation.

Okay. Any other -- if nobody needs to talk right
now. Let me say, first of all, in terms of timing because
I guess there are a number of people with different issues
about timing, the plan had been to finish this item and
then take a lunch break before we went into the truck and
bus rule. If that's still okay with everybody, let's just
stick to that. We do have 20 -- actually 19, because one
was on twice. So Matt Solomon got himself listed twice.
We're not going to let him get away with that. So we have
somewhat fewer. But obviously, it's going to take some
time to get through all this. So let's plunge in. And if
we have questions or comments, we'll do that as we go
along.

So let's started with Matt Solomon from NESCAUM
and then Ken Morgan of Tesla.

It is helpful if you can keep track of where we
are. And if you're next in line, be ready to jump up and
make your presentation. Thanks.

Matt.

MR. SOLOMON: Thank you, Chairman Nichols and
members of the Board.

Good morning. My name is Matt Solomon. I'm
transportation program manager for Northeast States for
Coordinated Air Management, or NESCAUM.

As we heard earlier this morning, California has
joined with seven other states, five of which are NESCAUM
members in a Memorandum of Understanding to support state
ZEV programs. I'm speaking today on behalf of these seven
signatory states: Connecticut, Maryland, Massachusetts,
New York, Oregon, Rhode Island and Vermont.

The MOU signatory states supports staff's
proposed modifications to the ZEV regulation. The
proposed adjustments to the optional Section 177 state
compliance path will improve this provision. It will
promote physical placement of vehicles by limiting the use of transportation system credits for this compliance path, while ensuring flexibility for auto makers by clarifying their ability to bank and trade credits.

In addition, the modifications will strengthen the rule by ensuring state's ability to request vehicle identification numbers as needed to ensure robust accounting of compliance status. We believe that the proposed changes will help to ensure the successful deployment of ZEVs in our region.

We also support the proposed overall 50 percent cap on manufacturers use of credits from BEVx type vehicles and overcompliance with federal greenhouse gas standards to meet ZEV requirements. This cap will help to ensure compliance flexibility for manufacturers, while encouraging the placement and sale of zero emission vehicles.

In conclusion, the MOU signatory states appreciate CARB's continued engagement of stakeholders on the ZEV program. The program is a critical part of our state's strategies to meet air quality, energy, and climate goals. We look forward to ongoing cooperation and partnership with the state of California.

Thank you.

CHAIRPERSON NICHOLS: Thank you.
Mr. Morgan.

Mr. MORGAN: Chairman Nichols, members of the ARB Board, thank you for the opportunity to speak today.

My name is Ken Morgan. I'm here representing Tesla Motors. And I will be addressing staff's proposal to change the fast refueling provision.

Fast refueling credits, as you are aware, are currently available to any long-range ZEV that can replace 95 percent of its range in 10 to 15 minutes. Battery swap accomplishes this goal in a way that is completely in line with both the language and the spirit of the regulations. We've demonstrated a Model S can restore its full 300-mile range in just 90 seconds and has already been approved for fast refueling designation by the Air Resources Board staff.

We understand that other manufacturers have argued that Tesla should not earn these credits. They argue that we're taking too long to build the swap stations and that once open, customers may choose not to use these stations. It's worth noting that Tesla has already fulfilled its promise to build fast and free charging infrastructure in the state of California. And we've done so without the use of direct public infrastructure funding. However, we agree that the spirit of the provision is that the technology be both present...
and accessible and in use by customers. This truth applies no matter what technology is being considered, whether it is battery electric vehicles or fuel cell vehicles.

To prohibit one specific technology not only fails to solve the core issues, it discourages research and development in an area that has great potential to transform the battery electric market.

It is for this reason that we recommend an alternative to staff's proposal of removing battery swap from the fast refueling designation. Our proposal is technology neutral and addresses the core issue of implementation.

We propose that manufacturers wishing to receive fast refueling designation submit data to the ARB staff showing that the fast refueling technology is both in use and available to customers. ARB staff will then review these submissions and grant fast refueling designation based on clear fulfillment of the intention of the mandate.

Given the nascent stage of this technology, we recommend that the Board leave it up to ARB staff's discretion to grant these credits and only add specific criteria once we have a better sense for what can be achieved in this area. Thank you.
CHAIRPERSON NICHOLS: Thank you.

Mr. Siefkes.

MR. SIEFKES: Good morning, Chair Nichols, others members of the Board.

You've obviously done an outstanding job reducing emissions at the pipe tail level through the ZEV program. However, in the opinion of the three groups I represent today, the E100 ethanol group, the Mendocino County Alcohol Fuel Group and the Fort Bragg Grange, we believe this Board should consider taking the additional step of regulating life cycle carbon dioxide emissions from motor fuel under the ZEV program in order to reduce the carbon footprint of the United States.

We currently burn 135 billion gallons per year of gasoline annually in country, which results in 3,267,000,000 pounds of new net carbon dioxide to the atmosphere every single year, a clear contributor to global warming. As a reasonable goal, our groups believe gasoline usage and these CO2 emissions should be cut in half.

The simplest lowest cost way to do this is a mandate that 50 percent of all light-duty vehicles sold in California after January the 1st, 2017, be E100 capable with strict mileage requirements.

At the same power level, an engine optimized for
ethanol will get equal or slightly better mileage than gasoline. Since ethanol costs less than gasoline, consumers will flock to these vehicles as they have done in Brazil for many years.

In front of you is a picture of a typical gas station in Brazil. This is from San Paulo. Two grades of gasoline, one grade is straight ethanol. All pumps in Brazil offer the same set of fuels. Eighty percent of all new vehicles in Brazil can burn straight ethanol.

The key to slowing global warming is to use carbon already above ground to make motor fuel, not bring up new carbon in the form of crude oil and refine it into the gasoline. Processes to make tens of billions of gallons of ethanol quickly from waste cellulose or algae are well defined but not have come into large scale production because there is no current market for ethanol beyond the current blend levels of the gasoline.

An E100 engine mandate by this Board under ZEV would give the automotive companies a powerful incentive to make these vehicles available in California and across the country and would rapidly bring full scale cellulosic ethanol into protection.

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MR. SIEFKES: CO2 emissions would be dramatically lower since the life cycle carbon dioxide emissions per
mile of an optimized E100 engine are less than those of electric, hydrogen fuel cell, or hybrid as can be seen by the chart in front of you.

The two most important are the last two, showing that cellulosity from switch grass or corn stover are zero emissions of carbon dioxide over their life cycle or even slightly negative.

CHAIRPERSON NICHOLS: We have your written testimony.

MR. SIEFKES: In summary --

CHAIRPERSON NICHOLS: Go ahead.

MR. SIEFKES: In summary, you are in a very unique position with your legal authority to regulate emissions independently of the Federal EPA. We urge this Board to use this authority to mandate the use of E100 optimized ethanol engines for 50 percent of the light-duty vehicle fleet under the ZEV program, leaving the other 50 percent under the current regulations.

I'll be happy to answer any questions.

CHAIRPERSON NICHOLS: Thank you. We may have them later but not right now. Thanks.

Julia Rege.

MS. REGE: Good morning. I'm Julia Rege with the Association of Global Automakers, representing 13 international automobile manufacturers. Global Automakers
are committed to ZEV technology and the success of the technology. Our members have invested billions of dollars in the research and development of ZEV technology. And the automotive industry as a whole has announced over 30 models through 2016 demonstrating our commitment to the technology.

With respect to the minor amendments before the Board today, we would like to offer our support for the following. One, we continue to support the pooling provisions in the rule and believe the suggested amendments to allow credits in 2012 to 2017 to apply towards pooling requirements are necessary and important to ensure the value of credits and provide incentives to manufacturers who produce ZEVs early. We believe these changes are consistent with the agreements reached by the large volume manufacturers and the Section 177 states prior to the January 2012 Board hearing and should be adopted.

And two, we also support ARB's proposed amendments to the fast refueling definitions to eliminate this credit for battery swapping. The proposed change will ensure only vehicles that, in fact, use fast refueling in the field receive credit for doing so and provide an added incentive for fast refueling for other vehicles. Thus we support this change.
Finally, separate from the modifications, most of our members support conducting a technical review of ZEV starting in 2014.

We look forward to working with ARB. Thank you for our comments.

CHAIRPERSON NICHOLS: Thank you.

Robert Bienefeld.

MR. BIENEFELD: Good morning. I'm Robert Beinefeld, Assistant Vice President of American Honda Motor Company.

Honda supports the comments of the Association of Global Automakers that Julia just made. And Honda welcomes the eight-state MOU announced this morning. I think it's great progress.

Honda currently markets the Fit EV and the Accord plug-in hybrid in California and other ZEV states and we're demonstrating the clarify fuel cell vehicle here in California. We have announced plans to bring a next generation fuel cell vehicle to market beginning in 2015. Honda is in the process of making plans and investments now for the steep ramp up in ZEV volumes for the 2018 and later model years. This is consistent with the ZEV regulation.

The last chance for us to make cost effective adjustments to these investments will occur in 2015. As
you know, the current ZEV regulation established credit
categories and values based on research estimates by the
ARB staff between 2010 and 2011 and approved by this Board
in the beginning of 2012, just as EVs and PHEVs were
entering the market.

We ask that staff update what will soon be three-
and four-year-old assumptions to reflect actual data from
the market. For example, the EV project in their latest
report based on more than 13 million miles driven filed
with the United States Department of Energy documents that
Volt owners driving a plug-in hybrid electric vehicle
driving 20 percent more heck trick miles than Leaf owners,
an all-battery electric car.

In every one of the 14 EV project cities around
the country, these data are consistent except in Los
Angeles where Volt drivers drive nearly 40 percent more
zero emission miles than Leaf drivers. This would
indicate the TZEV and ZEV categories and credit values
established by ARB staff several years ago without the
benefit of actual market data out to be reviewed and
updated as soon as possible.

These small but important adjustments to ZEV
credits can have important implications for auto makers
looking to maximize the environmental benefits of their
technology investments.
Honda believes all these vehicle technologies—PHEV, BEV, and fuel cells—are good and important and are moving us toward our shared goal of low carbon transportation.

We've seen this Board labor to make sure that regulatory incentives for cap and trade, LCFS, and numerous other policy initiatives reflect the best available data. The zero emission vehicle program serves nothing less. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Mr. Reichmuth.

MR. REICHMUTH: I'm Dave Reichmuth from Union of Concerned Scientists.

UCS supports the minor technical modifications to the ZEV regulation as proposed by staff. The changes will ensure that ZEV credits are properly awarded to manufacturers that are putting ZEVs into operation. In particular, the proposed modification to the fast refueling credit requirements is needed to ensure diverse types of ZEVs are available.

The intent of the fast charging provision is to reward technologies with fast refueling capability so that fast refueling stations can service a large number of vehicles. To date, battery swapping has not been demonstrated as a fast refueling mechanism that can
service ZEVs on a regular basis and no demonstrated
ability for the public battery swapping station to serve
its large number of vehicles.

For these reasons, we support the decision of ARB
staff to categorically exclude battery swapping from
qualifying as a fast refueling technology. If at a future
date battery swapping is demonstrated to be a viable
method for the ordinary day-the-day refueling of electric
vehicles, the ARB should consider revisiting this credit
allowance. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Mr. Douglas, good morning.

MR. DOUGLAS: Good morning. Thank you, Madam
Chairman and members of the Board.

I'm Steve Douglas with the Alliance of Automobile
Manufacturers.

And first, I'd like to applaud the Board and the
states on the historic MOU that was signed this morning.
As this Board is well aware, the Alliance worked
tirelessly over the last year with the environmentalists,
with the Air Resources Board, with the utilities, and
other stakeholders to pass legislation offering a broad
away of incentives and for some infrastructure for ZEVs.
And we're committed to continuing that work in California
with ARB as well as with the area states.
As I've said many times, the twelve auto makers I represent are committed to bringing ZEV technologies to the market, not just in California, but globally.

Next slide.

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MR. DOUGLAS: Auto makers now offer nine battery electric vehicles and six plug-in hybrid vehicles. Within a year, six plug-in electric vehicles will be on the road and in the dealerships. We're off to a strong start helped by a compelling mix of well-reviewed products, extensive focused marketing and media coverage, and very competitive pricing that's in the range of $139 per month to $299 per month. That's with zero or near zero down. That's the price of a cell phone bill.

HOV lane access, preferential parking, and other incentives are bringing people in the dealerships.

Next slide.

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MR. DOUGLAS: However, moving forward from the strong start to a broader market will require more work. In particular, we're finding that the demand for these vehicles in other states is substantially different than in California. For example, in 2013, the electric vehicle sales rate in California was over seven times that in the northeastern states.
MR. DOUGLAS: Comparing the California to the northeast or to the entire U.S. market for hybrid vehicles shows very similar trend where year after year California sales double those in the northeast or the rest of the U.S.

Incentives and infrastructure similar to California will certainly help that. But consumer demand in ZEV technology is likely to trail that in California, if history is any guide.

MR. DOUGLAS: As far as the technology front, the auto makers are making huge strides both on performance and cost. A key question remains at what point these vehicles become economically sustainable. Sales have clearly been buoyed by a significant package of federal, state, and local auto makers incentives. And as both a public policy and a sustainable business matter, it's unclear how long these incentives can and should last.

So for these reasons, the Alliance and its member companies request the Board consider the following actions:

We believe it's appropriate to begin an assessment of the ZEV program, including technology sales
and use of these vehicles. Historically, that's been every couple of years. As part of this review, we ask the Board on an annual basis to look at the sales of these vehicles, not just in California, but everywhere.

Just to wrap up, we're committed to this technology. We're committed to working with ARB and the states to make it happen. We need it. Thank you.

CHAIRPERSON NICHOLS: Thank you.

MR. LORD: Good morning. My name is Michael Lord here to represent Toyota.

Toyota is a member of the both the Auto Alliance and Global Automakers, and we support the comments from both trade associations.

To start, we would like to thank staff for its work on this round of amendments and make two brief comments on them.

First, we support the proposed amendments to the Section 177 State compliance path.

Second, we support the staff's proposal to reestablish the focus of credits for fast refueling to fuel cell vehicles, rather than to continue to reward them for battery exchange capability.

Now, some additional comments and other matters in front of you today. We are very appreciative of and
support the efforts and enthusiasm of the Section 177 states represented in attendance today. We believe it's important to reiterate that our experience shows there is a fundamental difference in the market for advanced technology vehicles between California and these states. The basic premise is demonstrated in the adoption rates for the Prius and continues to exist in the more recent effort to market BEVs and PEVs in those states. It's no surprise to us that California is still home to a much higher percentage of ZEVs and PHEVs. Prius is the number one selling car in California. California and Californians are just different. THEY'RE not better.

Just different. So while --

CHAIRPERSON NICHOLS: Be careful.

(Laughter)

MR. LORD: So while we will continue to work together to help these states transform their markets, we also need to be open-minded about the possible need to consider adjustments to the program to compensate for these market differences.

We also believe it is critical to do additional work to ensure that the future increases in requirements, must less the dramatic leap in 2018 and later requirements are sustainable. While we understand staff is starting the technical and market evaluation work and we appreciate
the commitment of the annual Board update, our main
request is that this work be accelerated so that we can be
in a position in the first quarter of 2015 to make
adjustments, if necessary.

In closing, we wish to underscore the fact that
Toyota is aggressively marketing a RAV 4 EV and a PHEV,
the Prius plug-in, while also targeting the launch of a
fuel cell sedan in 2015. Of course, we continue to put
more hybrids on the road than all other manufacturers
combined.

Thank you for your time. We at Toyota remained
committed to continued success of the ZEV program and to
working with you to achieve a mass market for ZEVs. Thank
you.

CHAIRPERSON NICHOLS: Thank you.

Bob Cassidy again.

MR. CASSIDY: Madam Chairman, members of the
Board, Bob Cassidy with Nissan.

Nissan supports the minor amendments proposed.
We think these are an effective way to proceed with the
ZEV regulation.

I need to point out at this time that Nissan does
not support an early review of the regulations. Just to
give you some perspective here, in calendar year '13,
Nissan's sold as many Leafs as we did in all of the prior
calendar year. We think sales in this market are dynamic. We think they're growing at a tremendous rate. Rather than review regulations, we think it's time to develop those markets, go back to this morning's process of engaging the 177 states and their collaborative agreement. That is the recommended course at this time by Nissan.

Thank you.

CHAIRPERSON NICHOLS: Thank you.

Paul Hernandez.

MR. HERNANDEZ: Thank you. Good morning, Chairman Nichols, members of the Board.

My name is Paul Hernandez. I'm the Energy and Transportation Policy Manager with the California Center for Sustainable Energy.

I wish to speak to you today regarding the proposed decision to disallow battery exchange to qualify under the fast refueling definition of type 4 and type 5 ZEVs and to encourage the Board not to move forward with this decision.

CCSE thanks the staff for recognizing that there is a potential for battery exchange to help market these vehicles. However, we are concerned by the exclusion of this technology through today's proposed decision. Such an exclusion may negatively impact current and emergent EV technologies by comparing market
developments around battery swapping capabilities. This capability has been under development by multiple companies in both automobile and transit fleets. It provides potential avenues for market evolution and opportunities for technology and product differentiation within the EV market.

Despite some recent setbacks, battery swapping may yet provide a viable or even preferred solution to EV fueling needs, which will only increase with the effort to put 1.5 million electric vehicles on the road by 2025.

Today's decision to disallow battery exchange to qualify as a fast refueling option would seem to impact the evolutionary path of sorts for the electric vehicle and infrastructure.

CCSE further agrees with Tesla Motors recommendation that alternative to removing battery swap from fast refueling eligibility, manufacturers wishing to receive fast refueling designation should submit annual data to ARB showing that their fast refueling technology is available and in use.

CCSE has been very attentive to the developments in the EV market and California's EV fleet has experienced rapid change and market growth. This fleet has surged to over 45,000 vehicles in less than three years. Purchases of EVs are an upward trend, and we only see that trend
increasing.

Further, with continued support from the Governor to increase infrastructure and to increase electric vehicle infrastructure under Executive Order B 1612 as well as legislative initiatives AB 8, AB 266, AB 1092, SB 286, SB 359, and SB 454 and in compliance with the 2013 ZEV Action Plan, the opportunities around the electric vehicle transportation market will benefit from an approach that embraces rather than inhibits market growth.

In closing, we encourage the state not to close the door on battery swapping capabilities as a potential technology to electric vehicle infrastructure needs, including as a fast fueling option for type 4 and 5 ZEVs.

Thank you very much for your time.

CHAIRPERSON NICHOLS: Thank you.

MS. TUTT.

MS. TUTT: Good morning, members of the Board and Chairman Nichols, staff.

First, congratulations. This morning was very exciting, and I look forward to seeing the progress that you make going forward.

My name is Eileen Tutt. I'm the Director at the California Electric Transportation Coalition. We are a nonprofit association, and we have over 20 years of a program dedicated to electrification of the transportation...
sector across the transportation sector, light-duty vehicles, heavy duty vehicles, motorcycles, port electrification, everything.

Although we focus on battery electric vehicles, I want to make it really clear and I think most of you know we support fuel cell vehicle technologies. We believe these are complementary technologies. And we are very, very supportive of fuel cell vehicles.

That said, we do have a little bit of a problem with the fast fueling proposal by staff because it does -- it excludes plug-in electric vehicles. And it does so in two ways by eliminating the opportunity for battery swap in the future and also by restricting the time to recharge for I think it's type three to ten minutes rather than 15 and by saying that the battery or the fuel cell battery has to be 95 percent charged in 15 minutes. For fast charging for electric vehicles, that would destroy the battery. So 80 percent is what would be required for fast fueling if you will for electric vehicles that use batteries and not fuel cells.

So we'd like to see the Board and staff consider making sure that the amendment is not exclusive, because I don't think that was the intention of the staff or this Board.

Second, we have long supported the idea of zero
emission miles being considered as a mechanism to define compliance. So I think that would really simplify. We make all these assumptions about how people are going to drive the vehicles. We now have a lot of data. And I think Steve at the Alliance said very simply that we aren't at full market penetration for battery vehicles yet. So we need to make sure that both fuel cell vehicles and battery electric vehicles get the fast fueling credits.

I do want to say the fastest fueling out there right now is the battery electric vehicle because you can plug it in at home, which takes seconds. So I hope that in the future you'll consider expanding some fast fueling credits for anything that can plug-in at home. Thank you.

CHAIRPERSON NICHOLS: Thank you. I like that argument actually, although I have a gas station pretty close.

But anyway, Simon Mui.

MR. MUI: Good morning. Simon with NRDC. I just wanted to represent NRDC to say we do support staff's proposed amendments to the program with some minor caveats here.

One, we don't believe -- it wasn't clear earlier the midterm review should be moved up earlier. We think that would send a very bad signal to the current
deployment and investments occurring in the market just as we're accelerating adding that sort of start-stop to the program.

Some of the considerations around the amendments, particularly the Section 177 States, is in a way one of the many items that ARB put forth during the 2012 adoption of clean car standards to help with Section 177 transition. So additional elements that were added include provisions such as allow continuing allowance of banking, the travel provisions being extended for the BEVs, as well as fuel cell vehicles, the GHG overcompliance provision as well.

And I will mention that if you look at the credit market data, not only does it show the industry is overcomplying, but they have an enormous safety net of banked credits accumulated. Those banked credits are probably enough to get through the 2017 requirements alone, depending on the strategy, the auto maker chooses. However, that is precisely helping auto makers with that transition to that accelerated rate of beyond 2018. And that is one of the design -- numerous design features added to the program to essentially allow for that transition to happen in as smooth a manner as possible.

Finally, I'd like to comment a little bit on this debate over the fast -- the battery swapping issue. You
know, it does remind me of the BEVx discussions earlier last year about really bringing to the table data before crediting. And if ARB does consider sort of the options around the Tesla proposal, we would ask that data -- that information that actual demonstration of the extended use of those vehicles, emiles, be demonstrated in a manner that's consistent with sort of the principles established with the BEVx question that came up with BMW last year. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Will Barrett.

MR. BARRETT: Good morning. My name is Will Barrett with the American Lung Association of California. We do support moving forward with a strong ZEV program and believe that the amendments today help to clarify the path forward.

In just for the past few weeks, we heard new research about the role of air pollution in causing lung cancer and in traffic pollution contributing to thousands of deaths in California in tens of thousands of deaths across the nation.

This new research does underscore the importance of the ZEV program moving forward and the importance of the actions taken by the states today. The amendments help to ensure that manufacturers continue to produce the
vehicles that we need to clean the air and ensure these
vehicles are deployed in states across America that are
working to support the program, the market, and cleaner
air.

On the issue of the battery swapping, the
crediting issue related to this is important to review in
light of the lack of on-the-ground demonstration. Credits
that don't result from the direct placement of vehicles
certainly deserve more careful review to ensure that the
program is not generating credits that aren't based on
real world results. So companies that are looking for
these types of credits should be required in the future to
demonstrate on-the-ground results if they are to receive
these types of credit in the future.

We also do encourage the Board to maintain the
course of the ZEV program as it stands. We don't think
that basically that minor reviews along the way are
important to strengthening the program. But maintaining
the current review schedule and the stringency is critical
to long term success and cleaner air for Californians. We
can't afford any starts and stops in the programs at this
stage as the market moves towards commercialization.

An early review is premature given today's
announcement by the states and the growing sales in the
ZEV category.
Also within the intermediate manufacturers' concerns that we've seen in the letters -- I know they're going to speak after I do. We just want to say that if flexibility is discussed going forward, we want to be involved in that discussion to ensure that the manufacturers comply with all current regulations and the overall program isn't delayed or weakened in any way based on any of that.

So in closing, we do look forward to working with the staff on strengthening and improving the ZEV program going forward. We think that the current review schedule is critical to keep, and we can't afford to step back from the program overall. The clean air benefits of this program are well known and we applaud the work of the staff and the states that was announced today to make sure that that happens. So thank you very much.

CHAIRPERSON NICHOLS: Thanks, Will.

Okay. Now I understand that we have five representatives who are part of a coordinated presentation. This reminds me of one of those tests. If somebody asked you what do Mitsubishi, Subaru, Volvo, Mazda, and Jaguar/Land Rover have in common, what would your immediate answer be if you didn't know anything about the ZEV program? I don't know. But they are all companies that are intermediate volume manufacturers under
our definition. So we look forward to your presentation.

MR. PATTERSON: Thank you very much, Chairman Nichols and Board members. Welcome. Good morning.

My name is David Patterson, Chief Engineer of the Mitsubishi Motors R&D of America. And I'm the first part of the comments of our joint comments of the intermediate volume manufacturers which includes Jaguar/Land Rover, Mazda, Subaru, and Volvo cars.

Our group has met numerous times over the last six months. We've identified some issues that are unique to manufacturers of our size and some possible regulatory solutions.

First, a little history.

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MR. PATTERSON: Our companies have complied historically with the ZEV mandate using partial zero emission vehicles. These conventional vehicles, clean, super low emission vehicles emit one-tenth emissions of standard low emissions vehicle. Our five companies overall have sold almost 700,000 cars in the state of California between the years 2004 and 2011. Of these vehicles, over a quarter million of these vehicles have been these super low emission vehicles. And all total, this has reduced the emissions in the state of California by 1,100 tons of NMOG compared to a low emissions vehicle.
MR. PATTERSON: Looking at this graph of vehicles, you can see here both the overall vehicle sales and the ZEV credits, the gold credits that have been given.

Two things stand out. Number one, the intermediate volume manufacturers are significantly smaller than the other OEMs. We're about -- all total, we are about five percent of the total market volume in the state of California.

And the second thing is few, if any of us, have any gold credits. As an IVM, we are focused on selling PZEVs instead of accumulating gold credits under special provisions.

Considering the announcement this morning, we believe it is critical to prepare for 2026 where we believe that the IVM category will cease to exist. And we will be competing with all the other manufacturers on a level playing field.

Therefore, we believe an ordinarily and voluntary progression is needed to allow us to develop and commercialize the needed technologies.

And similar provisions to accumulate those credits are necessary for sustainable compliance programs. So with the Board's approval, we would like to work with
staff to develop a suitable program in return in 2014 with a proposal. Now I'd like to introduce Davis Barker of Subaru to continue.

MR. BARKER: Thanks, Dave.

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MR. BARKER: Thank you, Chairman Nichols and Board members for the chance to speak today.

I'm David Barker, Energy and Environmental Activities Manager with Subaru.

Today, I also speak in cooperation with these other four IVMs. Almost two years ago, the Advanced Clean Car Rule significantly changed the sales threshold which defines an IVM. At that time, several Board members raised the concerns that the effects of this change should be monitored to avoid any unintended consequences.

One such unintended consequence will be that some smaller more unique manufacturers, such as Subaru, will be shifted into the large volume manufacturer category far ahead of their capability and R&D capacity.

Looking at world-wide sales, revenue, profitability, dealer and network size, these manufacturers have far more in common with the remaining IVMs than any of the LMVMs. For these smaller companies being subject to the full ZEV LVM requirements could be devastating and encourage the use of short-cuts to only
hopefully achieve compliance with the requirements. That type of strategy would not support the policy intents of the ZEV program.

IVM companies are working to overcomply with the current LEV III and GHG regulations and should be encouraged to develop unique and innovative ZEV technologies that can fully differentiate our brands in the marketplace to foster healthy competition. Some form of transition period to full LVM status to the smaller OEMs that fall within the new more stringent sales criteria. Encourage the deployment of unique and competitive ZEV products. Creating a transition period creates a chance for these IVMs to offer a more valuable contribution to the diverse ZEV market to California and its consumers. The IVM's request that the Board direct the ARB staff to investigate this issue with us and to bring proposal to the Board in 2014.

MS. YEHL: Thank you, Chair Nichols and Air Resources Board members. My name is Katherine Yehl, and I'm Director of Government Affairs North America for Volvo Car Group.

I'd like to speak to you today about --

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MS. YEHL: Call your attention to this slide. It's a good graph to show how 43 -- state of California
averages 43 dealers for us as IVMs. But in the states of Vermont and Rhode Island, we average two or three.

So as you can see, this presents a problem with this fewer number of dealers. Section 177 states will make it difficult to meet ZEV requirements without credit pooling for us.

I think it's important to note that dealerships are independently owned and can determine themselves which vehicles they chose to substantially. For example, Volvo has only two dealers in the state of Vermont. So if one of those dealers chooses not to sell EVs due to lack of consumer demand or infrastructure, it makes it very difficult to comply on a state-by-state basis.

Under the current regulation, ZEVs are eligible for the interstate travel provision. Anna noted this morning. This allows manufacturers to meet their obligation by combining credits obtained in all ZEV mandate states. This travel provision ends in 2017. At the same time, IVMs must produce ZEV technology not only in the California, but in 177 states adopting the 2018 reg.

Next slide.

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MS. YEHL: So given this scenario and the fact that there are some 177 states with fewer IVM dealers, it
will be a challenge. Therefore, we've been meeting with the 177 states and will continue to meet with them on an ongoing basis. But in the mean time, the IVM companies request that the Board direct the ARB staff to review this issue and bring a proposal to the Board in 2014.

Thank you.

MR. RYAN: Good morning, Chair Nichols and Board members.

My name is Daniel Ryan. I'm the Director of Government and Public Affairs at Mazda North American Operations. I, too, appreciate the opportunity to speak to you this morning as part of this IVM group.

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MR. RYAN: One of the issues that affects the IVMs and, indeed, effects every auto company is the credit recovery period for ZEV deficits. The current ZEV regulations in the advanced clean car program require any deficit for ZEV credits be made up within the one year. There is an extremely difficult thing to accomplish. All OEMs report their model year sale results and credit balances in May of the following year. Given that auto makers traditionally begin scales of the model year prior to the calendar year, the sales of the model year following the deficit is nearly complete before the deficit may be realized. This makes it impossible to make
adjustment to the vehicle design and nearly impossible to make any changes to our sales strategies in order to hit our credit requirement.

The ARB staff appears to have acknowledged this problem in the same Advanced Clean Cars Program ARB allows five years for a manufacturer to cover any shortfall in greenhouse gas credits.

In addition, under the U.S. EPA Federal Greenhouse Gas Program, three years are allowed to cover any deficit. The additional time allowed in the ARB and EPA GHG programs reflect the need for flexibility in attaining challenging goals.

Given the challenges that many unknowns surrounding the development, introduction, and marketing of advanced technology vehicles which incorporate a significantly different user experience from our current technology, it seems that a one-year limit to resolve any credit deficits its overly stringent and unnecessary.

In the end, the same number of advanced technology vehicles will need to be introduced, whether the period is one year or extended to three or even five years.

One year for ZEV credit deficit recovery is too stringent. We request that the Board direct the staff to review this issue to better align with other programs and
to bring a proposal to the Board in 2014. And with that
to conclude our presentation, I will hand it over to
Clinton Blair.

MR. BLAIR: Thanks, Stan. Good morning everyone.
I'm Clinton Blair, Vice President of Government
Affairs for Jaguar/Land Rover North America. It's an
honor to be here with you today.

Just a quick note about Jaguar/Land Rover. You
may know us for our line of SUVs, sports cars, but what
you may not know is that we're making great strides to
improve fuel economy and various changes to our product
portfolio, which get us on the path towards
electrification.

We've spent a lot of time talking with you over
the summer, and we found it to be a very, very productive
dialogue. We've spent a lot of time over the past
six months talking with the staff. We see this very much
as a constructive dialogue to share information about our
companies, who we are. You've heard a little bit about
the size of our companies collectively. We're less than
five percent of the U.S. market. My company in particular
is less than one percent of the U.S. market and less than
one percent here in California.

So what we're asking you to do today is to direct
the staff to continue this dialogue and look at potential
changes to the ZEV regulation for intermediate volume companies.

This is very much an important procedural gateway we see to continuing a discussion with a view towards implementing potential changes next year. So thank you very much for your time, listening to us. We really appreciate the open door that we've had, not only with the staff but with the Board members throughout the years.

Thank you.

CHAIRPERSON NICHOLS: Thank you. And thanks for coordinating your presentation.

MR. HARTRICH: Good morning again. I'm Mike Hartrick representing Chrysler Group, LLC, manufacturer of the Fiat 500 electric vehicle.

I'm here today to express our support for the proposed ZEV amendments to the zero emission vehicle regulation. The ZEV program is very resource intensive and Chrysler appreciates the staff's efforts to implement the optional Section 177 State compliance path and to provide a more level playing field by maintaining a minimum ZEV credit requirement for all manufacturers.

Chrysler supports the proposed modification to the optional Section 177 State compliance path. Staff's proposals clarify and simplify the requirements of this compliance path and are consistent with the intent of the
agreement reached between OEMs and the Section 177 states. Chrysler also supports staff's proposal to maintain a minimum ZEV credit requirement by capping the use of non-ZEV credit used to meet the minimum ZEV requirement. Specifically, Chrysler understood staff's intent to cap the use of non-ZEV credits at 50 percent when the rule was finalized in 2012, but special flexibility provisions could conceivably have allowed some manufacturers to comply without placing any pure ZEVs. Staff's proposal to place an overall 50 percent cap on non-ZEV credits will create a more level playing field and no competitive advantage some manufacturers may obtain through these provisions.

In summary, Chrysler supports staff's proposal not only provides greater clarity on the Section 177 State compliance path, but also provides a clear direction on minimum ZEV requirements.

Thank you. I'd be happy to answer any questions you have.

CHAIRPERSON NICHOLS: Thank you. That concludes the list of witnesses I had. I don't see anybody else coming forward. I think we can wrap up the public hearing part of this and move to forward questions, discussion, et cetera.

I don't detect any opposition actually to the
staff proposed amendments other than the battery swapping piece. And I would say I'm sure each of you has been thinking about this and many of you have had an opportunity to meet with the representatives of industry, including Tesla. I'm not prepared to close that item off yet. I just think we're not ready to say that we're prepared to support where the staff was on the battery swapping issue. So this may save us a little bit of time.

I would like to see us send that one back to staff to work on as part of the 15-day amendments. I see some head nodding on that with some clarification about what they should be looking at. I think that the issue here is that we are looking for ways to increase the market for battery electric vehicles or electric vehicle ZEVs, fuel cells, et cetera. And we came up with this idea which seemed interesting at the time, but the reality is that we don't actually have -- we have an idea. We have an announcement maybe, but we don't actually have a program yet in place. So I would like to see us make sure that if we do continue this option for credits that it has some criteria associated with it that makes sure it's actually accomplishing something other than just generating credits, which generating credits is what people wants but also has to be tried to actually getting us to the goal.
I don't have anything much more prescriptive than that, but I think Dr. Sperling may. So, Dan, I'll call on you.

BOARD MEMBER SPERLING: I sort of agree with what you just said. I mean, I think I sympathize quite strongly with the staff position on this. I mean, if you look at the research, if you look at commercialization, activities, if you just do it analytically, it's an option that looks like it really only makes sense in fleet operations. You know, maybe in some extreme situations it might happen in like an island economy. But sometimes we talk about California as an island economy, but I don't think it meets the definition in this case.

So I would say that going back they should be -- I mean, someone talked about not shutting the door. Well, I think we should shut the door 90 percent. In other words, make it really hard for anyone to qualify for it. There is a lot of ways to abuse this. Even if you have a rule that says, well, if you do a certain number of swaps, then you get credit. But you can imagine a scenario where you bring in your car for just maintenance and they just swap out the battery as part of their maintenance and call that a battery swap.

So there's -- you know, people can get very creative on these things. And the credits are worth so
much money. And what we're doing by having those credits is we are actually reducing the number of ZEVs out there because those credits are replacing actual cars.

So I think that, you know, better place went belly up and there's no one else out there. Tesla is an idea mostly for them. They're doing a little demonstration, and it's hard to imagine that Tesla actually being in a fleet operation.

CHAIRPERSON NICHOLS: May I just quickly say what I had thought we were talking about here -- and I just want to make sure we're talking about the same thing -- is that Tesla was suggesting that they would build a network of facilities where people would do this, and this would be a way of, in effect, extending the electric vehicle highway to deal with -- show you could deal with the issue of how you take your plug-in vehicle on a long trip. And given that California is a long state with lots of miles to cover, if they were up for doing that -- and I realize as you just said, better place to try this and, you know, wasn't able to really make a financial go of this. But if that were a viable option, that would be something that would be quite dramatic.

BOARD MEMBER SPERLING: I just have one thought on that. I'll all for innovation. If it was any other company than Tesla, I would be very, very antagonistic.
But Tesla has done a great job in so many ways. But the reality is there are fast chargers. So the battery swap reduces the time from 20 minutes to a few minutes. Yes, that has an advantage, but it's not like this is creating a whole new market. They've come up privately with some scenarios that are really minor-type opportunities, but there's just no -- it's hard to see any way that that's really going to be an important option. So that's why I just say whatever criteria we accept, the staff works on should be very biased in the direction of being skepticism.

CHAIRPERSON NICHOLS: Okay. So I have Serna, Mitchell, and then I have to turn my head in the other direction and go with you. Yes.

BOARD MEMBER MITCHELL: I'm supportive --

CHAIRPERSON NICHOLS: Wait a second. Hold on. I recognized Mr. Serna first.

BOARD MEMBER MITCHELL: I'm sorry.

BOARD MEMBER SERNA: Thank you, Madam Chair.

First of all, I want to thank staff for all the hard work that's gone into your recommendation and certainly the time and energy that industry has expressed their concerns and their desires.

I'm going to tend to agree with the Chair on this. Certainly, I don't pretend to have the knowledge
that Dr. Sperling has relative to alternative propulsion systems and the like and the technology in general that go into zero emission vehicles.

But I'm getting a sense that this is one of those instances when you're debating equity and rulemaking policies where you don't necessarily want to discourage a different approach that I think gets you to the same objective. And that's why I think, you know, a fast battery swap component here is at least worth exploring a little further.

And I understand in the testimony the need for data and information relative to the advocacy of doing that to get us to that same objective. So I think what I've heard at least from Tesla is that, you know, they hope to expand the infrastructure for battery swap, not only to serve their customers, but also to demonstrate, quite frankly, to the public and to the ARB, staff, that it can work.

So I'm inclined to support what I think I'm hearing from Chairman Nichols. And while I certainly am very respectful of some other opinions that have been expressed about the concern of cracking open the door with 10 percent or 90 percent, I think this is again one of those instances where we ought to not get too monolithic too quickly on just one approach to how we're going to
look at the future of infrastructure for zero emission vehicles in California.

CHAIRPERSON NICHOLS: Thanks.

Okay. I have Mitchell, Gioia, Riordan, De La Torre.

BOARD MEMBER MITCHELL: Am I next?

CHAIRPERSON NICHOLS: You're next.

BOARD MEMBER MITCHELL: And I would agree with Chair Nichols on this matter as well. What we are looking at I think today is a revolution in electrification of transportation as well as other kinds of zero emission vehicles. And Tesla has been innovative in that field. But I think we should not narrow our focus to just Tesla, because as a developing market, we've heard from a number of intermediate volume manufacturers this morning that are just starting up. Maybe they would develop a car that would be easily adapted to battery swap kind of technology.

And so we should be mindful that there are other developers out there in the field that can come up with cars that may utilize this kind of technology.

I do think, however, that before we would give credit for such a technology, it should be a technology that is in use. And there should be benchmarks that we're looking at as to whether or not we give credit.
The other thing we could look at is whether we
give full credit. Maybe we give a half a credit for that
or less than a full credit. Because it implements our
goal, but it isn't maybe the main path to get to our goal.
So that's another way that we might consider this
technology.

But I think we shouldn't close the door, because
we should be embracing all kinds of new technologies that
come to us. This is an age of technology. Sometimes
government is too slow and doesn't keep up with
technology. But I think in our case, sometimes we're
ahead of the technology. We're forcing technology. So
there is a balance to be had between what we do as the
regulators and the stakeholders that we are helping to get
to our goal.

CHAIRPERSON NICHOLS: Supervisor Gioia.

BOARD MEMBER GIOIA: I don't want to repeat what
others have said. I do agree that we should be at this
point technology neutral and that allows us the
opportunity to incentivize the full range of actions that
could really get us to our goal.

So maybe -- I thought it was interesting. In
addition to the Tesla comment letter, Nissan made a
similar comment in their letter that if we do this, we'd
look at a metric related to the actual use. I think this
idea that's in common in both it be available and in use
and that's the direction we provide to staff, that they
look at that sort of dual standard, that it's available
and in use and develop some criteria to come back to us.
So that would be what I would support.

CHAIRPERSON NICHOLS: Mrs. Riordan.

BOARD MEMBER RIORDAN: I would also support that
very thing, which I think your initial response was, Madam
Chair.

Also, just to add on in another way, the request
of the intermediate volume manufacturers, which I
recognize is out of the scope here, but I think for them
to begin to work with staff, I would certainly support
your efforts in trying to understand what they are doing,
how they can be successful in this. And if they have
special considerations because of their size and because
of their research and development, which may be behind
some of the bigger manufacturers. So I just add that as a
side bar.

CHAIRPERSON NICHOLS: Thanks.

Okay. And Mr. De La Torre.

BOARD MEMBER DE LA TORRE: Thank you, Madam
Chair.

The first points on the battery swapping, just in
general, I think -- I don't know -- this was the first
time I've heard of the situation where credits are being
given for any one of our programs that we've got that are
based on a hypothetical. And so it was concerning to me
to hear that on the possibility that something would work
we were allocating credits.

CHAIRPERSON NICHOLS: I don't think we have yet.
Nobody has actually earned any credits.

BOARD MEMBER DE LA TORRE: So it could qualify
once -- whatever that trigger is, not just in this area,
but in any area, we shouldn't be doing that. And so I
think that threshold is extremely important to
Ms. Mitchell's point earlier.

So I think it's very important that we see it out
in the real world and then credit it accordingly in terms
of how much usage it's actually getting, not just because
it's out there. Do you get --

CHAIRPERSON NICHOLS: And I guess I would say
that, you know, just building a car that is capable of
having its battery removed quickly isn't exactly what I
have in mind. If you're really going to do battery
swapping, you have to build out a network of facilities
where this can happen, which could be a massive investment
and frankly maybe beyond the capacity of any individual
car manufacturer to really do. I don't know if it's going
to happen.
BOARD MEMBER DE LA TORRE: So again, tied to reality and to people's real experience with that vehicle or those kinds of vehicles.

Second point is that we should be technology neutral. We should set a standard. If it's time and usage, then that's the standard. And whoever meets that standard gets to get the credits. And we shouldn't be getting involved in this technology versus that technology. Just flat out, if it's time and usage for that vehicle, then that's it. And staff has to come up with wonderful ways to measure that. But --

CHAIRPERSON NICHOLS: Haven't done it yet. Why not? It's been two hours.

BOARD MEMBER DE LA TORRE: I think that's very important.

And then finally to Mrs. Riordan's comments on the IVMs, I think if it gets us where we were going to get at the end of the time frame and there are slight adjustments along the way, I'm okay with that because it gets us where we're supposed to be at the end of the day. So I think there should be a dialogue there.

Again, based on staff's analysis that we are meeting all of the metrics in terms of emissions reductions, et cetera, throughout that time, then we'll have that conversation.
CHAIRPERSON NICHOLS: So I'd like to turn to that point before we come back to sort of pulling this all together.

Could I ask, I guess, Alberto to comment on this issue of the intermediate volume manufacturers. I know they pulled together this proposal essentially at your request to come up with something. But that doesn't mean that you're completely in agreement with everything that's in the proposal. And I'd like to know what the state of discussions and when you'd be ready to bring something back.

DEPUTY EXECUTIVE OFFICER AYALA: I do want to acknowledge them for making our job a little easier because when we first started the discussions, it was five different OEMs coming to us with five different proposals. So to your point, Chairman Nichols, we basically said, can you see if you can work together and get to some common ground that can be more manageable for us. And I do want to acknowledge that they, in fact, did that.

The second thing I'll say is we are in agreement -- I think this is an area that we need to take a second look at. It's an area that I think you, as the Board, is going to want us to come back and report on. As we all realize today, we're trying to achieve a balance. And the direction we got from you a little over a year
ago -- almost two years -- was that you wanted to be more inconclusive so that as many manufacturers that we could bring into the ZEV program, the staff go and do that.  

But as you heard today, the manufacturers face different realities and challenges. And I think it's only fair for us to commit to doing our part, and we will continue to work with them. We will continue to have dialogue.  

As you can imagine, even though they are proposing and making a request directly to you, everybody else is going to have a say in terms of how we deal with the issue. So I think what we do need is to take a little time. We will continue the dialogue. We will provide information, go through a public process, and we'll come back to you next year on our regularly scheduled update to the Board to other items on the Advanced Clean Cars Program.

CHAIRPERSON NICHOLS: So you're thinking next fall?  

DEPUTY EXECUTIVE OFFICER AYALA: That sounds about right.  

CHAIRPERSON NICHOLS: Okay. Yes, Dr. Sherriffs.  

BOARD MEMBER SHERRIFFS: Thank you.  

CHAIRPERSON NICHOLS: And then --  

BOARD MEMBER SHERRIFFS: Did I jump ahead of you?
BOARD MEMBER ROBERTS: No.

BOARD MEMBER SHERRIFFS: The battery discussion has been great, because it's brought up a lot of these little weedy issues that are so important in how things work.

You know, I think as we talk about availability, we're also talking about convenience. And our standard is looking what goes on currently in terms of how people refuel their transportation. And that's kind of the standard we're shooting for, whether it's with hydrogen or plug-in, with batteries. And swapping batteries at least at this point probably doesn't meet that. I think I need my mechanic to do that. I can't do it myself in 90 seconds.

Now by the same token, we want to encourage that innovation. It's an encouragement for batteries to get smaller for us to be able to do those kinds of things ourselves. If we can swap batteries, we can charge them at times that make more sense with the grid and make them more available. So there is lots of benefits. There is a lot to think about here. We could pull this battery thing out. Or we could leave it in and accept the staff recommendation, but direct staff to, indeed, continue this discussion and figure out how we want to go forward with it. Because I have a sense there is a general consensus
the way the battery thing is working now does not make sense. But we need to think how do we encourage innovation that, in fact, is not ready. It's not out there. But we're trying to get it to see if it can become a real alternative. So a thought.

CHAIRPERSON NICHOLS: Okay. Mr. Roberts.

BOARD MEMBER ROBERTS: Thank you, Madam Chair.

I think since everybody is weighing in on this, I'll associate my own comments closer to what Dan said. I'm very skeptical of this.

BOARD MEMBER SPERLING: That's twice now.

BOARD MEMBER ROBERTS: In how many years?

BOARD MEMBER SPERLING: Seven years.

BOARD MEMBER ROBERTS: But I was very reluctant to say that.

(Laughter)

BOARD MEMBER ROBERTS: So I hope it's not a trend.

But I have great misgivings about this and just the practical nature of it. It seems to me it's going to require a whole new ownership pattern where the companies own the batteries themselves. Otherwise, everybody who's got a pretty used battery pack is going to go in and want to have it charged, get rid of it and get something newer for the cost of the charge.
None of it makes -- there is a practical side. It's not just imagining that you can do something. There is a practical -- when I visited Tesla, I asked what does the business model look like. Nobody knows, because I'm not sure there is a practical sustainable business model that's out there.

CHAIRPERSON NICHOLS: There are a lot of Teslas out there though and people are lining up to buy them.

BOARD MEMBER ROBERTS: I'm not talking about the car. I'm talking about the battery swap. The battery swap.

And I've heard -- over the years, we've always heard things that are possible. You know, do some more work on it before we talk about credits. Because I think the practical nature of doing it is going to be far more difficult than just imagining it.

I'm wondering on the -- I think your suggestions are good to continue the discussions with the intermediate level manufacturers. But what is this in terms of the deadlines as they are there today, what does this do? We're putting them in a suspended animation state in a sense.

DEPUTY EXECUTIVE OFFICER AYALA: Well, there is a practical -- there is a practical need that we need time to work on this. I think they realize that. And in the
discussions that we've had with them, I think they're understanding and on board with the fact that if we get to work tomorrow -- or actually tomorrow is the Board hearing -- but maybe Monday, if we get to work on Monday with them, we can come back with a sensible what we hope to be a solution next year and that provides enough time.

Historically, we have provided a couple year lead time to manufacturers. And again, I think the critical commitment we're making is that we're not going to go silent on this. We're going to engage with them and let them know what we're thinking in terms of a possible solution. I think they'll be okay in terms of timing.

BOARD MEMBER ROBERTS: You think the year is not going to put them -- after that year up against something that is --

DEPUTY EXECUTIVE OFFICER AYALA: They've shared with us a request that if we come back with what we hope to be a solution next year, they will be okay with that.

CHAIRPERSON NICHOLS: Okay. I had Dr. Balmes first and then --

BOARD MEMBER BALMES: I don't want to spend a lot of time with my comments because I agree with a lot of what's been said already.

And unlike Supervisor Roberts rarely agreeing with Dr. Sperling, I often agree with Mr. De La Torre.
And I just wanted to emphasize I thought he hit the nail on the head with regard to the battery swap. He was calling for strong metrics for in-use demonstration and for a technology-neutral approach. I don't think we should be focusing -- right now, it's one single company that we're basically dancing around.

I'm also, like the Chairman, very impressed with what Tesla has done. But I also don't think they should be getting credits for vehicles that are for an idea that's not in use. But if they can get there, with a strong metric, I think that's fine.

And I agree with Ms. Mitchell that we should keep the door open for other folks that might want to innovate in this regard. I'm for a strong metric, but I think we should keep the door open.

With regard to the IVMs, I think Mr. De La Torre hit the nail on the head. And I'm really pleased that staff has been working with the IVMs. I think it's how this agency works best when we're dialoguing with stakeholders to try to come up with something that's both -- meets our needs in terms of controlling emissions, both of criteria pollutants and greenhouse gases and also doesn't kill business that is good for our economy.

CHAIRPERSON NICHOLS: Okay. Thank you.

Last words.
BOARD MEMBER GIOIA: In the interest of trying to make a motion, what I would do, given sort of listening to some of this -- now speaking to the Resolution itself, which is separate from the IVM, which is separate direction -- is move the Resolution with the exception of the portion that removes the battery swap, but provide direction that staff come back as quickly as possible with an alternative proposal that addresses the credit being available on a technology neutral basis for -- it has to be available and in use. But I just want to put those metrics out there there may be some additional -- we do not go forward with removing the battery swap, but provide the direction that it be available in use with that concept and have staff come back as quickly as possible.

CHAIRPERSON NICHOLS: So the way we normally do that is through the 15-day changes process, which doesn't actually come to the Board as long as it meets the overall criteria that the Board has adopted. So if that was acceptable to you, that would get it done --

BOARD MEMBER GIOIA: Right.

CHAIRPERSON NICHOLS: -- more quickly.

BOARD MEMBER GIOIA: Right.

CHAIRPERSON NICHOLS: So you understand that. Is there a second?

BOARD MEMBER RIORDAN: Second.
CHAIRPERSON NICHOLS: I have a couple of them. I could really like to say by the way I agree with everybody.

BOARD MEMBER SPERLING: I do want to say something before you finish the whole --

CHAIRPERSON NICHOLS: On that item? On other things?

BOARD MEMBER SPERLING: On the IVM and on some broader --

CHAIRPERSON NICHOLS: Broad thoughts. Well, we should have some wrap up broad thoughts before we vote then, I guess.

Are there other issues that people wanted to see -- yes, Ms. Mitchell.

BOARD MEMBER MITCHELL: Yes. I wanted to also comment on a couple of statements we heard here this morning.

Eileen Tutt mentioned looking in the future at zero emission miles. I think that's something we ought to be considering because we're ignoring the present protocol that there are cars out there that are getting almost zero emission miles. They only use the gasoline engine for a tiny fraction of the miles traveled, and I think that's a concept that we need to look at again. And I'm new on the Board, so I'm kind of -- I don't know the history.
CHAIRPERSON NICHOLS: You have zeroed in, to make a bad pun, on the fact that this is a program that is really evolved from a tailpipe emissions standard approach to a much more wholistic approach to dealing with greenhouse gases and conventional air pollutants and from a purely technology-forcing item in our standards to something that also is really helping to drive the standards themselves.

So this is something that's kind of under constant review, I would say, in some ways and will be part of the thinking going forward. I think -- and it's just symbolic of the fact that a good chunk of our time today has been spent on something that wasn't even part of the proposed amendments, but will be as we go forward the next -- it's going to be something we're going to be working on every year for a long time to come.

BOARD MEMBER SHERRIFFS: There is a group we talked a lot about that's not in the room and namely the dealers. There's an anecdotal and personal experience since that they're not in the game. And we're reminded again -- we need to think about how to engage them, where can the incentives, the encouragement come from to make them positive players in this. Because there is a big sense that at best they're neutral and sometimes they're very negative.
CHAIRPERSON NICHOLS: A lot happened last year. I hope that when we do our legislative update with Jennifer Gress she'll talk about this, too. The success that was so wonderful. We just are taking it for granted at the moment that we got SB 4 adopted and we have -- AB 8 but that the coalition that we had put together, you know, held together. And we added more people and all the rest of it. There was an effort at the end to bring dealers into the discussion and it bore some fruit and certainly gave everybody some ideas of how we could do better at that engagement effort. So absolutely.

I'm going to let Dan make his closing comments, and I'm going to bring this to a vote.

BOARD MEMBER SPERLING: Some little things building up to the big.

So I would note that we spent a lot of time talking about one type of innovation. And there is many, many innovations that we need here and battery swapping I think is probably the least important of all of them. But I'll leave that there.

One little item that there was no discussion on is the transportation system credits that the staff recommended eliminating. I'm apprehensive about that. I'm not sure I want to do anything. Yesterday, when we had a meeting with the other states and activities in
other states, there was a lot of examples where they were using car sharing as a means of getting electric vehicles out there and getting exposure and experience. So I kind of think it's still a good idea. But no one spoke up for it, so I guess I'll let it go. I'll just go on record saying I'm apprehensive about it.

There was one other little item that I brought up, and that was the idea of the carry forward for credits in the ZEV program. And that it does not -- it's only one -- you have to meet the requirements in one year as opposed to with the greenhouse gas standards for the vehicles you have three years. And I thought that was a reasonable request for us to consider. So I think I'd like to put that on the table here, unless there's -- so I'd like to put that back on the table here.

BOARD MEMBER BALMES: Dan, just one second. A point of information. Are we eliminating the transportation system consider have credit? I didn't hear that. We're putting a cap on it; right?

SUSTAINABLE TRANSPORTATION TECHNOLOGY BRANCH

CHIEF BEVAN: No. It was limited the 2012 rulemaking, and what we're doing is limiting how the caps work together in this rulemaking.

CHAIRPERSON NICHOLS: So to clarify, I think there is a misunderstanding.
BOARD MEMBER SPERLING: Can you translate that, please?

SUSTAINABLE TRANSPORTATION TECHNOLOGY BRANCH
CHIEF BEVAN: In our 2012 rulemaking, we sunsetsed the transportation system credits. And what we're doing with this rulemaking is, along with all of the other caps, we're limiting how they apply in addition to each other to a maximum 50 percent of these other types of credits being used to meet the pure ZEV requirements.

BOARD MEMBER SPERLING: It's sunset. That means you can't get any credit; right? What does sunset mean?

AIR POLLUTION SPECIALIST WONG: Transportation system credit program, that exists through 2017 model year. So vehicles can be placed in transportation system credit programs right now.

We sunsetsed it because the Board has directed us many times to stop giving extra things for not things that aren't vehicles and stop giving away credits. So in our effort to simplify the program, we actually removed transportation system credits after 2018 model year.

CHAIRPERSON NICHOLS: Meaning no new credits.

AIR POLLUTION SPECIALIST WONG: New credits.

CHAIRPERSON NICHOLS: The ones you have right now don't evaporate.

AIR POLLUTION SPECIALIST WONG: Correct. That
was something that was voted on last year and approved last year.

BOARD MEMBER SPERLING: Was I there?
CHAIRPERSON NICHOLS: You were, indeed.
BOARD MEMBER SPERLING: All right.
CHAIRPERSON NICHOLS: This is a problem with having professors on the Board.
BOARD MEMBER SPERLING: All right. So to take the IVM -- to resolve the IVM, I'd like to -- I want to just refine the request to the staff on the IVM that the staff consult with the stakeholders to develop some kind of transition path.

And I would say that something that -- some things that resonated with me are the idea of how can they generate some credits going forward that they didn't -- in a sense didn't have access to, as did the large vehicle manufacturers and could be for demonstration, putting vehicles in demonstration or something like that. I thought that was a reasonable idea.

And I had one other idea. I'll come back to it when my computer comes back on. I'll bring it to the closing thought here. And then there was a small item in there that the way it works now for the 177 states and a manufacturer has to put ZEVs on the road in 2016 and '17 to be eligible for pooling after that. And given the
special circumstances I think it might be reasonable to
delete that requirement for the IVMs, at least take that
into consideration in the deliberations.

So the closing thought is a theme that a couple
Board members picked up that I was delighted to hear, and
this is e-mile idea. And, you know, we talked about that
a couple years ago. I have to give Chairman Nichols
credit. She might not even remember when she first joined
the Board, she said can't be we more performance-based in
some way on this thing? And that is the idea.

And as I listen to all these discussions about we
get caught up in all these little rules and formulas.
And, you know, in principle, it looks like an e-mile type
concept would greatly simplify. We simplified in 2012,
and this would be I think the next step in simplifying.
It would make it a lot easier for us. We wouldn't even
care about this fast charging or battery swapping. If
they can get more e-miles, they get more credit and make
it much more performance based.

So we're already -- you know, there is research
going onto do the foundation of it. But I think when we
do the midterm review, you know, just reinforces to me we
really need to give that a lot of thought and back up,
start thinking about how do you design something like that
because it would be an important change.
But with the principle that we are strengthening, I think what we want to emphasize here, going forward, this program is -- you know, since we strengthen it in 2012 is really on a good path forward. We're making a lot of progress. Industry is making a lot of progress. And the principle is anything we do is to strengthen the program -- reiterate that we are very committed to this going forward and that any designs that would come out of it would be in that sense.

Now having said that, I want to note that it could mean more PHEVs with big batteries especially. And as some of the data is suggesting, we don't know how generalizable some of it is. Some of the PHEV 20s and 40s and 30s and 50s might be getting more e-miles than a pure EV. We ought to be willing and open minded about that and think about what our real goal here is.

So on that note, we are doing a great job. This is really moving towards the transformation, the revolution. I think we should all be proud and happy.

It was great having the other states here as partners going forward, because this is only going to work if a lot of other cities and states are working with us on this.

CHAIRPERSON NICHOLS: Okay. I'm going to bring this to a vote, and I just want to clarify that what we're
voting on is the Resolution that was before us with the amendment that was offered by Mr. Gioia and that we're also giving direction to the staff to continue the work on the intermediate volume manufacturer issue with the goal of bringing them in as quickly as we can and under some sort of a regulated program to make sure that we continue our strong efforts to get everybody making zero emission vehicles as quickly as we possibly can. That's what the goal is.

I do want to note particularly just to reinforce what Dr. Sperling just said, that not only are we not backing off in any way on our progress on the ZEV program, we're here to celebrate the fact we're making progress and to figure out how to strengthen the program going forward. And that in particular, we're doing that in conjunction with our partners in the other ZEV mandate states and that together we will keep looking -- we'll continue to get annual reports on this program, but that we see no reason for any hesitation in terms of how we're moving forward in the review process, which is a very orderly technology-oriented, data-oriented process.

So with that, may I ask for --

BOARD MEMBER BERG: Madam Chair, I think we need another second because you added -- do we need --

BOARD MEMBER GIOIA: I hadn't originally included
it, but I'm fine with that. You included the direction on
the intermediate, which wasn't originally part of my
motion. But the language you stated sort of reflects I
think the sediment here. So I will include it in the
motion.

CHAIRPERSON NICHOLS: So we still have a second.
So all in favor please indicate by saying aye.
(Ayes)
CHAIRPERSON NICHOLS: Any opposed? Any
abstentions? Terrific.

Thank you very much, staff.

And we're now going to take a break for lunch. I
thing you're okay because we told the people here for the
truck and bus rule we wouldn't start before 1:00, but we
actually will not start at 1:00 either because I think we
need an hour, close to an hour. So we will start up again
at a quarter to 2:00.

(Whereupon a lunch recess was taken.)
CHAIRPERSON NICHOLS: The next agenda item is the update on implementing the truck and bus regulation. And just to give a little bit of a background here while we're all assembling, in 2008, this Board adopted the truck and bus regulation as a cornerstone of California's efforts to reduce the public's exposure to toxic diesel particulate matter emissions and to meet federal ambient air quality standards.

This regulation achieves significant emission reductions from older trucks by requiring their retrofit or replacement. The regulation contains numerous provisions that provides some flexibility by giving credits to fleets that act early to install filters and to provisions that recognize small fleets, lower use, agricultural and construction vehicles, and vehicles that operate in rural areas of the state that already meet federal ambient air quality standards.

In 2010, the Board attended the regulation to provide additional flexibility and economic relief to affected fleets while still continuing to meet California's air quality needs. These amendments took into account that emissions were lower than expected because of the recession. The amendments provided the
most relief to small fleets where the first compliance requirement of installing soot filters was delayed by one year and the replacement truck requirements by eight years. Overall, these amendments were estimated to have reduced the costs of compliance by 60 percent.

Since January 2012, staff has been implementing the requirements of the regulation for larger fleets, and that has been a successful program. What makes this year's upcoming compliance date unique is that for the first time, small fleets of three or fewer trucks will need to be brought in compliance. Obviously, that's a challenge. Today, staff will update us on their efforts to date to implement the regulations as well as their plans to transition fleets through the regulation's upcoming January 1 requirements.

So with that broad background, I'm going to ask our Executive Officer Richard Corey to introduce this item.

DEPUTY EXECUTIVE OFFICER COREY: Thank you, Chairman Nichols.

Since the identification of the diesel particulate as a toxic air contaminant in '98 and the subsequent approval of the Diesel Risk Reduction Plan in 2000, the Board has adopted a suite of in-use diesel fleet regulations to reduce the public's exposure to toxic
diesel particulate.

The truck and bus regulation represents the largest remaining increment of reductions to be adopted or rather achieved under the plan.

The regulation is also critical to providing important reductions in oxides of nitrogen, which is the key precursor of both ozone and fine particulates in many areas of the state. Diesel trucks and buses account for about 32 percent statewide emissions of NOx and about 40 percent diesel particulate sources.

The regulation achieves emission reductions from older trucks by requiring the installation of soot filters, engine upgrades, replacing them with newer trucks that were originally equipped with exhaust aftertreatment controls.

The good news is that the vast majority of the 260,000 trucks registered in California must comply with the requirements of the regulation already compliant. However, key remaining challenge is about 20,000 trucks still need a filter by the end of 2012, as mentioned. And nearly 15,000 of these are in small fleets of three or fewer.

For small fleets, January 1, 2014, is a critical milestone, because it's the first time at least one vehicle for each of these fleets need to become compliant.
At the same time, small fleets typically have least access
to capital, creating additional challenges that will be
discussed today.

In order to ensure a smooth transition for all
fleets with the upcoming compliance date, ARB is
implementing a multi-prong strategy that provides
additional financial assistance opportunities to small
fleet owners, continues a comprehensive compliance
assistance program, and recognizes fleet's good faith
efforts to comply with the regulations, which includes
some flexibility.

For benefits of the fleets here today, we also
assembled on the mezzanine deck a variety of vendors that
can provide information on new trucks retrofits and loans.
We also have ARB staff on hand to provide information
compliance assistance and enforcement aspects.

I'll now ask Violet Martin of the Mobile Source
Control Division to provide an update on the
implementation of the truck and bus regulation with
special emphasis on compliance pathways provided by our
near-term implement station strategies.

So Violet.

(Thereupon an overhead presentation was
presented as follows.)

AIR POLLUTION SPECIALIST MARTIN: Thank you, Mr.
Good afternoon, Chairman Nichols and members of the Board.

Today, I will present an update on the implementation of the truck and bus regulation and how staff plans to transition fleets for the upcoming January 1st, 2014, compliance milestone.

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AIR POLLUTION SPECIALIST MARTIN: In today's presentation, I will provide background on the need for the regulation in terms of achieving ambient air quality standards and the health impacts associated with diesel emissions.

I will also provide an overview of the regulation's requirements and benefits.

Lastly, I will discuss strategies focused on what ARB is doing to assist fleets in transitioning into compliance as we approach the upcoming compliance date.

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AIR POLLUTION SPECIALIST MARTIN: The U.S. EPA sets national air quality standards for pollutants considered harmful to human health, including ozone and fine particulate matter or PM2.5.

The figures on this slide show the non-attainment areas for both ozone and PM2.5 respectively. Two air
basins in particular, the South Coast and the San Joaquin Valley, are in non-attainment for both standards. These regions are required to attain the PM2.5 standard by 2014 and the ozone standard by 2023.

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AIR POLLUTION SPECIALIST MARTIN: A key strategy towards meeting these standards is reducing emissions from existing diesel trucks and buses operating in California. These vehicles represent about 43 percent of statewide diesel PM emissions and 29 percent of statewide NOx emissions from all diesel engines. Reducing emissions of both these pollutants from all sources is needed to attain and maintain air quality standards. Substantial reductions in emissions from trucks and buses are also critical to reduce the public's exposure to toxic diesel PM.

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AIR POLLUTION SPECIALIST MARTIN: Federal clean air laws requires areas with unhealthy levels of ozone, PM2.5 and other criteria pollutants to develop attainment plans, known as State Implementation Plans. State Implementation Plans, commonly referred to as SIPs, are comprehensive plans that describe how an area will attain and maintain national ambient air quality standards.

In the 2007 Board-approved SIP, the State
committed to developing a suite of measures for attaining
the national ambient air quality standards, or PM2.5, by
2014 and ozone by 2023.

The largest share of new emission reductions in
the 2007 SIP is expected from trucks. Trucks are an
important component of the SIP because their inherent
durability means they remain in operation for long periods
of time. In some cases, this can mean a truck stays in
operation for 30 years or more. Yet, as I will discuss
shortly, emissions from new trucks produced today are at
least 90 percent cleaner than trucks that were produced as
recently as seven years ago.

In the near term, reductions from both NOx and
PM2.5 are needed to meet the PM2.5 standard, while
substantial additional long-term reductions of NOx are
needed to meet the 2023 standard.

In 2012, U.S. EPA approved the regulation as an
amendments to the 2007 SIP.

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AIR POLLUTION SPECIALIST MARTIN: In 1998, the
Board identified diesel PM as a toxic air contaminant and
in 2000 adopted the Diesel Risk Reduction Plan. The plan
is intended to reduce the public's exposure to toxic
diesel PM throughout the state and identifies strategies
to reduce potential cancer risks by 85 percent by 2020

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from the 2000 base line. The truck and bus regulation is a key component of the Diesel Risk Reduction Plan.

In addition to being a toxic air contaminant, diesel PM also poses other adverse health impacts, including increased hospital admissions, asthma rates, cases of acute bronchitis, and work days lost. In particular, those most at risk to the adverse health effects of diesel exhaust are children and the elderly.

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AIR POLLUTION SPECIALIST MARTIN: Reducing diesel particulate matter is also important for meeting our climate change objectives because diesel engines are a significant source of black carbon. Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow and by interacting with clouds and affecting cloud formation. The impacts from emission of black carbon are increased climate warming, accelerated ice and snow melt, and disruption of precipitation patterns.

Black carbon is a short-lived climate pollutant that has an outsized contribution to warming relative to its concentration. Reducing emissions can have immediate climate change benefits.

ARB estimates that the annual black carbon emissions in California decreased about 70 percent between
1990 and 2010, a result of regulations related to diesel fuels, fleet rules, and emission standards. Further declines are projected through 2020 due to the truck and bus and other in-use diesel regulations.

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AIR POLLUTION SPECIALIST MARTIN: Guided by the Diesel Risk Reduction Plan, since 2000, the Board has adopted a suite of diesel regulations that represent the biggest public health initiative ARB has undertaken to date. These regulations include cleaner new engine standards, cleaner fuels that enable the use of advanced control systems on new engines and retrofits on existing engines, greater use of alternative fuels, and operation controls.

Perhaps the most important element of the Diesel Risk Reduction Plan is addressing diesel PM emissions from the hundreds of thousands of in-use diesel engines that are in operation each day in California and that do not have diesel PM filters. Of all the regulations approved by the Board to reduce in-use diesel PM emissions, the truck and bus regulation is the most significant, as it will ensure that nearly every truck operating in California will have a diesel PM filter.

This requirement compliments similar regulations already approved by the Board for transit buses, solid
waste collection vehicles, vehicles in publicly-owned fleets, and trucks and equipment that operate in ports and intermodal rail yards, to name a few.

Taken all together, these regulations are a critical component of ARB's overall strategy for reducing the public risk throughout the state for all Californians.

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AIR POLLUTION SPECIALIST MARTIN: As I mentioned earlier, a key enabler in achieving emission reductions from trucks operating in California is the availability of cleaner new engines.

Since 1990, ARB in conjunction with U.S. EPA has implemented increasingly cleaner standards for newer heavy-duty diesel engines. The progression of cleaner emission standards for new diesel engines is shown on this slide.

As you can see, the cleanest engines available, those meeting 2010 and later model year engine standards, reduce exhaust emissions for both NOx and PM by 90 percent relative to engines produced as recently as 2006.

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AIR POLLUTION SPECIALIST MARTIN: Significant benefits have already been realized because of ARB's suite of regulations to reduce emission from diesel engines. In fact, the localized benefits resulting from the
regulations related to diesel engines have been confirmed in scientific studies conducted at Los Angeles and Long Beach and at the Port of Oakland.

An ARB study focused on the port truck cleanup in Los Angeles and Long Beach measuring pollutants levels at busy intersections in July 2007 and July 2010; the study found that levels of both black carbon and NOx, primarily from diesel vehicles, were reduced by 50 percent over the three-year period.

And a study in West Oakland performed by U.C. Berkeley researchers measured port truck emissions from November 2009 to June 2010 and found that diesel PM emissions went down 54 percent and NOx emissions went down 41 percent.

It is also notable that this port truck cleanup occurred rapidly, in less than a year. Similar reductions for heavy-duty trucks at another Bay Area location took nine years to achieve.

While these near-term successes are important, California must continue its progress towards reducing emissions from diesel engines so that we can meet our long-term emission reduction goals. And the truck and bus regulation is a key strategy to ensure that these goals are achieved.

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AIR POLLUTION SPECIALIST MARTIN: The truck and bus regulation was adopted in 2008 to clean up harmful emissions from heavy-duty diesel trucks operating in California. The regulation was amended in 2010 to provide economic relief to truckers affected by the recession, particularly small fleets by delaying the first compliance requirements by one year and extending the time the truck could be operated before replacement. The amendments in 2010 reduced fleet compliance costs by about 60 percent, while maintaining the regulation's air quality benefits.

The regulation applies to medium and heavy-duty diesel vehicles that operate in California, regardless of where they are registered. The compliance requirements of the regulation include upgrading lighter vehicles and older vehicles to 2010 or newer engine year standards starting in 2015.

Fleets with newer heavier vehicles must phase in PM filters between 2012 and 2014 based on the engine year of the vehicle or over a percentage of their fleet and then must phase in the cleanest engines meeting 2010 or newer engine year standards beginning in 2020.

Small fleets, which are one to three diesel vehicles, can delay their PM filter requirements on heavier trucks until January 1, 2014, and truck replacements until January 1st, 2020, or later.
AIR POLLUTION SPECIALIST MARTIN: The regulation has also a number of flexibility options to provide fleets additional time, as shown on this slide, to meet the basic requirements of the regulation. Key flexibility provisions include dedicated agriculture use vehicles, log trucks, vehicles operating in NOx exempt areas of the state, low mileage construction trucks, and vehicles that operate less than a thousand miles, which are exempt from cleanup requirements.

Fleets that chose to take advantage of these provisions must report annually. Currently, some of the opt-in periods are closed to fleets.

AIR POLLUTION SPECIALIST MARTIN: As you can see by this chart, significant statewide diesel PM benefits are already being realized from the regulation. The top line reflects estimated emissions from normal truck turnover. As you can see, emission are forecast to go down over time due to new engine standards and cleaner fuels that provide emission reductions as fleets turn over their vehicles naturally.

The bottom line shows statewide emissions with implementation of the regulation, which are substantially lower than would be realized through normal turnover.
Cumulatively, since the first compliance date, the regulation will have reduced 2,700 tons of toxic diesel PM2.5 by the end of this year, providing significant regional and local air quality and health benefits, as well as substantial reductions in global warming black carbon.

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AIR POLLUTION SPECIALIST MARTIN: This chart is similar to the previous chart and shows the expected statewide NOx benefits of the regulation. The top line shows NOx emissions with natural fleet turnover. The lower line shows the expected statewide NOx emissions with the regulation. Because the regulation's fleet turnover requirements do not begin until 2015, very little NOx benefits have been realized so far. However, the expected NOx benefits are estimated to be approximately 89 tons per day in 2023.

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AIR POLLUTION SPECIALIST MARTIN: As we look at how fleets are complying with the regulation, we see both tremendous successes and upcoming challenges. Overall, there are approximately 260,000 heavier trucks that must comply with the PM filter requirements.

The success is that about 136,000 of these trucks
already have filters and are compliant with the PM requirements. Additionally, another 68,000 trucks are taking advantage of the flexibility provided in the regulation, which allows them to comply at a later date, including in some cases as late as 2023.

Another 34,000 trucks have older engine model years and do not need an upgrade until 2015 at the earliest. This means that for most truck operators there are no upgrade requirements for the January 1st, 2014, compliance date.

While this is a good story, not every fleet is in this situation. Staff estimates that about 20,000 trucks still need an upgrade by the end of this year. Even more challenging is that out of these trucks, we estimate that 15,000 trucks are in small fleets, with many of these trucks being driven by owner-operators.

Recognizing the importance of these trucks to the transportation sector and to local regional economies, staff developed a comprehensive strategy which will help many of these fleets transition into compliant trucks.

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AIR POLLUTION SPECIALIST MARTIN: In developing a comprehensive compliance strategy, staff recognized that no single solution would work. Rather, a multi-pronged approach was developed to provide a compliance pathway for
affected operators which will help them transition into
cleaner trucks.

ARB's plan includes a continued focus on
compliance assistance and incentives, addressing
compliance challenges faced by fleets in both urban and
non-attainment areas, as well as rural and attainment
areas; and recognizing fleets that make good faith
compliance efforts to meet the upcoming compliance date.

Each of these pathways will be discussed fully in
the next few slides.

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AIR POLLUTION SPECIALIST MARTIN: Last year at
this time, we updated the Board about our ongoing efforts
for compliance assistance. This effort has remained
strong since then, with continued support through
training, call center assistance, website support, media
events, and published materials mailed to the affected
community.

Through these efforts, we have been able to train
13,000 truckers in person and handle 84,000 calls in
Spanish and English and Punjabi since 2012. We continue
to develop and distribute printed materials. Thousands of
packets of such materials have been handed to truckers at
inspection sites throughout California.

Mail outs of important deadlines and action items
are regularly sent to the California truckers. The English and Spanish truck stop website are useful resources that are easy to navigate and provide information to small fleet owners. The address for the truck stop website is arb.ca.gov/truck stop.

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AIR POLLUTION SPECIALIST MARTIN: Augmenting our ongoing efforts and to broaden the reach of our assistance, we are also launching a comprehensive media and information outreach campaign including pump tops, printed materials in Spanish and English, and TV and radio advertisements. The design of this campaign is based on research and work with focus groups so that the materials we provide resonate with truck owners.

I would like to note that as part of our efforts today we have assembled in a mezzanine outside the hearing room as well as in the lobby a variety of representatives who can provide information on clean trucks, retrofits, and loans. We also have ARB staff on hand to provide information on compliance assistance and enforcement aspects.

We would encourage any fleets here today to stop by and talk to the representatives outside on the compliance options that may be available to them and answer any questions they may have.
AIR POLLUTION SPECIALIST MARTIN: As an example of outreach efforts underway, I will now share with you a video clip that will be placed in major television media markets to reinforce the importance of meeting upcoming compliance deadlines.

(Whereupon a video presentation was made.)

AIR POLLUTION SPECIALIST MARTIN: In developing our comprehensive compliance strategy, we recognize that fleets in urban and nonattainment areas face challenges in meeting the upcoming compliance date.

To address this, ARB is continuing to make funding opportunities available for fleets. In particular, the ARB and the Legislature through Senate Bill 359 have collectively made available $20 million for small fleets in the Statewide Truck Loan Program.

In addition, the Goods Movement Grant Program, commonly referred to as Prop. 1B, will provide $108 million in funding to fleets with 2006 and older trucks that operate in trade corridors and move goods. At least $40 million of this funding will be prioritized for grants and loan assistance for small fleets.

Staff is also proposing some new regulatory flexibility to be added to the regulation. This would
include allowing additional trucks to use the existing flexibility options for both low use agricultural vehicles and low mileage construction trucks.

In allowing trucks access to these provisions, staff is not proposing to change any of their existing elements.

Staff also proposes to increase the low use mileage threshold from a thousand miles to 5,000 miles per year through 2020. Staff believes that this will provide targeted relief to fleets that most need assistance without appreciably changing the overall benefits of the regulation or the ability of non-attainment regions to meet federal air quality standards. Staff anticipates presenting these proposed amendments to the Board no later than its April 2014 meeting.

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AIR POLLUTION SPECIALIST MARTIN: In addition to the concerns expressed in urban and non-attainment regions, staff has received considerable feedback from stakeholders in rural and attainment areas to request relief.

To address this, staff has developed a strategy that builds on the elements of incentives and regulatory relief just discussed for urban areas and expands them to recognize the different needs in more rural areas.
For incentives, the statewide $20 million Truck Loan Assistance Program will remain open to small fleets in rural areas, as will $3 million in new state funding for modernizing log trucks. This $3 million is currently available through local rural air districts throughout California.

Similar to the regulatory relief being proposed for urban and non-attainment areas, staff is proposing to allow additional trucks in rural areas to use the existing flexibility options for both low use agricultural vehicles and low mileage construction trucks, as well as increase the low use vehicle mileage threshold.

Additionally, staff is proposing to adjust how NOx exempt areas are defined. Additional areas will include those in attainment for NOx that also do not prevent other regions from meeting their federal air quality standards.

In proposing this change, staff will evaluate the timing of the PM filter requirements in these regions such that fleets may more easily transition to cleaner trucks on a time line that is longer than what is currently provided in the regulation.

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AIR POLLUTION SPECIALIST MARTIN: Finally, it is important to recognize that many fleets are making good
faith efforts to comply with the regulation before the January 1st, 2014, deadline, but will still be unable to fully meet its requirements on time.

Staff believes it is reasonable to recognize efforts by fleets and provide them additional time to finish their compliance actions. As such, staff is proposing to issue a regulatory advisory that would provide fleets that order a PM filter or a replacement truck or that are eligible and apply for a grant or a loan to have until July 1, 2014, to complete the steps necessary to come into compliance.

Fleets must initiate the effort by January 1, 2014. In recognizing these steps and providing additional time, the actions taken by the fleets must documented and reported into ARB's truck reporting system.

In addition, because we are planning to make regulatory changes to provide relief, we believe it is appropriate to provide access to these provisions while staff finalizes them to present to the Board by April 2014. Therefore, staff is proposing that the regulatory advisory also allow fleets that are able to utilize these provisions to claim compliance with the regulation for eligible reported trucks. Staff plans to issue the regulatory advisory in late October and early November.

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AIR POLLUTION SPECIALIST MARTIN: Moving forward, ARB will continue to work with fleets and other stakeholders through our extensive compliance assistance and outreach efforts and maximize funding opportunities, especially for small fleets.

As part of this effort, staff will assess the emission and economic impacts of proposed regulatory changes and to discuss the specific elements of the changes in a public process.

Staff believes that the changes will provide significant relief to fleets in need of the most assistance without changing the overall benefits of the regulation.

Staff will return to the Board by April 2014 with proposed amendments to the regulation as well as to provide an update on overall fleet compliance.

This concludes my presentation. Thank you.

CHAIRPERSON NICHOLS: Thank you. Obviously, a lot has gone on, but we're now getting down to the end of the implementation and people facing difficulties, we understand, as well as some opportunities. So I think we need to probably hear from the witnesses. We've got 43 of them. So I think we're going to keep our usual three-minute time limit. But if anybody is able to shorten their time, that will just provide more time for
everybody else. And if necessary, we may have to tighten
that up a little bit if we start to hear the same message
over and over again. But for now at least I think we need
to try to hear from everybody.

We'll start out with Matt Cox and go from there.
We have one podium here with a microphone. And you can
see where you are on the list. So if you see that your
name is about to come up, it's helpful if you can kind of
be in position to come forward. All right, Mr. Cox.

MR. COX: Madam Chair, members thank you for the
opportunity today.

My name is Matt Cox. I'm an advisor for State
Senator Ted Gaines, and I'm here on his behalf
representing him. The Senator represents the first Senate
district, largely rural district, which goes from here up
to the Oregon border. The Senator is very concerned about
the effect that this regulation, the heavy bus and truck
regulation will have on businesses in our district,
particularly small business, and is asking for a
suspension of the implementation of these regulations. In
our district, we have received many calls, and these
business owners have flatly told us that they will be
unable to comply and they will go -- the will disappear.
Jobs will evaporate in our districts immediately.

Certainly, the compliance costs would have been
difficult even in good times. Many of these businesses, however, have not rebounded from what continues to be a recession. And unemployment in many of the counties in our district is above ten percent.

So we are doing everything we can to try to reverse that trend and feel that this will move in the wrong direction for the Senator's district.

With that, I'll close. Thank you.

CHAIRPERSON NICHOLS: Thank you very much.

Rick Bosetti.

MR. BOSETTI: Good afternoon, Madam Chair, members.

Rick Bosetti, Mayor of the city of Redding. And you know, we've sent you a letter expressing our concerns with the implementations as well. Not only are small businesses in our community, but also the smaller cities that are required to bring their fleets up to the standards as well are being affected here as well.

And so to echo the sentiments of all of the small trucking fleets in our area, we'd really like to see a suspension as well or implementation of the recommendations right now to delay this as much as possible.

Mr. Cox's estimation of immediately losing jobs should not be taken lightly at all. I'm born and raised
in that area. My family came out from the Red River Lumber Company that started up, and we saw the lumber industry completely disintegrate. And this is having the same effect as what the Spotted Owl has done for the large fleets that will be the only one standing like the large timber companies are the only ones left standing. That's not makes our community up in Northern California great. It's the individuals, the small businesses. I really would like for you to take that into consideration. Thank you.

CHAIRPERSON NICHOLS: Excuse me, but we do have a general policy of recognizing elected officials ahead of the rest of the group, just in deference to the fact they are elected and representing a lot of other people. If there are other supervisors, assembly members, legislators of any kind who join us, would you just make yourselves known so we can call on you ahead of others. If not, might as well go ahead. Okay.

MR. HOGO: Good afternoon, Madam Chair, members of the Board. I'm Henry Hogo, Assistant Deputy Executive Officer from the Mobile Source Division, South Coast Air Quality Management District.

I want to express our staff's appreciation to your staff's efforts to address the issues. You have a very challenging regulation to have folks comply with, and
your staff has gone out of their way to work with us and CAPCOA to address many of these issues. So we appreciate that.

We do look forward to working with your staff on the proposed amendments. We're generally supportive of providing more flexibility, because we recognize that there is no one-size-fits-all in this regulation.

I do want to make a couple comments. And first in our discussions with staff, it wasn't clear that an upper limit has been set for the low use mileage proposal. And today, staff mentioned moving up to 5,000 miles. We believe we need to see the analysis to see how many trucks would be out of the regulation and how that impacts our air quality in the South Coast. Because as you know, the truck and bus regulation is part of the key regulation for us to meet the fine particulate and ozone standard in the South Coast air basin.

Secondly, we do recognize the need to have further flexibility in NOx-exempt areas. And we would want to make sure that the trucks that are proposed to have a delay in their PM requirements. Because of the local toxics exposure, we're a little concerned about that. But these trucks may travel into other areas of non-attainment. So we need to take a closer look at that.

With those two comments, we look forward to
working with staff as they move forward with the proposed amendments. Thank you.

MR. SADREDIN: Good afternoon, Madam Chair, members of the Board.

It's a pleasure to be here before you. Once again, Seyed Sadredin with the San Joaquin Valley Air Pollution Control District.

I do have one slide I wanted to show you just to point out the enormity of the issue to our district. This is the inventory of NOx emissions by source category within San Joaquin Valley and where we need to go to attain the federal standards.

As you can see, the trucks -- and this is for NOx emissions, which is really the key pollutant for both ozone and particulate attainment. Trucks are over half of the total -- or near half of the total emissions in San Joaquin Valley. And there is no way San Joaquin Valley can meet its public health goals, attainment goals, and the federal mandates without significant reductions in those emissions. We can shut down all the businesses, stationary sources that you see up on top and all the farms and stop all the vehicles in San Joaquin Valley and we will not be able to meet many of these standards without a significant reduction in truck emissions.

So we do support a strong measure to reduce those
emissions. However my Board, the public in San Joaquin Valley, is also concerned with economic impact of this rule that we cannot simply stick our head in the sand and hope to wake up January 1st and everything will be okay. And I want to thank you, your Board, for recognizing that Rich Corey for working very hard on this. ARB staff has come a long ways since we first started talking about this. They have worked very closely with us, and we support all the recommendations before you today.

I do have one additional request that I like your Board to consider. I have had a chance to briefly discuss it with your staff. I think it's critical to find a way to deal with this other component that I think today's recommendations really do not get to.

That is for trucks that for which the only suitable option -- economically feasible option is retrofits. Many of these measures we're talking about today really get to if you replace your truck, you will get some assistance and some additional time if you show good faith. This issue really came to real life for me yesterday afternoon when I was talking to an owner-operator. He called me. He says he's a 59-year-old owner of a truck. He just bought a truck ten years ago, and he's about to finish paying it off. Come January 1st,
we're in a position to tell him you either have to do away
with the truck or put a filter that he can not afford.

      At our district, as you know, we have spent a lot
of resources of our own dollars to help the
owner-operators. And we have additional funding to help
this gentleman, for instance. And fortunately, the way
the law is written right now, we cannot help him with any
retrofit dollars, because those reductions will not be
deemed surplus.

      My request is to ask your staff to look at the
potential regulatory change, if need be, that would allow
a small universe of the owner-operators where they can
demonstrate economic hardship and they have a fairly new
truck that you don't want to simply throw away and buy a
new truck. That with local funding, perhaps if you want
to limit it to that so you can encourage local
contribution to this. Or perhaps for other districts that
don't have the where with all, open that up with other
funding to allow that rule to create some surplus
reductions by allowing for some time to be able to take
advantage of some funding to help those specific cases.

      CHAIRPERSON NICHOLS: So just to clarify, this
would be an amendment to the Moyer program?

      MR. SADREDIN: In the context of the regulatory
changes back to the truck rule, I think that's probably
where it has to be dealt with. It could be something similar to where with do with the construction rule. We called it SOON. But this is not soon, because it's going to be late. It's going to be fast. It will be a fast, you know, get it basically to compliance to give them some time if you can show economic hardship, if you have a fairly new truck, provide with good faith effort along the lines you're talking about in today's proposal they can take advantage of some local funding or grant funding to help retrofit. I know your Board has been supportive of retrofit technology. Today's proposal really leaves retrofits for the most part out of the equation.

CHAIRPERSON NICHOLS: Appreciate your suggestion and appreciate all your district has done to provide funds and other assistance. Thank you.

Mr. Gearhart.

MR. GEARHART: Good afternoon. I'm Doug Gearhart with the Lake County Air Quality Management District. Chairman Nichols, Board, thank you for having us here. I just want to say before we start, I want to thank your staff. They've been wonderful to work with. They've come up with some good ideas. We're generally supportive of the ideas they've come up with. There is a few things that we think could really definitely help in our area.

I just want to say I had a little thing to -- as
you probably see, we a quick meeting of our Board on
Tuesday, and they provided me with their full support to
represent them as the Board of Supervisors and as the
District Board of Directors. So it's kind of an economic
and air quality benefit.

We're looking at -- our Board is definitely
interested in protecting public health and safety, as well
as economic interest in country. As an Air Quality Board,
of course, air quality is definitely a concern. But the
economics is definitely a concern because, as you know,
we're kind of a -- we're a bowl in the middle between a
lot of areas. There's not a lot around us, and we're kind
of in the middle of nowhere. If we lose truck fleets that
are specifically our local fleets that don't go outside
the county, that means we have to get truckers from
outside to drive through those roads, drive into our
county to do work in the future.

And as you know, the Lake County area basin has
been in attainment with all State and federal air quality
standards since 1990. Just this last year, we were rated
number one cleanest county in the nation for PM, by the
American Lung Association, and which makes it difficult
for truckers to swallow. Our local companies have been
very supportive of us. And to have that number one rating
and then we can't use our trucks anymore, it's a very hard
thing to explain to them what the issues are. So having those options is really important.

I wanted to give you a quick example. We have one operator, she's 65. We have a lot of family-owned businesses. They are family run. The parents, grandparents, and the kids, the truck company passes down from one to the next. She's selling her trucks because she doesn't want to hand the company down to her kids because to come into compliance, she'll have a million dollars in loans to come into compliance with the regulation. She has a large fleet by definition, but it's a rural fleet so it doesn't really fall into -- it's not a corporate ownership. It's a family owned, but they have to have a lot of trucks because there's a lot of different things they end up doing.

With that, what staff has suggested we are definitely in favor of. The couple things that we would like to see in addition to some options, of course, I've mentioned them, but modifying the -- well, making changes to the Moyer program so that we can open up the Moyer to any project that's in excess of what's required by regulation.

This company that I was letting you know about, we had them in the Moyer program, but we had to -- they were dropped because they were a large fleet. And when
the regulation went into effect, even though we had five
years until the compliance date, we couldn't fund any of
the vehicles. It made it very difficult for them, and we
would like to see those things in excess still continue on
as options.

CHAIRPERSON NICHOLS: Okay. Can I ask you to
wrap it up?

MR. GEARHART: The last thing I wanted to say was
we would like to see the extension in rural attainment
areas is very important because we would rather see them
replace their truck with a 2010 used truck over the next
five or ten years than put a filter on a 1990 truck and
use it for another ten years. We're looking at the
long-term benefit of getting the NOx reductions.

Thank you. We are definitely in favor of the
option being proposed.

CHAIRPERSON NICHOLS: Thank you. Appreciate your
involvement here.

Mr. Davies and then Constance Boulware.

Mr. DAVIES: Good afternoon, Madam Chair and
Board.

My name is Skip Davies. I'm the Mayor of the
City of Woodland. Sit on the Yolo Solano Air Quality
Board. I'm the Chair of the Truck and Bus Subcommittee.

I grew up in agriculture. Drove a truck. Had a
Class A license. Now they're Class 1. I've been involved in it for a number of years. Been in Woodland for 45 years. I understand agriculture.

I'm here with three interests I'd like to share with you. I'd like to look at a more realistic and practical path and an assisted path to compliance for small fleet owners. In my area that's usually one, two, three trucks.

We still have some technology issues with filters. They only don't all work. They plug up. Some have to be replaced. Our estimates are that 60 to 80 percent of our small truckers in Woodland and Yolo County cannot be in compliance and will be out of business in two years.

We need a special outreach program in Yolo County and in our area to those Latino- and Spanish-speaking truck drivers. They're not tech savvy. They don't find your website very well. They don't trust you. They don't trust me either sometimes, so that's okay.

In Woodland, we had a meeting. We expected to have 20 individuals. We ended up with 70 truck drivers, 50 of those were Latino. Their families were there. They had children there. Many of them just have high school help and they were a little bit frightened.

Our second interest that I speak to is allowing
the small fleet owners to stay in business for four to five years to reach compliance. We believe in compliance. The 5,000 mile exemption, it was suggested is not adequate. You have to understand our lifestyle. In May, we do wheat. That lasts until June. From June until mid-August, tomatoes. And from September through November, October, we do rice. And these people work for six or seven months, and then it's over.

We also would like you to understand that they have to take non-op certificates in the winter to save licensing money. To move their truck into a non-op status, they don't qualify for the loan programs. But that's the way we live.

We'd like to encourage a loan program that is restricted to small fleet owners. $20 million is appreciated. We need to work on that with you to gain more.

My third interest is to protect my regional economy. In Woodland, we have the third -- we have the largest tomato cannery in the United States. We have 600 employees. It's important that we maintain our economy. And again, that series that I talked to you about is exactly what we have. Our projects need eight hours from the time it's harvested to get to processing. Very, very important. Without adequate trucks, we won't meet the
CHAIRPERSON NICHOLS: I want to interrupt you because I want to have you answer a question, if you don't mind.

MR. DAVIES: Please, ma'am.

CHAIRPERSON NICHOLS: Supervisor Serna wanted to ask a question.

BOARD MEMBER SERNA: First of all, thank you, Mr. Davies for being here. I appreciate you taking the time and energy to do the outreach you have in your own district, but also being here this afternoon.

My general question is -- and I appreciate the fact that you've articulated your concerns. Have you or others in your air district, members of your air district, had a chance to understand some of the flexibility measures that staff have presented this afternoon?

MR. DAVIES: Yes, sir. We got that e-mail about three or four days ago. The 5,000 miles, we understand that. We appreciate that movement. We also understand the issue of the loan piece. Constance, behind me, will talk about the NOx issues because we're not in that exempt area and that effects us.

But yes, sir, I think -- I guess they're listening well. They're making some movement. We appreciate that. We want to continue to work with them to
see if there's more money, more issues, more outreach that
we can do to keep our businesses afloat and keep our
people employed.

BOARD MEMBER SERNA: Thank you.

CHAIRPERSON NICHOLS: Thank you. If you could
just wrap up.

MR. DAVIES: I just want a summary, ma'am. Thank
you so much.

Again, in my interest, more feasible path to
compliance. We all believe in compliance. Increases in
mileage allowance so people can pay their bills and work
and feed their children. 5,000 miles isn't going to get
this.

Time and effort to allow a better outreach
program to our small individuals, especially our Latino
population. And that's a personal contact. It's not a
website. It's not a TV add.

A loan program that is restricted to small fleet
owners. Little more money, please. I'll work with
whoever else to try to assist in that. I to protect my
local economy. I want to provide an opportunity for the
non-op trucks to still qualify for loans.

And the last piece is to allow the agriculture
exemption to go beyond the first point of processing. Ag
exempt allows it to go to the first point of processing
from the tomato field to the cannery, not really allow you
to pick those large cans up and take them to the
warehouse. If you're taking rice to the rice dryer, it's
fine. You can't really pick it up and take it to the
flour mill. It's a simple piece within the mileage.
Those are things we could consider.

Thank you for your time. Thank you for the work
of your staff. We recognize each other's interests and
who we're trying to represent. We'll make a lot of
progress.

CHAIRPERSON NICHOLS: Thank you very much. That
was really helpful.

We have now Constance Boulware and Skip Thompson.

MS. BOULWARE: Good afternoon, Madam Chair and
Supervisors. I'm Constance Boulware. I'm the Vice Mayor
of Rio Vista, California. I'm also on the Air Quality
Management Board for Yolo Solano Air District and a
Committee member with Skip Davies.

I do want thank your staff for taking up this
cause for the work they've done and the proposals they've
made to expand the NOx exempt area and to delay the filter
for small fleets.

However, we just think that it needs a little bit
more tweaking. And we'd like to just offer maybe an
expansion of the criteria used in determining that all
areas should include all areas of the state which are primarily rural and do not need short-term reduction of particular matter like Yolo, Solano district. We suggest that the criteria to evaluate it when studying these areas should include population of the county or area district or particulate matter attainment status. We think that would help make the process more inconclusive. And probably protect some of the drivers and the truckers that Mr. Davies spoke about earlier.

And that's what we're trying to reach here in Yolo Solano county is an inconclusive process so that we don't put people in economic dire need and have them -- this has been a very stressful couple of months for us trying to find the solution to help our constituents.

I also am very concerned when I looked at the slides when we talked about your staff, spoke about assistance, it was very light. Not a lot of detail. So I just want -- I'm concerned there be a safety net for those truckers who don't get things through the normal channels, the website, the telephone. We need, as Mr. Davies spoke about, a system that works one on one with them because we want everyone to be included in this process, regardless. Because it benefits the whole state.

In closing, I'll say I look forward to hearing from your staff on compliance assistance and on economic
opportunities to keep everybody working towards the same
goal. And thank you for your time.

CHAIRPERSON NICHOLS: Thank you.

Skip Thomson and then Vicki Helmar.

MR. THOMSON: Good afternoon, Madam Chair and
Board members.

I'm Skip Thomson, member of the Yolo Solano Air
Quality Management and also a member of Board of
Supervisors in Solano.

As I sat in the audience and was looking at your
TV ad, it's a great tag line, "just do it." But one thing
that I was struck by a couple weeks ago when your staff
came to our Board to make a special presentation on these
rules and possible changes is that just doing it could
cost anywhere between 20,000 for a new filter up to
140,000 for a new truck. So just doing it is a little
problematic for some of my constituents.

What I would like to do is just leave you with
some thoughts. Some of my colleagues, Mr. Davies and
Ms. Boulware, have talked about the short term reductions
of particulate matter.

What I would like to say is first I support
staff's recommendations. Your staff has done a yoman's
job of trying to deal with all the moving parts in the
different parts of California that are required to comply
with this new rule. So while I don't have any concerns with allowing the NOx exempt areas to delay the installation of filters, it should not be based solely on ozone attainment status. And my colleagues mentioned the other criteria that we think could be considered when achieving those rule goals.

I won't take but another 15 or 20 seconds, but I just wanted to close and say that this is an extreme burden on our small businesses. And I'm sure you're going to take that into consideration. I've always prided myself as an elected official, been around since the early '90's that government is about finding solutions. Your staff has indicated that they're willing to look at anything they can do. I would ask your Board do as well. Think about things that we can do around the edges that achieve the goal of good air quality but don't forget about the burden that it places on some of the small businesses. So thank you.

CHAIRPERSON NICHOLS: Thank you. Appreciate your testimony.

Vicki Helmar and Gretchen Bennitt.

MS. HELMAR: Good afternoon. I'm Vicki Helmar, the Air Pollution Control Officer for Tuolumne County Air Pollution Control District.

Thank you for the opportunity to share some
comments regarding the implementation and possible
amendments to the Truck and Bus Regulation. Our Air
District Board has in the past commented to the California
Air Resources Board on the adoption of this regulation:
First, in June of 2007, with a letter suggesting that the
regulation apply to larger urban counties and not to small
rural counties; again, in December 2008, with the
resolution requesting the delay of the implementation of
the rule due to the economic hardship it would create for
Tuolumne County operators; and most recently with the
letter requesting a delay in the implementation schedule.

The reality is the situation has not changed for
Tuolumne County. We still are a small rural district with
mostly small fleet operators, a low population density, a
lack of any high transportation corridors and a slow
economic recovery.

The regulation as currently written is still
overly burdensome on our operators. What has changed is
that in 2012, Tuolumne County was designated as attainment
for the 2008 federal ozone standards. We are encouraged
by the proposed amendment to the regulation to redefine
the NOx exempt areas. Having recently achieved attainment
for the 2008 standard, I'm confident the Tuolumne County
Pollution Control District will be included as an exempt
area. However, it is important that your Board also
consider for listing as NOx exempt areas those rural
districts that are on the bubble of achieving attainment
and are victims of overwhelming transport.

We also applaud your efforts to recognize the
applicability for filter requirements does not necessarily
need to be the same throughout the state and your efforts
to explore a phase-in schedule with a time line at the end
of the decade for rural districts and NOx exempt areas to
comply. Adopting such an amendment to the regulation
would certainly provide the flexibility for our small
operators to gain compliance in a less burdensome manner.

Tuolumne County Air Pollution Control District
supports these proposed amendments to the regulation.
However, as with the development of any amendment to a
regulation, the devil is in the details. I urge the Air
Resources Board staff to work with districts to ensure
that the amendments will truly benefit small rural
counties and ease the burden of complying with the
regulations. Thank you again for taking my comments.

CHAIRPERSON NICHOLS: Thank you.

Gretchen Bennitt and then Alan Abbs.

MS. BENNITT: Good afternoon. My name is
Gretchen Bennitt. I'm the APCO for Northern Sierra Air
District. That's a three county district: Nevada,
Plumas, and Sierra. Plumas and Sierra are NOx exempt
areas, very rural. I'm also a member of the Mountain Counties Air Basins. Those Are the counties of -- not just the three I just mentioned -- but also Placer, El Dorado, Amador, Calaveras, Tuolumne, Mariposa. So basically the foothills.

We've submitted -- both of those agencies have submitted comments to you in writing, so you've got those on record. And primarily, we just did -- we submitted comments during the development of this regulation, but we also would like you to consider more recent comments that are basically asking for relief for our businesses in our rural counties.

I just really quickly echoing Vicki's previous comments. I do agree with everything that she said as well.

And you know, I did want to thank your staff for being so accommodating. They've been really helpful. They've come to my rural areas. Erik White has come to Downeyville and Sierra County and presented in front of the Sierra County Board of Supervisors. That was in about 2007 when the development of the regulation, there were a lot of questions. He was able to answer it and put them more at ease.

And then more recently, we've done three workshops in our very rural counties. So we really
appreciated that as well.

And in closing, I just urge to you adopt these
modifications that would put some kind of relief to our
rural counties. Thank you.

CHAIRPERSON NICHOLS: Thank you. Appreciate
that.

Alan Abbs and then Jack Broadbent.

MR. ABBS: Good afternoon, Madam Chair and
members of the Board. My name is Alan Abbs. I'm the Air
Pollution Control Officer for Tehama County Air Pollution
Control District. Major cities of Red Bluff and Corning.
Population in total for the county of 65,000.

The Tehama County District Board has previously
submitted a letter to the Air Resources Board. And
several of the things that we asked that ARB staff
consider were, in fact, presented today as possible
solutions, including the reopening the low mileage
provisions for construction trucks, ag vehicles, and the
threshold of 1,000 miles or 100 hours.

We also asked for to look at a delay of the
implementation date for the filter requirements. It looks
like staff is proposing some way to do that as well. So
I'm in full support of what staff has proposed so far.
And certainly willing to work with them to make this a
reality when it comes back to the Board in April.
Also one thing I think is good to hear as well is that staff is looking at changes to the areas designated as NOx exempt. For us, that's particularly important because although Tehama County is a NOx-exempt county, our neighboring county, Butte County, is not NOx exempt. And the 99 corridor from Tehama County down into Yuba County, Sutter County, it's a major transportation corridor for the ag community. So it would be great if we could have Butte County become a NOx exempt area as well. That would make things a lot easier for our truckers in Tehama County.

Thank you very much for the work staff has done so far.

CHAIRPERSON NICHOLS: Thank you.

Jack Broadbent and then Larry Greene.

MR. BROADBENT: Good afternoon, Madam Chair and members of the Board. I'm Jack Broadbent, Executive Officer for the Bay Area Air quality Management District. And very much appreciate the opportunity to speak to you on this matter.

I'm here to speak in favor of the flexibility being proposed by your staff for those single, small, and rural truck operators affected by the year's deadline for the on-road truck and bus regulation.

I want to begin by complimenting your staff,
Richard Corey, Erik White, Cynthia Marvin, and the rest of your team for their openness in being able to work with the Bay Area Air District on these proposed measures.

As you know, the Bay Area is home to several communities with some of the highest health risks of diesel particulate in California. The primary driver of that risk is the truck emissions associated with the truck traffic in these communities. We believe these measures achieve a good balance between the need to provide regulatory relief for one of the most hardest hit segments of our economic community here in California with the need for strong regulations to protect public health.

We at the Bay Area Air District are ready and stand ready to assist your staff in performing the outreach for this program and to continue to provide grants and compliance and educational assistance to the truckers for this upcoming deadline.

I think you know, Madam Chair, we have a long and strong record of working with your staff in this area. And we did it with the drayage truck rule, and I know we can do it for this as well.

I do want to note, however, while we support these measures in front of you today, we do not wish to see this repeated and think that you have some additional deadlines coming up in 2015 and 2016. So therefore, on
behalf of the Bay Area District, we want to request that
you task your staff to return with an action plan that
ensures that similar measures are not necessarily for
these upcoming deadlines.

We think frankly this is where the Bay Area Air
District can continue to work with your staff to come up
with some solutions so that we can continue with the
success of this program.

So thank you, Madam Chair and members of the
Board. Appreciate it.

CHAIRPERSON NICHOLS: And we certainly have
worked together on the truck rule, the port trucks and so
forth. While it wasn't exactly smooth at all times, you
know, overall, I think people would look back on it and
say it was amazing how well it worked. So thank you for
that.

Larry Greene and then Greg Furlong.

MR. GREENE: Chairman, members of the Board,
thank you for this opportunity. I'm Larry Greene, the Air
Pollution Control Officer at Sacramento Air Quality
Management District.

We certainly recognize the complexity of the
rules and the scope of what we're discussing today. Our
district and others have been working for many months with
the Air Resources Board staff and with Richard. I want to
commend them for their really hard work. We've had a lot of late night meetings.

They've driven many miles coming to meet us and I think it shows their dedication to come into a good resolution on these issues.

We think they've seriously considered the concerns we brought up, and we think they have brought a good package forward. We certainly support the recommendations that are in front of you today.

A few things other things to note, this is a journey we're on. This is one deadline we're coming up on, but we're going to be doing this. There's other milestones over the upcoming years. Just like Jack Broadbent mentioned, we need to not only be focused on this deadline coming up at the end of this year, but we need to be thinking about how we're going to execute this program over multiple years and as much as possible really get ahead of the curve as we move forward on these other deadlines.

We also want to remind the Board as you might guess that we are a non-attainment area for NOx and that we are -- we do not want any changes that would significantly impact our attainment date coming up in 2018. I think that we've been assured the changes they're recommending are going to be okay in that regard. But as
we move forward in time, that needs to be one of the
tings that we consider as we consider maybe other options
and other things we're doing.

That SIP deadline is a federal requirement, and
it impacts other businesses and other things in our
district that are far beyond the scope of this particular
role.

We'll continue to work closely with the Air
Resources Board. We've developed some really good working
relationships over the last month. I'm sure that will
continue into the future. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Greg Furlong and then Betty Plowman.

MR. FURLONG: Good afternoon, Board.

I'm an owner-operator. And just a little bit, me
and my wife owned a 1981 Peterbilt. Had three million
miles on it. We sold it in '03 after putting four kids
through school and bought an '03 Pete. The '03 Pete is
actually my 401(k).

So with that, there's $3500 a month payment on
this new truck. Okay. So now at the age of 62, I bought
a house for the first time. Without the truck, I ain't
going to have a house. I won't be able to make the
payment.

So as a small businessman, everything I've had
and read said the filters don't work yet. They haven't had the technology. So as a small businessman, how am I supposed to spend the money on that? I just can't bring myself to work it out in my mind how that's all supposed to work.

And I don't think it's fair for me to put my wife through the anxiety of trying to figure out how to make those payments. So basically I'm going to be out of business. And I'm also probably going to lose my house.

The thing to think about the filters, I've talked to a small fire department from Browns Valley Bullards Bar. They have on record the filters have started 20 fires. I mean, that's something the Board needs to really think about.

And it's been my life since I bought my first truck in '68. And basically I'm going to be out of business. Thank you.

CHAIRPERSON NICHOLS: Ms. Plowman and then Chris Shimoda.

MS. PLOWMAN: Hello again, folks. As usual, I'm going to veer off all the perfect notes I took because of some things that happened today.

I'd like to address Mr. Gearhart from Lake County. Lake County actually fascinates me because the American Lung Association di give them an A, which is very
hard to achieve from the American Lung Association for their state of the air. However, the Robert Woods Johnson Foundation, which examines every county in the United States on many, many health factors -- by the way attribute ten percent of one's health to all environmental factors and 40 percent of your health to poverty and unemployment. And this year, Lake County has the distinction of being rated the unhealthiest county in California based on their premature deaths. So I think it's interesting. I have the documentation.

With that same report, Santa Clara County is the third healthiest, which shocked me. How could that be? They have 880, 680, 280, US 101, eight expressways and the third healthiest. They also have low unemployment and poverty. So I ask you to keep that in mind.

I also question the figures that we heard at the beginning on only -- if I've got that right -- only 15,000 trucks still need filters. Was that accurate? Well, I think we got 15,000 of them in this audience today. So this is why we need to go back to the table. We've got to get back to the table because some things didn't work. TRAC didn't work. TRAC we haven't had a meeting of TRAC, which I'm of member of, since 2010. Wasn't that when we were supposed to be talking?

We've got solutions if I could offer one. Our
state's period smoke inspection program PSIP, wow, what a mismanaged program that was. You insisted that anyone that had more than one truck, two or more is a fleet, had to test every year. But it was not tied into any type of regulation whatsoever.

Once in a while, years ago, you'd get a knock on the door from the CARB guy. He wants to see your papers. Two years ago they got wise and sent mail audits. The state of New Jersey has the rule every truck in the state needed to be smoke tested once a year. I talked to them two days ago. I can say that the limits they set for the state of California is way too high. You've got a 40 percent for 91 and newer. Let's cut it in half. Let's require every single truck in the state to test.

I don't like dirty trucks. Tony, you know, I've talked a few times to report them when I've seen them. I love clean air. I've got grandchildren. I can't leave the state. But we can clean up the work. These folks can't afford filters right now. That's another thing at the table. There are problems with the filters, especially for our trucks that don't generate the heat as the freight guys do going down the road. Thank you. I guess I'm out of time.

CHAIRPERSON NICHOLS: Thank you.

MR. SHIMODA: Chris Shimoda with the California
Trucking Association. A couple of slightly different items I'd like to highlight for the Board.

There are a significant amount of fleets out there who have spent millions of dollars to come into compliance with the rules that you guys have passed in the passed couple years. I'd like to talk about a couple of the issues that are hot with the compliance fleets right now.

So first, we still don't have a resolutions inform the Cleaire long mile situation. There are 2800 long miles out there that need to be replaced. We're talking about the burden of complying once. I don't think anybody believes you should have to pay for compliance twice. We've suggested what we feel are reasonable solutions to this problem, and we hope to work with them in the future and get a resolution to that.

Second is this issue of what happens with the folks in the room if you do offer flexibility, they decide to go ahead and make the investment, what happens then? And I can tell you that I do hear concerns from compliant carriers every day. Here's an sample from the e-mail that sums up the frustration my members are feeling right now. This is what he said. "They haven't shown us they can adequately enforce the regs. Why make it harder on themselves with more changes? This seems to create a
moving target when they haven't shown us they can hit a stationary one." That reflects the frustration the compliant carriers are feeling right now.

With regards to the flexibility you're considering today, I do believe that the folks in this audience are going to take that flexibility and comply. But keep in mind that public incentive money was never supposed to pay for the cost of this rule. The industry was supposed to pay for all this new equipment by raising the rates. This is never going to happen as long as carriers who are compliant or plan to comply have to compete with those who have no intention of ever complying on an unlevel playing field.

We urge the Board not to forget about the folks who have already invested in early compliance and are in danger of suffering right now because of that.

And lastly, I think the expectation from most folks out there is that in this current round of Proposition 1B solicitations, there is going to be a pretty good chunk have money left over. I'd just like to say we have two areas of the state in the north state and the central coast who have received next to no money through either Prop. 1B or Moyer.

I would encourage the Board to consider whether this money should go into compliance assistance for
carriers in the NOx-exempt areas or other areas of the state who have been shut out of major grant programs because they did not meet the criteria. There are folks who do not run enough miles to qualify for those programs, and the folks in the NOx-exempt areas have received next to no money.

Thanks for your time. We'll be working with the staff in the coming weeks.


MS. HOLMES-GEN: Good afternoon. Bonnie Holmes-Gen with the American Lung Association of California.

The Board's regulations on the diesel trucks and buses have already reduced thousands of tons of particle pollution, as you've heard today. When they're fully implemented, they will save thousands of lives every year and protect vulnerable populations, including those with asthma, emphysema, chronic bronchitis, and other respiratory illnesses.

And for this reason, the Lung Association has been a very strong supporter of these regulations through the years. They're incredibly important to our mission to prevent lung disease and promote lung health.

From our perspective as a health organization
it's important to remember the facts about diesel pollution that diesel is a top cancer risk in California. Contributes to a range of lung illnesses, heart attacks and strokes. And that the science demonstrating the link between diesel pollution and premature death is very sound and has been growing recently. And we're concerned about the vulnerability of the children. And you've discussed today even the effects of diesel soot pollution on children who already suffer from the highest rates of asthma and are particularly vulnerable because their lungs and bodies are still growing and developing. As we know, children living in these heavily polluted areas are suffering from underpowered development of their lungs.

So while we appreciate the concerns that are presented today, we have to stay on course with the diesel truck and bus regulation and want to present our perspective. As you're looking at these ideas presented by staff, we'll say number one we appreciate the need to work with truck operators that are trying in good faith to comply. And we appreciate the need for some flexibility where these good faith efforts that are occurring.

We support and have worked hard to expand incentives, financial incentives, loan incentives available to assist truck operators. And we're very pleased that AB 8 has been passed to extend those
incentives as well as other programs. We support compliance outreach assistance. Appreciate the hard work and the ramping up of those efforts by the Board. That's incredibly important, and we hope more will be done in that area.

But we are concerned about proposals to allow Board delays and exemptions from rule requirements. This is where we think the Board has to take a very hard look. We need more information on the impact of these ideas on emissions and health benefits. We need to make sure that modifications are limited, short term, anything considered would be a limited short-term, maintain the integrity and health benefits of the rule, and not disadvantage those who have already taken steps to comply. We think there is a -- we want to express caution and say we need to take a very hard look and carefully understand what exactly would be the impacts of these suggestions that are before us today. We've worked a long time and hard, as you know, to get these regulations implemented. And we're new on the read to seeing these health benefits. And we don't want to lose ground. I guess that's a good place to end.

CHAIRPERSON NICHOLS: Thank you. Charlie Peters and then Justin Oldfield.

MR. PETERS: Yes. Hello, Madam Chairwoman and Air Resources Board.
Charlie Peters, Clean Air Performance Professionals. We're a coalition of motorists, and we'd like to see the programs in California work better.

Provided for you today a letter to the President of the California Senate asking him to make sure that the new Chief of the Bureau of Automotive Repair if and when the Governor decides to appoint one actually has the ability to determine whether or not cars that need repair actually get it. Such things as PZEV that seems to have the car manufacturers, the Air Resources Board, the Bureau of Automotive Repair, God, Jesus Christ, all of the cycles involved in those processes, how does the public get a quality job and actually get those cars repaired. Somebody needs to take a look at that and see if they can give some help to see that more of those cars actually get repaired.

I would guess somewhere between 25 and 50 percent of the cars that should fail do and what's actually wrong with them get fixed. I would petition the Committee to take a look at the possibility of improving that performance with a quality audit process so we can work on quality and performance instead of crime and fines. We can't put anything in of the newspaper except calling small businesses in California frauds and cheats. I think it's time for that to end and for us to start working on
quality and performance and start doing something to make this a better state, instead of one that destroys small business.

I've given you a second page there that talks about the use of ethanol in gasoline. I happen to have gone to an IM Review Committee some time back and indicated that in Colorado in the wintertime when they put ethanol in the gasoline that the NOx goes up double. Double. Member of that Committee said, "That's a lie, Charlie." Well, the supplied by Dr. Steadman to my fax machine.

I think it's time for the Air Resources Board to do a little testing to find out if, in fact, ethanol-laced gasoline or gasoline that doesn't have the ethanol does better at performance, gas mileage, and particularly in emission, and to report to us and let us know if we have an opportunity here at making the ethanol flexible rather than mandating. We don't have to do what the Feds says if it's costing us our wallet and our air.

Thank you, Madam Chair.

CHAIRPERSON NICHOLS: Thank you.

Justin Oldfield and then Jason Barbose.

MR. OLDFIELD: Good afternoon, Madam Chair and members of the Board.

Justin Oldfield with the California Cattlemen's
Association.

It's a pleasure to be here in front of you today, and I appreciate the opportunity to comment on this update.

First, I want to thank staff, especially Erik, Tony, for working with us back in 2007 and 2008. Seems like a long time ago. Unfortunately, not long enough, when we worked on the ag provisions of this rule.

And I have a couple comments I want to make today. There was a lot of effort that went into that. So my comments are meant to be constructive, not meant to be critical.

With that being said, I do want to talk about some realities. I've heard largely two complaints from my members since this rule has gone into effect, one of which I think the presentation mentioned that there were 84,000 phone calls. I'd like to know how many of those 84,000 phone calls were actually returned. And when they were returned, they typically were returned by interns that provided very little information. That was very frustrating and a process that if we are going to open up the ag provisions and begin to allow new trucks in, we have to fix that. To have the ability to clearly communicate requirements, especially reporting requirements, to individuals is absolutely key.
And a lot of times I ended up getting calls from people saying, you know, we've called four or five times. Haven't heard anything back. Can you contact somebody over there and find out what's going on?

Second is largely based on compliance. I've had a whole lot of people -- I don't think I've had one individual tell me they can comply with the rule. And I think leading into these first phase of compliance for small businesses, I would say for us a lot of people that looked at that as procrastination. We look at it as an economic reality. So that's very challenging. It's very hard to convince an individual that's operating a 20-year-old truck to put a filter on it when the filter probably is worth more than the vehicle itself.

And then I guess my last comment that's specific would be, you know, California's cattle industry, we're not just competing with producers in other parts of the world. We're competing with producers in states next to us. We depend on the ability to get trucks in and out of here. Our cattle are marketed typically to other states. So we depend heavily on out-of-state trucks.

So I guess my one request in addition to opening up the ag rule, which we would support for vehicles that would fit within that, would also be to look at taking the mileage provisions in the ag exemption or the ag
compliance portion of the rule and extend that to say if you were going to drive in California, the total vehicles of that vehicle for that year over all the states that you operate in don't just have to be under 10,000 miles. It can be under 10,000 miles only in California. I think that will provide a huge help.

I understand there's issues related to enforcement and monitoring, but I hope we can work with staff over the next coming months to address that. That would be a huge help for us. Thank you.

CHAIRPERSON NICHOLS: Jason Barbose and then Karen Pelle.

MR. BARBOSE: Chairman Nichols, members of the Board. I'm Jason Barbose, with the Union of Concerned Scientists.

For any newer Board member who may not be familiar with our organization, we're a national science-based advocacy organization. We have about 350,000 supporters across the country. And I've noticed listening to the conversation today it's understandably focused a lot on the compliance and the urging for flexibility. And I understand that investments that are needed to clean up the legacy fleet are significant and especially a challenge for smaller operators.

But I hope that as you all consider where to go
from here that you keep at the front of your minds the reason this rule was adopted to begin with. And that is to protect public health and keep in mind that the rule is working, that the rule is providing significant benefits to Californians today, as we saw from the slide presentation. As investments by companies and truck owners, along with the support of the important local and State incentives, they're helping to clean up thousands of trucks on California's roads. And it's already happening.

And second, that continuing to make progress is absolutely critical to achieving our health-based air quality standards, as well as reduce the risks from exposure to diesel exhaust, particularly in communities that are on high traffic corridors and in communities overly burdened with truck pollution.

So you know figuring out where you go from here, one of the things that is absolutely critical from our perspective is that if you are to consider any changes that there would be a full accounting and assessment of impacts to the health benefits that would result from such changes.

And then we'd also urge as others have that the Board focus any modification very narrowly and ensure that we -- those who are in need of short-term compliance flexibility are put on track to come into compliance.
quickly.

Otherwise, we'd also urge the modifications be short term. For example, provisions under consideration such as the increase in low mileage exemptions, we urge those to be on a temporary basis only. So I'd really just conclude with where I started, which is to say this rule is vitally important to cleaning up California's air to protecting public health, because diesel trucks and buses are a major contributor to pollution and is harming public health. So we strongly support this Board's efforts to ensure the rule is successfully implemented and that our health benefits are achieved. Thank you.

CHAIRPERSON NICHOLS: Karen Pelle and then Erica Morehouse.

MS. PELLE. I had my notes completely done and wrote them ten times over, and there was a few comments I need to comment on.

The so-called 15- or 20,000 non-registered truckers is not true. You have over a half a million trucks based outside the state of California that still are required to have this compliance. And a lot of these trucks are owner-operators. And to require this compliance of an owner-operator -- I work with owner-operators a lot. I get so shaky. He's absolutely true. He's going to lose everything.
The cost of the filters which is not yet proven is anywhere from 7- to 20,000 alone for that one piece and it's not a proven piece. I also have trucks that have the filter on them, and I'm replacing them regularly because of multiple cracks. So this is not a proven piece of equipment that an owner-operator should be required to buy at this time. When the part is proven, that's good.

I have notes real quick. So to mandate this program is going to cause a lot of issues with owner-operators. And the major problem nobody is saying is that nobody wants to come to California. What are our shippers going to do? What are our corporations going to do? What are we going to do for trucks?

Our corporations are going to be required to pay 30 to 35 percent more in freight charges to hopefully find a truck. And don't think it's just about trucks. When the truck rates get to go up, so do the rail rates. The corporations in California are going to be impacted I would say minimally 100,000 trucks a month. And they are required to have this program.

So there's 500,000 trucks out there that do not have the DPF filter. Do I believe in clean air? Absolutely. I have four grandchildren. I want them to be healthy for the rest of their life. But that's one thing that hasn't been brought up is the impact on our
corporations. But to require an owner-operator to put that kind of money into a truck is a burden. There is no program available for an owner-operator. You have to have a fleet. Should you make up a fleet? Who wants to lie? You want to be honest business person. They need to invest in this program.

Now, with these older trucks it's not just about switching a lightbulb for seven to $20,000. It requires their turbos need to be redone. They need to have larger cooling system on the trucks. So you're asking them to invest 20- or $25,000 in a truck they can't sell for that much because it doesn't have the filter on it in California. It's a catch 22 how it works. But these are really good people. This is their business. And they are being jeopardized because this product is not proven.

I'm done.

CHAIRPERSON NICHOLS: Erica Morehouse and Bud Caldwell.

MS. MOREHOUSE: Good afternoon, Erica Morehouse with Environmental Defense Fund. I'm going to be brief today.

But just want to thank the Board and their staff for their critical work on the standards that our children, our vulnerable communities absolutely need. And they're already making great strides towards improving our
I'd like to echo the comments of my colleagues from the American Lung Association and the Union of Concerned Scientists and just look forward to working with you going forward to keep these standards in place and doing the critical work. Thanks.

CHAIRPERSON NICHOLS: Thank you.

Mr. Caldwell and then Angela Casler.

MR. CALDWELL: I'm Bud Caldwell representing the Alliance for California Business. We try to keep businesses and jobs in California. And you're making it tough for us.

I also have North Gate Petroleum. I'm in compliance. I intend to stay in compliance. I don't appreciate it. I think it's wrong. It's bad business decisions on my part. But the law is the law, so I'm doing that. But I don't think that you should take some action against some people that unable to do that. That's anti-American. That's anti-California. If my counterpart over here just doesn't have the funds to comply, maybe I started business 25 years before he did. But the worst thing the Board is doing is killing the American dream.

I started as the vice president of the air hose and Hancock station part time. I was going the stay there for there six months. And this Jewish -- son of a Jewish
immigrant took this Methodist Heinz 57 variety American and all he wanted in that whole company was for all of us to want to be Americans.

So we went down the road, and he made it -- every time I planned to leave, I got promoted. But it got better and better and better. And he made it so that I could buy that company with a wife and my strong back and both of us wanted to work. But if you make me come take my sons today and say go out and buy ten trucks and buy about 14 service stations and you go into business and then try to find customers to sell it to, you can't do that. You're killing the American dream. That hurts me more than anything you could possibly do.

To work in compliance to work together toward a goal which we all want, that's what I want to do. But in the next -- between now and 2023, you take the line that you're demanding and it drops off pretty quickly. But we end up at the same point in seven years. What is the point?

And the other thing the people that have no access to funding -- and I know the Board says, oh, yeah, you do. You do. We take your own graphs that show there is no funding above interstate 80 and there isn't, unless you have multiple trucks. In my case, I qualified for two new trucks at 60,000 a price. He came back and said, no,
you don't operate in the corridor. I was awarded that before it was withdrawn. But this any case today, I don't want the funding. I want to comply, but I want to tell you, we've got the change this.

So thank you for listening to us. And I have 57 minutes left to talk to you, but I'm done. Thank you very much.

CHAIRPERSON NICHOLS: Angela Casler and then Tony Hobbs.

MS. CASLER: Good afternoon. Thank you very much. Welcome, everyone, to this Board meeting. We appreciate public comments.

I want the say a thank you for Erik White and Tony Brasil for coming up to Butte County to meet with several of our business owners.

My name is Angela Casler. I'm with Sustainability Management Consulting, also today representing the Alliance for California Business. And also I'm an instructor at Chico State, and I teach sustainability management.

And I'd like to talk to you about a different take on I have on this entire regulation. I also served as a TRAC member. I was a former owner-operator as well, and I have been engaged with this regulation since the formation in 2007.
Now that it's been in place for quite a while, I specialize in something called systems thinking. I like to look at the whole entire picture of what could be the consequences of decisions that we make. And so looking at the environmental impact of this actual regulation, I see it as getting worse. So a little bit of a different take today. Yes, I agree with all the speakers today this is economic hardship on our small companies, but I wanted to talk to you today about some of the supply chain impacts that are occurring.

Many of you Board members have been inside a truck I would assume; right? You've seen a truck. So you know the enormous materials that go into building a tractor trailer or refrigerator trailer, so on, so on. The materials that we're using today, these trucks of course last for so long because we rebuild them, refurbish them, we maintain those engines, rebuild them over time. And so those are ways that we can extend the life of a huge piece of equipment.

We then take that piece of equipment and now we're having to sell it out of state because it doesn't comply. Or we're ordering these huge particulate matter traps or an entire new system to rebuild for the new 2010 compliant engines.

So the materials resources we are already having
exceeded the carrying capacity of the planet. And as a populous or as a wealthy nation, we are partaking in continuing that trend. This particular regulation is exceeding the resources because we are ordering new parts, new trucks to build these SERs and the PM filters. I'm very concerned about that impact. Not only that, we are then transferring all these materials from global resources, assembling here hopefully this California, which I was happy to see a lot of the PM trap concessionaires outside are located here in California. That made me feel very good today.

   But the global transportation of all these materials to come here to be assembled and then to go globally all over the world is increasing CO2 as well.

   And of course, we're delivering that through ships, through trucks, and we're increasing our PM filters as well. So imagine that that probably exceeds what we're trying to do here in the state by reducing PM and NOx in the transportation companies within the state.

   I also just want to finish up telling you downstream we have hazardous materials --

CHAIRPERSON NICHOLS: You've used more than three minutes. Really, I appreciate the sustainability overview --

MS. CASLER: I want to make one more point --
CHAIRPERSON NICHOLS: Could you just submit your testimony in writing? I've got the --

MS. CASLER: I will. The urea tanks, I would like to see a study from the Air Resource Board on the ammonia and the impact to ozone and also the methane that is exhausted during that process as well.

CHAIRPERSON NICHOLS: Thank you. You can have some further dialogue with our staff on this topic. Thank you.

Tony Hobbs.

MR. HOBBS: Thank you Board for letting me speak today.

Back in June, Glenn County Air District sent you a letter, Ms. Nichols, right here, asking for help or delaying or letting us have a stay in execution if you might. But you sent back a letter to Glenn County stating that, you know, the rules are rules. We have all this funding money available to the people in your country. And I'd just like to ask you, I have 25 trucks. I travel within 150, 200 mile radius of Glenn County. What kind of funding can I get?

CHAIRPERSON NICHOLS: I think that you're going to have to that conversation with the staff of the Air Resources Board.

MR. HOBBS: I already have.
CHAIRPERSON NICHOLS: What they tell you? They didn't have any funding.

MR. HOBBS: No. None for me.

CHAIRPERSON NICHOLS: I don't have it in my pocket either. That's why we have a problem. That's why we pursue the next iteration.

MR. HOBBS: In your letter, you stated that there was funding money available for me.

CHAIRPERSON NICHOLS: I did not say there was funding for you, sir.

MR. HOBBS: Well, we'll go on.

First of all, I want to thank you guys for coming out to Chico to meet with us. It was faster for you guys to come out than the hotline. Appreciate that.

And one way you guys could probably find out -- your chart, you know, with the little trucks on it and stuff, the one that says 15,000 trucks is only left. It's about upside down. You might try contacting the CHP motor carrier permit division. Everybody that has a truck has a CA number, and they have to report to the California Highway Patrol how many trucks they have. And put that against your list of the people that are trying to comply.

You know, I'm on your list. I'm complying as much as I can. But without help from -- that 1B Goods Movement, I would be using it right now if I can get it.
I have so many truck loans right now I can't go any further. I employ about 30 people, and it would be nice to keep those people employed. Thank you very much.

CHAIRPERSON NICHOLS: Appreciate that. Thank you.

Everybody, every individual is different. Every business is different. We're not trying to say we have the answer for every person. I think what we can say is that staff has worked really hard to get the correct information about what is going on out there. I'm not asking them to respond every time somebody says something that indicates something they disagree with. We're just going to wait until the end and then try to respond to a lot of the factual comments so that we can get a better handle on what's right.

And I really do appreciate you all coming here and also giving us your views. So we'll just continue on through this.

Mr. De Carbonel.

MR. DE CARBONEL: Good afternoon. I guess I'd like to start with a quote from Winston Churchill. "If you have a thousand regulations, you destroy all respect for the law."

We ought to keep that in mind. We have some pretty complex regulations here.
Secondly, on the staff's report this morning on the number of filters that have been installed, I think the number was in excess of 130,000. But if I look at the press release from MECA, the Manufacturers Association from September of this year, they show 25,000 total filters sold in all applications in California. So we have some sort of problem with the mathematics there.

I'd also like to point out that California leads the nation in the number of households living below the poverty line. That's not the place you want to be. We are below the poverty line. We are number one. Our closest competitor is two and a half percent below us. The U.S. Bureau of Labor Statistics rates California as number two in unemployment. Number one is Nevada with eleven percent. California is at ten and a half percent. The California Transportation Commission which oversees all transportation in this state has a $3 billion shortfall coming up the first of the year, which does not bode well for growth in the state of California.

I'd also like to point out that early on in this whole procedure we did talk a lot about economic recovery and time lines. We haven't even come close to the first or the worst time line we projected. We also talked at that time a number of ways about trucking. I saw this morning's ad you put up. You talked to their about
commercial truck, truckers. But many people own trucks who are not -- don't see themselves as commercial truckers. A truck is a part of their business, their overall business, but it's not the business they're in. That's a big difference. And that's a message that is not being relayed very well in the television commercial, in my opinion.

Also Ritchie Brothers, the largest auctioneer in the world for construction equipment, as well as all sorts of ag equipment, shows 120 different categories for vocational trucks. I don't think we ever considered vocational trucks as how separate they are from all over the highway trucks. And I think when you have that kind of a very big difference in the way they operate, their temperature ranges, everything else, a lot of assumptions are made that are not accurate. That's why we're having a lot of problems today with these accessories.

We're only talking in the terms of construction trucks in the state of California maybe around 50,000 vehicles. I think there's plenty of room for accommodation to revisit this regulation before we have a serious problem for the people of California who get everything that they eat and everything they use on a daily basis via a diesel truck. And I don't think anybody wants that impact to put on a bunch of people who are
struggling to get along right now.

CHAIRPERSON NICHOLS: Thanks.

Mike Manna and then Pat Cramer.

MR. MANNA: Good afternoon. I just want to say thank you for this time and the opportunity to be heard. I represent a company. We kind of fall into the -- we're not a small company. We're not a small fleet. We are in a rural area. But we are in a NOx-exempt area. So we've -- we are currently -- my company is in compliance and we plan to stay in compliance. However, we've applied for the 1B money. And because we don't operate in the corridor, we're not allowed that money.

We have currently purchased a couple trucks, but we used the flex option phase-in option. And the percentage from 60 percent to 90 percent is a good chunk. It's actually about $650,000 for my company. And as of right now we bought two trucks. We're supposed to be buying three more before the end of the year.

I've got to tell you, the phrase-in option was the best scenario a couple years ago. It's just painful coming into the end of the year. Any extension or to allow us to go past the January deadline would be much appreciated.

Our trucks operate in a very rural area. We don't have a lot of help and support. If we were to use
the filters, they have proven to be problematic. And I can't see sending our drivers out into these areas so far from the manufacturers and the dealers that would work on these filters. So for our application, we really look at buying a new truck. If nothing was to happen and these regulations were not in place, we would have all the trucks replaced in two to three years anyway. It's just we have to replace so many of them in one year, it hurts. Thank you.

CHAIRPERSON NICHOLS: Pat Cramer.

MS. CRAMER: Good afternoon. And thank the Board for letting us speak.

I kind of have a dual position here. My husband and I have a small trucking company. And we also have an insurance agency which specializes in transportation insurance. Consequently, this is two-sided sword for me. So I have some numbers I brought to the Board that are accurate, not manufactured out of the thin air.

I do business with a company called Great West Insurance Company. Nationwide, they insure 56,000 trucks. 41,000 of those trucks are 2006 and older. Of those 41,000, less than one percent of any kind of filters.

Now, since California has the largest number of trucks, you can imagine. I don't have the absolute numbers for California.
Another company that I do business with insures 21,000 trucks in California. Now, these are long haul trucks, interstate trucks. Of theirs 21,000 -- and that is insurance companies that are Scottsdale, Northland, Carolina, Maxim, and Stratford, major A rated insurance companies. Of their 21,000, 15,300 of them are 2006 and older.

Now, my smaller company out of the northwest who insured primarily local short haul trucks in California, Washington, Oregon, they have 6,000 trucks. 4,600 of those trucks are 2006 and older, less than one percent again have filters.

I personally have very small insurance agency. I probably insure right at 500 trucks. Of that 500, I do not have one, one owner-operator who has a filter. Not one. So the numbers that we've heard today are extremely misleading. And you can come and look at my numbers. Those are just manufactured somewhere. I don't know where.

Once again, as the gentleman who spoke before, go to the California Highway Patrol and find out how many trucks are out there. 15,000 isn't even close. So it's very offensive to me that have to sit and listen to things that I know are fact. I'm in the trenches. Fifteen to $20,000 for a filter, my guys have a three percent profit
There's no way.

The money that you're willing to give them, $60,000 -- $60,000 on a $150,000 truck. So what you end up with, $30,000 in sales tax and FET. Then you get a 1099. Tell me, folks, where can these people -- and I'm primarily dealing with owner-operators. Where are they going to go? They're out of business. I'm in northern California. So please take these things into consideration. These guys aren't going to be compliant. And everything in this state is going to stop.

CHAIRPERSON NICHOLS: Kirk BLACKBIRD.

MR. BLACKBIRD: Good afternoon. Kirk BLACKBIRD, General Counsel for the California Tow Truck Association.

First applaud the Board and staff for recognizing that there is severe impediments to complying with this rule. In the towing industry, heavy duty tow trucks are particularly impacted. These are trucks that drive very low mileage and clean up the state's most disastrous accidents. Because these are highly specialized trucks, they're extremely expensive. Generally range from 325,000 to $750,000 to replace.

As you can see, because of the low mileage these trucks operate as well as the expense incurred in order to replace them, the business model assumes these trucks are going to last for several decades, something the rule does
not permit.

In order to accommodate these trucks, we want to continue to work with staff in order to make any modifications -- any necessary modifications to the low use exemption. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Mr. Faris.

MR. FARIS: My name is Allen Faris. I'm a native Sacramentan, second generation in the trucking industry. And so many people have said exactly what I want to say. I just have one thing I want to talk about that nobody has talked about. But nobody in their right mind wants dirty air. Nobody in their right mind would not want a brand new state-of-the-art truck. It's the ability of being able to afford it and servicing the debt.

Myself, I'm in the construction industry. We're vocational and seasonal, which makes it even more burdensome.

But since July 1st, 1998, we have complied with all the opacity testing that you required. And I guess what I'm trying to say is we have mechanical engines that you say are going to be junk, have to be thrown away. There is no way we can run any more in the state. And I have statistical opacity tests on my own trucks that are down as low as some of your new state-of-the-art...
electronic motors. I'm looking at -- went to three trucks
so I could, you know, work for a little bit longer. I'm
looking at putting aftermarket soot collector on a 2003
truck, which is an electronic engine and that may work.

My other trucks, I guess I wished you could
revisit the mechanical engine aspect and maybe have an
opacity test just like smogging a car with a minimum
standard to meet to let these trucks serve their life
expectancy out. A lot of these independent
owner-operators of small businesses have the older trucks
that we overhaul, maintain, take care of. And for
six months out of the year, they get better fuel mileage
that some of the new ones. It's hard to believe, but they
do. And that would be one way of keeping some of the
small businesses going.

The other thing is the thousand mile threshold is
way too low. I mean, that should be really looked at.
But everybody has brought that up already. So I guess I'm
just going back and saying again that the opacity testing
on the mechanical engines is something that should be
looked at. And if they're maintained properly and
everything, they're very, very clean. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Mr. Horspool and then Mr. Lokey.

MR. HORSPOOL: Chairman Nichols, Board, and my
old County Supervisor, Ms. Barbara Riordan. I'd like to
thank you for the opportunity to address the Board and
express some of my concerns.

I work with countries around the world in
reducing emissions. We have a large operation in the
Philippines. If any of you have been to the Philippines,
you know what a jeepney is? Jeepney is one of the
absolute dirtiest forms of transportation in the world.
And we bring jeeps into compliance with Philippine
emission standards, in particular particulate matter, the
PM standards.

In Mexico, we've got trucks that run zero
emissions, but they're not allowed to come into California
because they don't have a trap. And to me, I mean, these
guys are the kind of tearing their hair out. They have
tucks that are absolutely beautiful. Our vision of the
ecks coming from Mexico are these poor broken down, bad
tires, et cetera, et cetera. No. These guys have some
unbelievable rigs. And they can't bring them into the
state because they don't have particulate traps.

What I would like to see -- and we had the
discussion about traps earlier. And traps is a good word
for these things. We had the discussion earlier about the
need for the traps. What about having an easier regime as
far as qualifying for bringing vehicles or engines into
compliance because right now it's extremely expensive if you want to come up with a new approach. We're looking at doing that with another device. And between what we have and what these other guys have, our product will reduce PM up to 96 percent. These guys are reducing it up to 70 percent. Combined, we know we're going to be a Tier 3 basically, have a Tier 3 approach. I'd like to have the Board look at technology and be open to new technology that's out there. Because you will be amazed at what the entrepreneurs in this -- not just this country, but especially this state can come up with.

Thank you very much for your time.

CHAIRPERSON NICHOLS: Thank you.

Mr. Lokey and then Mr. Luiz.

MR. LOKEY: Hello. I'm Richard Lokey, from Calaveras County, a rural area up in central eastern Central Valley.

1986, the PUC rates were around $52 an hour for the trucking. Fuel was around 86 cents a gallon. On the average for most people there's about a five to seven year turn-around on your trucks. And you know I come from the construction and agricultural, we haul livestock. Plus we have our own ranches. And most of our trucks service our own business.

Since 1986, the government has added many new
programs, UCP and other fees that heavily impact us as well as the average hourly rate for a truck today is about $85 an hour. And with four dollar a gallon fuel, the rates have not gone up near as much as the fuel has.

There is a lot of trucks out there running these lower rates that don't maintain their truck up to industry standards. Since 1995, the CA numbers on these trucks were around 135,000. And that was from the start of the trucking industry. Now since 1995 to present, the CA number's well over 500,000. That tells you how many new trucks have been implemented in the last 17 years.

Then also the housing is down 80 percent since 2006, and the construction world, you know, it makes it pretty tough to survive being a seasonal job, as well as myself, I haul livestock. Eighty percent of my time is in the rural areas. And we do pass through these high emission San Joaquin Valley and stuff. And I would like to see something to help the livestock because with all the new housing tracts going in, we now move our cows from a 50-mile radius to three states: California, Nevada, Oregon. So I'd like to also see the mileage raised up on some of the agricultural trucks. I put an average about 65,000 miles on my truck.

Thank you.

CHAIRPERSON NICHOLS: Thanks.
Blain Stumpf and Paul Larking.

MR. LUIZ: Good afternoon, Ms. Nichols, Board members.

I've been coming up here for quite a few years on this issue. I've been against this whole thing for many, many years. Been to a lot of stakeholder meetings. And so your staff brought up their update on this whole proposition. I'm going to give up my update on my business.

As of right now I've lost every single puller I've had. Every single puller is gone. Subs, people own their own equipment, I'm down to a handful. I'm down to two trucks, one driver, all because of this rule and because of the economy. I went from a two million dollar a year business to hopefully I'll make 300,000. Out of the $2 million, if I did my job correctly, if I had good luck, I'd be able to keep about 10 to 15 percent of that money into expanding that business. The rest of that money went into the economy; parts, fuel, wages.

Some of those drivers that I had are no longer with us. They're dead. You know one of the reasons I believe they're dead is because they had health issues. And because they no longer worked for me, they had no medical insurance. So they're gone. Others are on welfare. Others lost their houses. This is all wrong.
As far as the filters go, the reliability on the filters. I've had transfer units -- this is construction work mainly. I've had transfer units that had filters on them that haven't made it to the job. So now they got a whole transfer load of hot asphalt. You have to get it off. You can't dump it on the ground because the truck ain't going to run. You got a whole crew waiting for that stuff. You've got cement mixers. Trucks don't run. You got a whole drum full of concrete. You can't turn it. You can't dump it.

These filters are unreliable. They're expensive. A lot of the trucks can't put them on there. This is what -- I'm giving you what the real world -- what I'm dealing with right now. I have three months. Three months left, okay. Three months left. And either I got to get rid of one of my trucks so I can go one more year or I have to get out of the business after 30 years. Thirty years of busting my ass, me and my wife, six days, seven days a week. It's a total disaster. Total disaster.

I had a few more things to say but my time is up. I'm been up here so many times this is wrong. Wrong deal. Thank you.

CHAIRPERSON NICHOLS: Mr. Larking.

MR. STUMPH: Chair Nichols, Board, thank you.
My company is a Placerville based dump truck fleet of 17. Been in business since 1983, 30 years. I had hair back then. Come to think of it, I had hair right up until the implementation of the truck and bus rule. I'm thinking there might be a correlation here.

CHAIRPERSON NICHOLS: Excuse me, sir. I'm sorry. I just got confused in the order. Would you just tell me who you are?

MR. STUMPH: 34, Blain Stumph.


MR. STUMPH: This rule has been a massive hit to our way of operating and our bottom line. We've been fortunate enough to receive CCAT funding for several units. However, most of the balance has been financed. That amounts to between 90 and $100,000 each after grant funding. We've purchased nine units that way. And you do the math on what that's cost me. This has put us in a position with having the highest payments we've ever had during the worst economy we've seen while being in business.

The cost of these replacements is not limited to financing. These trucks have higher DMV registration
fees, insurance, and maintenance costs. The technology used in these vehicles is new and largely untested in the real word. Of course, we have seen our share of emission equipment problems also. DPF plug-in, forced re-gen during the workday, port OEM support, extended down time waiting for dealer repairs. I can go on and on.

We embrace technology. I'm not afraid of it. What I'm afraid of is competitors that don't upgrade, retrofit, or replace. Those guys don't charge the rates required to operate this new technology like we do. We're running $150,000 pieces of equipment competing with guys running $15,000 equipment. The truck and bus rule has really upset the market. Eventually, it will level out. But where will the honest guys like me who have spent the money to be compliant be when the old trucks are finally gone?

Please consider these implications when modifying the rule. Thank you for your time.

CHAIRPERSON NICHOLS: Thank you.

Okay. I hope we're back on the right order now Mr. Larking.

MR. LARKING: My name is Paul Larking. I'm the co-Chair for the Port of Oakland Truck Work Group. I've been honored to have that position for the last two years. It completely unpaid. It's a forum. I don't work for
Port of Oakland. I'm not here to represent any particular interest, but to give you a perspective and update on the Port of Oakland situation.

I'm glad, Madam Chair, that you mentioned the drayage truck regulation. So I feel that I could talk about that a little bit, too.

As you know, the Port of Oakland was shut down again Monday this week and was shut down completely for two days in the month of August. There are currently intense ongoing discussions. The Port of Oakland has done a marvelous job facilitating a discussion group to come together. But speaking through my capacity as co-Chair for the trucking industry to various parties, I could tell you the issues are far from resolved.

The independent owner-operators have put several considerations or requests on the table. But one in particular is relevant to this audience. And that is the fact that, as you know, the port drayage truck rule community went first and experienced many of the issues that are being discussed here today in terms of filters, et cetera, et cetera.

There is approximately -- numbers are always subject to discussion. I think CARB's own drayage truck registry has got numbers of 1700. Those numbers have been reducing month on month. Maybe it's a thousand. Let's
cut it in half and call it 500. There are at least 250 to 500 families affected as a result of 250 to 500 owner-operators being put out of business come January 1st, at least prevented from working at the Port of Oakland.

The irony of this situation is they already complied once with CARB's regulations by putting filters on their trucks. And all these trucks in question here are filtered vehicles. The irony is they would still be legal to drive over the road anywhere in the state of California. And that to me seems a little bit nonsensical, because there really is a zero emission benefit or impact from actually allowing these guys to operate beyond January 1st next year and do what they like to do and that is stay at the port.

Many of them live in the port area and even if pushed over the road will be coming back into the residential area of the Oakland community.

On top of this, we have the 880 and I-80 going right through the heart of the Oakland residential community. And many of the over-road vehicles that will only be required to be compliant with the truck and bus road apply that route.

So my request to you is please give urgent consideration. What we don't want to see is 250 vehicles
descending on Sacramento if they can shut the port down, they may well be capable of this. This is not a threat. It's just providing you with information for your consideration. If there is any dispensation given under the truck and bus rule, I would urge you to see if there is any way we can accommodate some form of additional time for the drivers effected in the port drayage community in the port of Oakland.

Thank you for your time. I'm available to answer any questions.

CHAIRPERSON NICHOLS: Thank you.

Mr. Torres.

MR. TORRES: Madam Chairman, members of the Board, thank you for your time.

Chris Torres, F&L Trucking. I hail from Colusa County, rural community. We operate 15 trucks in that area. We operate in about approximately 250 multiple radius covering three states, 15 trucks, with 14 employees at any one time. We've already -- we've purchased nine trucks that are already compliant. 08-09 trucks, used ones. We've spent almost $700,000 in the last 18 months with these trucks to try to become compliant.

There's been pretty much a burden for us, but we are complying. We have to buy two more next year and two more the following year to bring us to where we need to
You know, it's almost a million dollars worth of money I've spent out of my own pocket or my family's pocket to comply. We want to comply. We don't have a problem with it. But we're concerned about some of the issues that staff is bringing up about changing and delaying. This could possibly show some unfair composition for folks like me that have tried to -- that are complying and struggling through the payments.

I do support though the low mileage change. I don't see a problem with going up to 5,000 miles. That will help a lot of the farmers. I'm a farmer also. It will help my farming friends and the communities all throughout the state.

I also support putting Butte County into an attainment area. That will take that island out from north of Sacramento. It's important there is consistency there throughout the north state. So I think businesses that are there can stay and not have to worry about going through Butte County. Butte County is of major importance to the north state.

Also the one of the other things I'm interested in is I think the folks that are retrofitting and that have purchased '08 and '09, '10 model trucks that are supposed to be phased out in 2020 through 2023 that may
possibly extend that time with those folks that have retrofitted and spent the money and let these trucks go and use their full life cycle. The life cycle of these trucks I don't believe was utilized enough when we get went through this rule and developed it back in '08.

I also feel that DMV needs to be involved somehow, some way, too. The trucks that don't comply shouldn't be licensed. And that would help with compliance and that.

And that's it for me. The only other thing I have to say, I'm wondering where everybody was in this crowd here back in '08 when we went through all this. Everybody should have been here then. Thank you.

CHAIRPERSON NICHOLS: Okay. Thank you. Obviously, there is a lot of different views and positions that people are coming from.

Richard Skaggs and then Joe Matlen.

MR. SKAGGS: Thank you, Madam Chairman.

My name is Richard Skaggs. I've been in the environmental field since the '60s. I served on the Inspection Maintenance Review Committee appointed by Kirk Pringle at the time for seven years. I've been testing diesel for over 25 years. And I have to say everything I heard today and years now, they're absolutely right. We do have to listen to them. We've been testing diesel
vehicles, bringing bring them into zero.

I know when we started this program with SAE -- I went back to SAE back in '91, '92 because we were using analog meters. They were reading high. So I went to SAE. We started the SAE 1667. We designed equipment that was digital instead of analog. And today, these meters, all of them, they can read the opacity right down to .001 or whatever we want.

When we started this, the Air Resources Board indicated that we did not want the meters to read zero because no diesel would ever come down to zero. That was back in '96.

Well, guess what? These folks, the hard-working folks with trucks, tractors, you name it, they did it. I was in the room back in the '90s when I said the diesel industry, the folks that have these diesel trucks can really do it if you give them a chance to do so.

I remember back in 1991, I was Chairman of the Environmental Department for the California Bus Association. Paul Jacobs came to our annual meeting. And he said every one of you should replace every diesel with methanol because we're going to phase out diesel. That's our program. We said there is not enough infrastructure to have methanol. Well, the RTD decided to go with methanol. Guess what. It failed. They had to get diesel
buses to go out and pick up the passengers.

A year later I asked the question: Why did you continue the program when you knew it wasn't going to work? They said because the government continued giving us money, $131 million. And they continue giving them money. The engines kept failing. We kept using diesel buses to pick these passengers up.

So you must listen to these folks. I've been listening to them since 1985 when we started our program in California to clean up diesel. We did not ask the Air Resources Board to help us. We had a program. We gave out $5,000 for the cleanest bus in California, and I personally sent out ten people to do testing throughout California. And these people were proud. They wanted to bring those emissions down and they did. That program lasted for seven years. Thank you very much.

CHAIRPERSON NICHOLS: Okay. Thank you.

Mr. Matlin.

MR. MATLEN: My name is Joe Matlin. I'm the controller for an agricultural hauling company that has a fleet of about 150 trucks.

Over the past several years, we have invested and borrowed about $10 million to stay compliant with ARB rules. This exercise has severely limited our competitive ability, our ability to provide increased pay and benefits
for our employees, and created immense financial
challenges for our business.

For these trying to become compliant, sadly our
story is typical. Although I do not really support the
regulation because of the hardships you have heard here
today, I also do not support any modifications at this
time because too many companies have already followed the
rules, much to their disadvantage. Any attempt to soften
the blow at this late day is completely unfair to those
companies.

You may or may not know the goods movement
program that was just taking applications this month is
not available to companies who are not already compliant.
This is bad policy.

The point of government is to help industry and
assist them in getting compliance so there is no
transportation meltdown in the state. I understand that
the State does not want to invest when a particular
company will never get compliant. But limiting it to
those already compliant is ridiculous. You should at
least include those that will get compliant with these
funds.

So to summarize there is only one action by this
Board I would support and for this Board to lobby with the
Legislature from a more funding to help truckers get
compliant. The time line for implementation that was
extended once is very difficult to meet. And the
appropriate action now is to attain some funding for
retrofits and replacements, not to extend. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Mr. Lewis.

MR. LEWIS: Good afternoon. I'm Mike Lewis with
the Construction Industry Coalition on Air Quality. And I
want to talk about construction and construction trucks.
That's not the trucks that were in your video, just so you
know.

Let me put it in context. Home building in
California usually makes up 75 percent of all the
construction in the state. A healthy annual rate for
building homes is about 150,000 homes. At the peak of the
economy, just before it tanked in '07, we were building at
the rate of 200,000 homes a year. Last year, we built
40,000 homes.

This year, with a little luck, we may make 50.
And the best projections anybody has got for next year are
60,000. At that rate, the terminates are eating them
faster than we're building them.

Unemployment is until 30 percent in this
industry. There simply is no recovery in construction.
Your staff's hockey stick recovery graph from 2010 is
simply laying on the ice today.

The good news is that because of that, the emissions from the construction industry are well ahead of schedule. And you should take some comfort in that. But we would like some credit for that.

The staff recommendations I would categorize as benign. I think you should certainly follow through with them at a minimum. They're a little bit of tinkering around the edge. If that's all you do, we're probably going to be having this conversation again in six months. Not that anybody asked, I'd like to give you the suggestions what I think part of the direction to the staff should be.

First of all, you need to update the construction industry emission inventory. A lot has changed in the five years since this rule was adopted and the assumptions that were made at the time that it was adopted. The fleet looks different. Activity has not been at the same pace it was originally projected. And I think we need to get the phantom emissions out of the equation. If we could get down them down from what they are today from the industry, the point we have to hit is going to look a lot different than it did when you wrote this rule in '08.

Secondly, humor us and take a really good hard look at VDECS reliability. Both new and old equipment
retrofits and OEMs, the problems are more widespread than you think or more than the VDECS manufacturers will admit. My contractors thought they were smart buying 2010 trucks and now they complain they're in the shop more than they're on the road.

Third, recognize the excessive burden you've placed on California-based businesses with the multiple rules that you have that effect a lot of these fleets. Certainly in construction with you have off-road equipment, on-road equipment, portable equipment, and forklifts and things of that sort, you're trying to compete and comply with a bunch of rules that don't necessarily work together. And that creates a very unfair burden, and there ought to be some sort of additional time for multi-use fleets.

Next, let's create a vocational truck category for those that are solely dependant on the vehicle --

CHAIRPERSON NICHOLS: Guess what. I'm going to ask you your opinion so you can get more time. You're over your time. So Mike, what do you think we should do?

MR. LEWIS: Well, I have a couple more points.

CHAIRPERSON NICHOLS: All right. Go ahead.

MR. LEWIS: Create a vocational truck category for those who are totally dependent on their truck for their source of living. And make a distinction here
between the interstate and the intrastate. These aren't
the same kind of trucks. They're individuals. They don't
travel very far. And the cost of compliance is excessive
for many of them.

Next, harmonize some of your requirements. You
can have a truck in the construction activity that only
has a thousand mile limit on it, but if it's in ag, it has
a 10,000 mile limit. That doesn't make any sense. You
need to pull those together.

Six, open the low mileage truck exemption as your
staff is proposing to do. I would advise to you do that.
But look at the definition of a contractor. Currently,
you have to have a contractor's license to put your trucks
into that program. Not every business that does
construction needs a contracting license. So they can't
get their trucks in. And some companies that are
contractors keep their fleets in a separate company that
doesn't have the license. So they can't put their trucks
in those fleets either.

I think at the time you did this, we told you
that that criteria, that was going to be a barrier to
entry. And it's turned out to be that. We haven't had as
many trucks into that category as were originally allowed
based on the emission estimates. And therefore, you need
to look at that definition.
Seven, on the low use designation, I think 5,000 miles will help, certainly for people that have water trucks and things of that sort. It should probably be about 7500 miles. And if you looked at those actual emissions, if we had that inventory updated emissions inventory, it would probably be justified.

And if you're going to do that, you also need to change the PTO limits on the PTOs on that same equipment. So to be able to drive a truck more miles doesn't help if when it gets there it can't work because it's at its 100 hour limit on the power take off on it. You might want to consider raising that to 4- or 500 hours as well.

Finally, I would suggest you consider a three-year rolling average similar to what you have in the off-road program so you can exceed a limit in any one year, as long as you didn't exceed the total limit over three years. I think that would provide some additional flexibility for some of the smaller fleets trying to comply.

So all you have to do is ask. We're more than happy to sit down and help you fix this. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Ian MacDonald and Rasto Brezny.

MR. MAC DONALD: Madam Chair, members of the Board, thank you for the opportunity to make comments.
My name is Ian MacDonald. I'm with the CDTI, a California-based company with headquarters in Ventura, California, and research and manufacture facilities in Oxnard, California. We're a VDEC manufacturer. CDTI supported the education and outreach of several programs including, the one being discussed today. We have interpreted and understood the truck and bus rule in an effort to assist fleets with understanding the rules and option for compliance.

We have also understood and adapted to the tendency for fleets to delay compliance action until the deadline is imminent. We attempt to plan our business around this typical peak demand. And as such, we have invested in significant inventory to support what we expect were the reasonable compliance dates proposed by the ARB.

Systems that remain in our inventory for extended periods of time as a result from delays in compliance requirement will be detrimental to our business.

I would like the Board to consider this impact in light of the proposed changes. Thank you.

CHAIRPERSON NICHOLS: Okay. Thank you.

DR. BREZNY: Good afternoon, Chairman Nichols, and members of the Board. I'm Rasto Brezny with the Manufacturers of Emission Controls Association.
With the new Board members, MECA represents the manufacturers of emission control technology for all types of internal combustion engines, everything from chainsaws to oceangoing vessels. That includes heavy-duty trucks, both new vehicles that have had filters and catalysts on them since 2007, as well as the in-use fleet we're talking about today with the same technology being incorporated in the form of retrofits filters.

We've been around since 1976. And we've worked with your staff on all types of regulations for new vehicles as well as for over ten years on the development and implementation of these fleet rules.

So we certainly recognize the hard work that staff does in the regulatory process as well as beyond once the regulations have been adopted and are going through implementation, which is where we are today.

The emission control industry is a green industry and relies on regulations in order to incentivize technology development and investments made into commercializing those technologies.

Retrofit manufacturers have made huge investments in verifying their devices are working properly over ten years ago. And today, they rely on market stability in order to recover some of those investments and continue to stay in business.
MECA has always supported staff's proposals that they brought before you to provide economic relief for our potential customers. And we believe that, you know, this is an important consideration. But as you consider what you've heard today, the main point I want to make is that we're concerned that changes to regulations that are made mid-stream of implementation are not only going to destabilize the market and the incentives that have been already made, but it also creates an unlevel playing field for those that have already complied with those regulations.

So we urge you to consider and hold firm on the major provisions of this regulation so that the emissions benefits and the health benefits of this regulation are realized.

And we look forward to continuing to work with your staff as they go through making whatever changes you direct them to make. And we thank you for your time for allowing us to make these comments. Thank you.

CHAIRPERSON NICHOLS: Thank you.
BOARD MEMBER BERG: Madam Chairman, could I ask a quick question?
CHAIRPERSON NICHOLS: Sure.
BOARD MEMBER BERG: Are you seeing an uptick in retrofits now that we have this rule coming?
DR. BREZNY: We have done a midyear survey that was a quantitative survey. And the midyear numbers were at the same level they were a year ago. We've done an informal qualitative survey for the third quarters. We've seen a slight increase in retrofit sales, but we're nowhere near the level that has been predicted or expected when either this rule was adopted or as recently as a year ago.

BOARD MEMBER BERG: Thank you very much.

CHAIRPERSON NICHOLS: Cynthia Cory.

MS. CORY: Good afternoon, Chairman and members. Many of you, Mr. Sperling, Ms. Berg, a lot of you that were here the first time we got to vote on this rule a handful of years ago. As one Chris Torres said, where was everybody? Well, I remember there was overflow room and it was the most people that had ever testified on any rule ever. We went for two days and there was hundreds of people and we heard similar stories.

So I hated this rule then and I hate it now. And I know maybe you do, too. And I didn't mean that say that for applause. I'm just saying it because we've heard from the manufacturers who make the retrofits. Sure, they don't want things changed. We've heard from the folks that have already invested. They don't want things changed. We have the SIP hanging over your head. I get
that. You're going the get sued no matter what you do. And it's a mess. I hate it. I'm going to be clear. I hate it.

But given that reality, which is just the reality, I really embrace the changes that you're making. They're baby steps. I don't want to overplay them. They're not going to help a lot of folks, a lot of the small operators. But I appreciate the steps you are tacking.

As Jack Broadbent said, we can't turn around. We started with the rules, had some changes a couple years later. Every time we get more flexibility in this rule, it's helpful. But folks that have made the changes, and I understand that. They already made the investments. It's not fair to them.

But in playing around the edges, which is what we're doing here, I really encourage you. There's been a handful of good ideas. I'm not going to repeat them today. There's been a handful of ideas I think we can take it a little bit more especially for the small operators. We not going to say they're not going to comply. If we can give them to the folks doing the non-opt that only go into one to six months a year, if there is anything that can be done for the funding for their incentives, that's -- some of them are going to
shrug and say the loan is not going to help me anyway.

But I just hope that we take every step we can. We're going to get one last bite at this apple. And I really encourage us to do that. The outreach that's been talked about, you know, I'll help you work with the farm communities on that. It takes a lot of work to get the changes into place and get them out all over the state. We can't do it many more times.

We heard a lot about the concerns about the filters, the life cycle analysis, the impact, the environmental impact. If we can talk about that a little bit more, I think that would be helpful.

But again, thank you for what you've done, even though I still hate this rule.

CHAIRPERSON NICHOLS: Okay. Tell us how you really feel.

Now let's hear from Mary Jo Dutra and then Jim Wagoner and Bill Magavern.

MS. DUTRA: Madam Chairman and members of the Board, thank you for allowing me the opportunity to speak. I was actually asked to come down and introduce myself to you and our organization, which is SAFE-BIDCO, State Assistance Fund for Enterprise and Business Industrial Development Corporation. A very long name, but the State named us.
They created us to work with other State and federal agencies in order to facilitate lending to borrowers that might not be bank ready or bankable for one reason or another. Specifically, when we started was in the energy field. How it fits in with what you're doing is a lot of the borrowers and the truckers that are prospective borrows have been showing up at our door because they can't afford loans at the banks. We are hearing about the problems they're facing in getting regular funding and financing. Therefore, they come to us usually referred by the banks.

Because of that, we would like to work with you in terms of any kind of programs moving forward you might be considering in your direct lending programs, if any. And I did have brochures that were handed out with some of the different programs we've put together with other agencies. If you have any questions, I can be available after your meeting to answer them. Thank you.

CHAIRPERSON NICHOLS: Thank you. That's good to know about your work. And hopefully we will be able to purview it further.

Jim Wagoner and Bill Magavern.

MR. WAGONER: Thank you, Chair Nichols and Board members.

First of all, I'd like to thank the staff,
particularly Erik White, for the presentations he's been doing in the north state. I did one up in Chico a few months ago and then in September in Marysville for the Sacramento Valley Basin-Wide Air Pollution Control Council. It was a very good opportunity to present information on the rule and to get comments at that time.

Just a couple of areas I'd like to talk about. We're really interested and happy to hear that staff is proposing to reopen or revisit the definitions to the NOx exempt area. This's an area where Butte under the current rule as designated does not qualify for that because we are a federal non-attainment area. Marginal for ozone. But we are heavily impacted by transport, much like the mountain counties. So we feel that re-visiting that provision and allowing a district like Butte to have that relief would work. It wouldn't hinder us as far as attainment goes. We're very close to attainment. And we think that should be looked at.

Regarding the PM filter installation schedule, this is something that I think that as we look at this rule -- and I'm not sure what the staff is going to do, if anything, with that schedule. I think we really do need to look at attainment status. We have a lot of rural attainment areas that don't need the PM reductions. We don't have heavy populations in those areas that are
exposed to the diesel particulates. An area like Butte, true, we are technically a federal non-attainment area. But recently EPA classified us as meeting attainment. Our issues are not related to diesel particulate exhaust as far as our attainment status. It's wood smoke. And we're making very good progress on that.

So with that, thank you again. And thank you to the staff.

CHAIRPERSON NICHOLS: Thank you. Sorry you had to go to the end of the line there. Okay.

And Bill.

MR. MAGAVERN: I'll try to be brief. Bill Magavern with the Coalition for Clean Air.

This Board has been in the forefront of first identifying diesel exhaust as being toxic and moving to regulate it. And you know that since that initial determination there has been increasing scientific evidence of the damage caused by particulate matter, including lung disease, heart disease, premature death, among other ills.

And as we'll be discussing in the next agenda item, particulate matter also is one of the pollutants that is rapidly changing the climate. When it lands on our snow pack, accelerates the loss of that snow pack.

But this is a challenging rule. And we thank
everyone who is complying with the rule or making a good faith effort to comply. And we think it's important that those folks not be disadvantaged by any changes that are made.

We support the loan program, support the recent legislation to put more funding into that. We think it's very important that the staff proposal proposes to gather more data and to analyze those data before making any regulatory changes.

You're showing flexibility here today. And flexibility is an important part of wisdom, an important part of success. I think it's most important certainly to us and to the mission of this Board that you focus primarily on maintaining the health benefits of this important rule. Thank you.

CHAIRPERSON NICHOLS: Thank you, Mr. Magavern.

This is not a public hearing item because there is no proposal before the Board. And so there is no record to be closed at this point.

We have given this issue a good bit of time because it deserves a good bit of time. And other Board members I know have devoted time, not just at Board meetings, but in between times to working with staff and working with many segments of the affected stakeholder community.
I want to particularly thank and call on Board member Sandy Berg to give us a few pearls of wisdom, if you wouldn't mind, Ms. Berg, because I know that you struggled hard with this one.

BOARD MEMBER BERG: Well, thank you very much, Chairman Nichols.

I have followed this regulation from the very beginning. And it is near and dear to my heart. As a business owner and as an owner of 17 trucks, I understand the rule fairly well. And more important is I have interacted with many of the stakeholders and both in large businesses and small businesses. And recently, I have also interacted with many of our friends up in the rural counties.

This is for real. People are not coming here to talk about these issues in a way to be defiant, too not care, to be flippant. This is very near and dear to their heart. That is their businesses. And so as we do look at this, it is extremely important that we hear everything that everybody has said. I hear from the business owners that they care about clean air. They care about the health of the environment. They have children and grandchildren. They have children that want to come into the business. They want to be able to not only live in clean environments, but they also want to be able to be
business owners and participate not only effectively but productively.

And so I've always worked very closely with our NGO partners who have a passion to make sure that we have clean air and that we are on the path. This has been an important regulation, and I don't want to underscore that.

Given that, I have to commend staff tremendously for the work that they have done, Chairman Nichols, over the past several months. They have earnestly come together. They have gone out into communities. They have listened. They have an absolute yoman's almost impossible job here in looking at a regulation that quite frankly is so large and covering so many types of vehicles and vocations and duty cycles that it was almost a little too big.

I really appreciated the testimony that suggested that we take a look at vocational trucks. And I'm not suggesting because I think there is about zero will to want to look at this rule and reopen it and recraft it.

That said, I can't express strongly enough the need that regulation should not drive small businesses out of business. We need small business here in California. We need medium-size businesses. And regulation does tend to weigh heavily on almost four times the amount of cost on small business as it does large business.
So Madam Chairman, I do applaud staff for this major step forward. I would strongly recommend to this Board that we endorse the staff's recommendation. I would strongly recommend to staff that you come back to us by your April deadline, and I know that you have looked in all sorts of areas. But I would also encourage you to revisit some of the areas where it is so complicated that owner-operators don't understand what they truly do have available to them. And I would ask that you would revisit some of the intent of the existing rule where it wouldn't have an emissions impact, but people don't know how to do it.

I appreciate, Madam Chairman, you giving me this opportunity to open up this discussion. And with that, I really thank all of you for coming and testifying. I know many, many of you have been here several times. And I thank you for your tenor, for your heartfelt opinions, and for letting us know on all sides. It's a very important issue. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

I'd like to hear from Mr. Serna and also from Dr. Balmes and then Mr. Mr. De La Torre and then Ms. Mitchell and Mr. Roberts. Okay.

BOARD MEMBER SERNA: Thank you, Chairman Nichols. First, I want to certainly echo and underscore
what I think Member Berg has appropriately articulated in terms of the stress of this regulation, quite frankly. But also the needs for the regulation.

I want to thank in particular all the speakers that took time out of their very busy schedules to be here and not just here this afternoon, but I know at many evening meetings, other meetings, to engage staff and to hopefully engage in productive exchanges to get us to a place where we can find that sweet spot so to speak, if there is one, and how best to implement a regulation that has real health impacts and one that doesn't, as Ms. Berg mentioned, doesn't put small business out of business in California.

There have been a number of speakers this afternoon that have expressed your concerns with a great deal of passion, but with also a great deal of civility. I want to thank everyone for being very, very respectful. I know there are some very, very concerned people in this audience and elsewhere that maybe couldn't be here today.

I want to thank staff for taking I think very seriously what those concerns are. We heard from a speaker early in the testimonials from Woodland about some concerns that that air district has about communication and outreach with the Latino population and also the area that I represent in the north part of the Sacramento
Valley, the Punjabi seat population as well.

And I'm not sure if Ms. Bowen is the appropriate person to direct this comment to, but as our Ombudsman, I would suggest that as we begin to move forward with hopefully some recommendations that we think are going to advance what we need to advance at this point, maybe introduce some flexibility, that we make sure that we do it in a manner that isn't necessarily phone calls that don't get returned or just in a monolingual fashion. So any way we can enhance communication moving forward in those respects I think would be very much appreciated by the community that we heard from in large part this afternoon.

OMBUDSMAN BOWEN: We'll follow up on that, Supervisor Serna. And I know we have a really good outreach team on Erik's staff and also have a Spanish speaker on our own staff in the Ombudsman office. And we'll pull ourselves together and develop a plan and let you know what it is before we implement it.

CHAIRPERSON NICHOLS: Great. Thank you.

Dr. Balmes.

BOARD MEMBER BALMES: So I again want to express my thanks for everyone that showed up today. I know a lot of you came a long way. And this is a major investment of time, but I understand why you've made that investment.
I just want you to know that I'm listening to your stories and they move me.

I'm the public health representative on the Board. And I have to be concerned about the health consequences that several of the witnesses talked about Bonnie Holmes-Gen from the Lung Association, Bill Magavern for the Coalition for Clean Air.

But that said, I also listen to Ms. Plowman who correctly said that being out of work is not good for your health. So it's a balancing act we're dealing with here. When I was testifying or actually speaking to members of the Legislature or the Senate when I was up for confirmation, I said while I was -- pledged to try to maintain as best as possible clean air for public health in California, I also would work to try to find pragmatic solutions so that the economy wasn't impacted too much.

And I think that what I'm hearing is that small truck owner-operators and small fleets are being impacted to the point where they're maybe having to go out of business. I don't think that's what we really need.

Because we have to balance, again, the positive impacts of improved air quality and less climate change impact with the negative consequences of people losing their livelihood.

So I don't have a specific solution. This is a
complex rule. I voted for it back in whenever 2008, but it doesn't mean that it's -- that we can't make modifications at some point. I agree with Member Berg that we can't do a wholesale change, but I think we have to come up with some solutions for small trucking operations.

CHAIRPERSON NICHOLS: Okay. Mr. De La Torre.

BOARD MEMBER DE LA TORRE: Thank you, Madam Chairwoman.

I also appreciated all of the comments and the struggles that the various owner-operators have expressed today. But I wanted to share two anecdotes of my own living down in southern California, very close to the 710 freeway and the goods movement corridor.

The first is every morning when I drive on the 710 taking my son to school, invariably, I would say almost every day if not every day, there is a truck that is smoking not just normal emissions, smoking on that highway. And more often than not, it's an independent owner-operator truck. A lot of dump trucks, a lot of other kinds of trucks, they tend not to be drayage trucks because those have been processed already. So I see these trucks every day on this freeway.

And that's problematic because the people who are on that freeway, the people who live next to that freeway
are breathing this every single day. So there is a postponement that has already taken place for folks to comply with this. And these trucks are out there. And they are polluting. Again, I understand the difference between urban and rural. But clearly, there is an issue out there in terms of what people are breathing from these trucks.

The second is an owner-operator story. A couple weeks ago, I was at an event in southern California at a trucking company where an independent owner-operator had taken advantage of some of the programs we are talking about here in terms of the loans and some of the grants, and he had packaged a means of being able to get a newer truck. And he bought this truck and was making payments, and the ceremony was the ceremony where he made his last payment. So he got to keep the truck obviously and they were recognizing that.

He did this through the recession. He bought the truck in the midst of recession when port container traffic and other business activity had dropped tremendously. And he, you know, kept making his payments and he got through. And after it was over, I went up to him and I said, "You know, if you buy a car and get a loan on a car, all you get a pink slip in the mail. But here, you get this whole big ceremony. It's kind of a big
"And he was so proud. It was a father-son trucking team. They just took turns with the truck, and it was their family business. And that was all they had, one truck, two drivers.

And so when I see that and folks who have already done it and made it work in the worst of times, I think it can be done. That's not to dismiss everything that we've heard here today as was expressed by Ms. Berg and Dr. Balmes. We would like to see how we can be more helpful to make this happen. But because it has already happened, it is important to us to stay the course on this path because those trucks are out there smoking in communities like the one I just described. Thank you.

CHAIRPERSON NICHOLS: Thank you.

We've got Mitchell, Roberts, Riordan, Gioia.

Okay.

BOARD MEMBER MITCHELL: Again, I want to reiterate a thanks to all the people that came today. You took time out of your busy schedules, and you drove to get here. We all appreciate hearing from you because it helps us make better decisions. So I always appreciate and relish the input of the stakeholders.

Also want to thank our staff. I know they worked on this to get flexibility into the rule. And when issues of owner-operator came up a couple months ago, I spoke out
very passionately in favor of finding some funding for all of you, because we need that. And you know how much we need it.

At the same time, I think most of us sitting up here are balancing always the economic impacts on some rule that we are looking at on the one end. On the other hand, we're looking at the health impacts. And both of those are important issues and goals that we struggle with because we want to find how we can manage both of those in a way that is equitable, is fair to all of you.

So I'm very thankful that we build flexibility into this rule, because I've heard a lot of things that are going to be included that will give that flexibility.

I do have a concern about my area, which is a non-attainment area. And the concern -- but I think it can be managed -- is that if we allow exemptions in the NOx exempt areas, I think there should be some assurance that we don't have those vehicles then straying into non-attainment areas. That can be done with some kind of program. I'm sure that can be managed. From what I've heard from the testimony is that, you know, many of you are rural truck operators and you're operating in a rural radius that doesn't extend beyond a certain sphere. So I'm sure that can be managed. I'd like to see you look at that.
We continue to hear about problems with the filters and the traps. And I think some of that deals with public outreach. I've heard from the other side of the story, if you put these in right, if you're using an authorized dealer, there is no problems. But I'm still hearing from our owner-operators, our truck owners that these are problematic. So I think we should continue to look at that and work on that.

The loans, I think that also probably people don't know how to get them. Maybe they don't qualify. I think some will fall through the cracks that may not qualify. We need to keep helping those people as much as we can and help them find the loan assistance or other kinds of financial assistance that might be available.

And the Spanish speaker issue is one that's particularly true in the South Coast area, lots of Spanish-speaking owner-operators. And we want to make sure that we publicly reach out to them so they get the help they need.

So I think that's it for me. Thank you.

CHAIRPERSON NICHOLS: Okay, Ron.

BOARD MEMBER ROBERTS: Thank you, Madam Chairwoman.

One of the speakers mentioned that thanks to the negative economy we have actually achieved some of our
early goals. About three years ago, we amended this rule. We actually took that into account when we changed the filter -- both the filter requirements and the new truck requirements. So we extended the period. And I know I was a strong proponent of that at the time. And several of us here on the Board today strongly supported that because clearly the times were bad and the emissions were down significantly. So that has been to some extent reflected in the current rule.

Having said that, there were a couple things. Mike Lewis gave us a whole series of points, but he didn't give us anything in writing. And I couldn't keep up --

CHAIRPERSON NICHOLS: I'm sure she'd be happy to give it to you in writing.

BOARD MEMBER ROBERTS: He unfortunately didn't. I have a pile of stuff. I would like to have heard staff's response. I know one of the items was -- we heard it from a few speakers was the possibility of going from 1,000 to 5,000 miles for me that seems to have some resonance.

We are in a difficult position. And I do feel obligated for people who have made the investment. So I don't want to just sort of push everything aside.

And we want to get this changed. Some of us have been here long enough to actually have been part of the
Board that declared diesel a toxic -- at least two or three of us I think maybe more, but I doubt it. And it was a commitment that we were going to change. And we were going to get the health benefits that would come from it. So we're committed to that. And we've been committed to that for a long time.

Having said that though, I'd like to work to the fullest extent possible with the fairness to the people that are complying. I think the staff has done a good job. I think there's a few things out there. I'll be honest, I don't understand how analyzing on the intra to interstate basis might do, what the implications of that might be.

But again, I'd like to -- if we can't hear today, I'd like to see in writing responses to some of the points. That used to be routine. We would do this after a hearing that the staff would say okay, here's what we heard, let us give us a response to that. There's kind of a silence. A lot of points were raised. I'm not hearing a rebuttal here that I would have expected.

CHAIRPERSON NICHOLS: Well, it's because I didn't let them talk.

BOARD MEMBER ROBERTS: Pardon?

CHAIRPERSON NICHOLS: Because I didn't let them speak. We can hear from staff if you want to now or
later. But I think probably getting a written response to some of the points you'd like --

BOARD MEMBER ROBERTS: I didn't know if it was the lateness of the hour.

CHAIRPERSON NICHOLS: It's just we wanted to hear --

BOARD MEMBER ROBERTS: I would like to see especially on those points that were made and some of the others. There's some that I understand the general economic conditions. And those are clearer to me than some of the specific points that are coming up though.

CHAIRPERSON NICHOLS: Fair enough.

Mrs. Riordan.

BOARD MEMBER RIORDAN: Thank you.

Quickly, I'm supporting the staff recommendation. I think you did an excellent job of trying to balance all the issues out here.

The one thing that I noted, there is still -- and I think it was brought up prior to my time -- this issue of filters and whether or not they work. We need to follow through on that. We need to take some examples and see if, indeed, that is what is happening. Or is it the maintenance or the installation or whatever. Please, please, if we make these requirements, I want them to work.
The other thing is to the audience. I just picked up on Mary Jo Dutra's brochures here. Here is a program -- and I don't know if it works for you or not. But it is a program for financing for small counties. And it goes from Butte to Yuba and all the rest in between. These are the kinds of things you need to make inquiries about. This has to do with a rural county loan program. And it's for businesses. And maybe they have the gap funding that you might need for the improvements that you might need to do. And my suggestion is before she leaves the room, talk to her. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Mr. Gioia.

BOARD MEMBER GIOIA: First, we thank everybody that came here today, both those who run the businesses and those who are also public health advocates. And by saying that, I don't mean the truckers aren't public health advocates. They are. They understand the importance of clean air and running their business. But also those who came here, like the Lung Association.

You know, for those of us in the urban areas, we deal with the same thing. We look at how do we balance the challenges of a new -- controlling what is a very large source of diesel particulate emissions in the state. It's hard to not address the issue when 40 percent of
diesel particulate matter comes from trucks out of mobile sources.

We've had the same things with neighborhoods around urban areas concerned about the trucks that pass through from the ports, for example. And I'm glad in this case -- and I think you heard this from folks here -- is that the staff has tried to go back and develop a strategy to address a lot of the concerns that have been raised. While it's not an extension of a deadline, it's things like coming up with additional financial assistance opportunities for single truck operators to obtain cleaner trucks. So that issue -- the strategy to identify more funding for that. To also recognize I think this is a big deal, recognize good faith efforts to comply. Not everybody by January 1, 2014, will be in full compliance. But the strategy is going to look at recognizing good faith compliance. So I think that's a really important fact to emphasize.

And also to go back and evaluate your recommendations to provide additional flexibility and doing additional outreach. I think all of those -- and the strategy I know they're going to work on to bring back, it will allow us to really achieve a very important public health goal that's going to be good for everybody, but try to balance the issue of protecting those in this
business.

So I have faith that the implementation of this is going to be thoughtful and going to -- we'll get a report. We'll get an update on this. It will be thoughtful in a way to respect a lot of issues that you raised here today.

CHAIRPERSON NICHOLS: Okay. I think it comes back to me. And I want to close with a couple of comments. Oh, no. I thought you said no.

BOARD MEMBER SHERRIFFS: No respect for the skeptics.

CHAIRPERSON NICHOLS: Did you wish to speak?

Please, go ahead.

BOARD MEMBER SHERRIFFS: I'll be brief because everybody has been very articulate in expressing appreciation for people sharing their concerns and for staff's efforts to listen and come up with some flexibility to meet some very important issues that have been raised.

Just a reminder because, indeed, we are driven by health. That is why we're doing it. And there is potentially a cost to the postponement of some of the compliance issues we've discussed. And I think it's important that staff work as you're crafting these things to also be as specific as you can about what the costs
are. Because these things do affect air districts in terms of meeting criteria pollutant issues and standards.

You know, a comment was made that the lines come together at the end. What's the difference? Well, the difference is there is this space under the curve, and that is tons of pollution per day which actually does translate into lives per year. That is a real number. And the lines don't exactly match up at the end anyway. But even if they did, this represents real thousands of lives over that period of time. That's a real effect.

But I think it's important we've talked earlier today about metrics and how important that is to help us do a good job.

I think the Board is committing -- if there is in a sense a shortfall by postponing some of these people coming online three months, six months, there is a shortfall. I think the Board's making a commitment to figure out how to make that up. Because we committed to make a January 1, 2014. And there is going to be a lag. I think it's important we know what the cost is and what we need to be thinking about.


Well, first of all, if you don't give us credit for anything else, I think you have to admit this is a
Secondly, I've been thinking a lot about what Cynthia Cory said about how much she hates this rule really cut me to the quick.

I think part of what I want to say to all of you is that we are here because we have a sworn obligation literally to carry out the laws that have been given us to execute, which include the Clean Air Act. And frankly, regulation isn't always fun and it isn't certainly easy. It's tough. And it's tough to do well. We probably don't achieve perfection. But I think we strive to get as close to that as we can. And what we're seeing here is a process where we iterate where we improve.

I take it as a sign of success that even though there clearly are people who are still struggling to figure out how or if they can comply and plenty of people who don't think that we should be regulating in this area at all, that some of the people who came who were in that camp before are not in that camp anymore, and others have chosen to send us messages that they want us to stay the course. So I actually -- while that shouldn't make me feel happy -- it doesn't make me feel happy. It makes me feel like we have been moving in a positive direction. And that we can continue to make progress.

I have to say as an urban person myself, I have a
particular bias in favor of the proposal to increase the size of the low mileage exemption, because I don't think that's just an issue for rural areas. I think that's actually an issue for quite a number of small, for example, nonprofits, churches, and other organizations that have trucks that are subject to this rule. So I'm especially interested in that one as one that the staff is working on.

But I'm also very interested in pursuing further this question of whether there are trucks who either by the nature of their business or by where they're located just are not -- should not have the same level of concern for us from a regulatory public health perspective.

Having said all of that, I also I can't help reminding us that at the end of the day, by its very nature, regulation advantages some more than others and disadvantages some other than others. We can do our very best to try to bring everybody into compliance and find funding, and I'm thrilled that we've been able to come up with some additional funding.

I can't say too strongly how gratified I am that the Legislature and the local districts have come together to try to make this a more affordable regulation, but we can't make it completely affordable or easy for everybody. And I don't want to pretend that we think we can. But I
do think that we can get there pretty close. And
certainly we can improve over where we are right now.

So I, too, want to thank everybody who came and
who's helped us with this process. Thank staff. I know
there were some things that were said that you didn't
agree with and that you would like to comment on and
others where, you know, the Board members have challenged
you to give us better information because, you know, it is
frustrating to come back time and time again and hear
people talking about how horrible these filters are. And
yet at the same time, we know that there were people out
there who have used the filters, have the filters, and
people who invested a lot of money in designing them and
certifying them who think they're working very well. So
anything we can do to kind of close that gap I think would
be very helpful.

And with that, I think I'm going to say that
we've come to the end of this item. But our job at the
Board is not done even for today. We have another item on
the agenda. So I'm going to give everybody five minutes
or so stretch break and then we're going to come talk
about scoping plan.

(Whereupon a recess was taken.)

CHAIRPERSON NICHOLS: We're here to talk about
the Scoping Plan. So recently we released a Scoping Plan,
which is the first five-year update on our AB 32 Climate Change Scoping Plan. And the draft is out because we want to hear comments from the public.

We also have a couple people who are joining us I hope for this discussion. So I'll be introducing them as soon as we I guess before we hear from the staff. After. So after the staff report. Okay. I'm sorry to be fumbling here, but we invited representative from the CAPCOA, from the organization of local air districts, and also a representative from our Environmental Justice Advisory Committee, but I will introduce them in a minute. So two representatives.

Let's talk for a minute about what we're doing here. We have a framework that we're required to use for implementing the requirements of AB 32. AB 32 has occupied a lot of our time, so I'm not going to bother to tell people what it is, because the Board certainly knows and I think everybody who's watching does, too.

But the point of this effort is that we have to look at the variety of different programs that we operate that are driving us towards the goals of 2020 and beyond in some kind of a comprehensive fashion. The plan itself is not the same thing as a SIP. It's not the same thing as a local general plan. It's a new creation, the idea of a Scoping Plan. In fact, nobody knew what one was really
until we started to try to create it. But it's a way to organize our thinking about how we're getting towards the lower carbon future that we need to have to achieve the overall goals of AB 32.

So we need to work on this with partners. The ARB is responsible for developing the plan, but we don't implement it all. In fact, large portions of it are within the areas of responsibility of other agencies. Many of them are things that we do with local government, with the private sector, and with individuals. And we can't do any of this all by ourselves. So we recognize that the plan serves as a guide post that others can look at, but that it has to be flexible enough so that as we learn more and we do continue to learn more, both about the science and about the technology and economic feasibility of various strategies that we can change it and update it.

I think it's important that we hear briefly at least from the staff about what this new Scoping Plan looks like, how it differs from the previous Scoping Plan, what they're hoping to achieve, and the time line they're on.

I know that there were a number of people who signed up to talk about it, and we will hear from you. But I would urge you to remember that we're going to be
back here again in November -- December. Sorry. December, not November. December. We will be producing in November a revised version. So we're on a fast track already to continue to make the plan more specific, more concrete, and to reflect what we're hearing already from the public.

So with that, I will turn it over to our Executive Officer to present this item.

EXECUTIVE OFFICER COREY: Thanks, Chairman Nichols. And I will move through this quickly. With the development of the original Scoping Plan, California became the first state in the nation with a comprehensive set of greenhouse gas emission reduction strategies involving every sector of the economy. The Scoping Plan stimulated a long list of successful State and local initiatives, including several ARB measures, such as the low carbon fuel standard, advanced clean cars, and cap and trade.

The update highlights California's success to date in reducing its greenhouse gas emissions, defines California's climate change priority and activities for the next several years and frames activities and issues facing the state as it develops an integrative framework for achieving both the air quality and climate goals in California beyond 2020.
Staff released a discussion drafted earlier this month to solicit public input and will release a revised version in November. We plan, as you noted, to bring the next version of the update to you all in December, with approval set for spring. With that, I'll ask Marcelle Surovik with our Stationary Source Division to begin the staff presentation.

(Thereupon an overhead presentation was presented as follows.)

AIR POLLUTION SPECIALIST SUROVIK: Thank you, Mr. Corey.

Good evening, Madam Chairman and members of the Board. Today, we'll provide you with the status on first update to the Climate Change Scoping Plan.

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AIR POLLUTION SPECIALIST SUROVIK: AB 32 required the ARB to develop the Scoping Plan that outlines the State's strategies to meet the 2020 greenhouse gas emissions limit set forth in the law. The initial Scoping Plan was built on a principle that a balanced mix of strategies is the best way to cut emissions and grow the economy in a clean and sustainable way.

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AIR POLLUTION SPECIALIST SUROVIK: As envisioned in the initial Scoping Plan, the State has implemented a
comprehensive suite of strategies across sectors that are moving California toward a clean energy future.

California has made tremendous strides in harnessing its abundant renewable energy resources, increasing its renewable energy use to 22 percent.

The State has long been a global leader in energy efficiency and is implementing scope plan strategies to set aggressive standards for appliances and buildings and saving billions in reduced electricity costs.

The State has also developed the most comprehensive Cap and Trade Program in the world, sending a clear signal to California businesses that investment in clean, low carbon technologies will be rewarded.

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AIR POLLUTION SPECIALIST SUROVIK: Renewable fuels with the help of low carbon fuel standard displaced more than a billion gallons of gasoline and diesel. California's pioneering zero emission vehicle regulation and Governor Brown's 2012 Executive Order are driving a transformation of the State's vehicle fleet. As a result of these efforts, California will see 1.5 million zero emission vehicles on the State's roads by 2025.

California is also making major strides toward reducing the number of miles vehicles are driven, through more sustainable transportation, land use, and housing
AIR POLLUTION SPECIALIST SUROVIK: AB 32 mandates that the Scoping Plan be updated at least every five years. The Initial Scoping Plan prescribed specific measures and programs to achieve 1990 emission levels by 2020.

The update focuses on our progress towards meeting this goal and tees up challenges and opportunities to achieve reductions beyond 2020. Progress toward meeting our pre- and post-2020 targets will depend on direct regulations, partnerships with local and regional agencies, and incentives such as through the cap and trade proceeds.

The update is part of the administration's overall climate strategy, which includes the Governor's environmental goals and policy report, the State's adaptation strategy, and the climate change research plan.

AIR POLLUTION SPECIALIST SUROVIK: In developing the update, we posted several questions to focus the discussion and coordinate input from multiple agencies. These questions are: How have we done over the past five years? What is needed to continue progress to 2020? And what steps are needed to continue emission reductions and
grow our economy beyond 2020?

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AIR POLLUTION SPECIALIST SUROVIK: The update was developed by ARB in consultation with the Climate Action Team and reflects the input and expertise of a range of State and local government agencies.

The update also reflects public input and recommendations from business, environmental, environmental justice, and community-based organizations.

ARB held four public workshops throughout the state to provide opportunity for input before the discussion draft was released on October 1. We are currently accepting written comments on the discussion draft.

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AIR POLLUTION SPECIALIST SUROVIK: Since the development of the Initial Scoping Plan, even stronger scientific evidence continues to mount that the climate is changing. The recently released intergovernmental panel on climate change fifth assessment report confirms the increasing scientific consensus that human activity is contributing to climate change and underscores the growing body of scientific evidence confirming the serious detrimental impacts of increasing GHG emissions.

California is particularly vulnerable to the
effects of climate change and faces a range of impacts, including increases in extreme heat and storms, and coastal flooding and erosion. Climate change is also likely to affect air quality and water availability.

We must accelerate the pace of emission reductions needed over the coming decades to avoid the worst impacts of climate change.

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AIR POLLUTION SPECIALIST SUROVIK: One way to accelerate our progress is to focus on short-lived climate pollutants. These pollutants have atmospheric lifetimes ranging from a few days to a few decades as compared to CARB dioxide's lifetime of more than 100 years. Short-lived climate pollutant have high global warming potentials and thus contribute more to global warming.

These pollutants include black carbon, methane, and hydrofluorocarbons. Reducing emissions of short-lived climate pollutants can offer significant air quality and public health benefits, in addition to slowing the rate of climate change.

Over the past several decades, California's actions to improve air quality and protect public health have already resulted in significant reductions in these pollutants emissions.

In addition to implementing several regulations,
the Board adopted to reduce emission of short-lived climate pollutants. ARB staff is currently developing a proposed measure to reduce methane from oil and gas production. Other measures may be pursued as we continue to collect data and identify sources that can be regulated.

Staff is proposing to develop a comprehensive short-lived climate pollutant strategy by 2016. The strategy will include an inventory of sources and emissions, and a plan for developing additional control measures.

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AIR POLLUTION SPECIALIST SUROVIK: Over the last five years, ARB has worked with other State and local agencies to implement and ensure the smooth implementation of the climate change programs outlined in the Scoping Plan.

California has undertaken a number of ground-breaking climate change initiatives. These include the first in the nation economy-wide Cap and Trade Program, the low carbon fuel standard, a 33 percent renewable portfolio standard, and the Advanced Clean Cars Program that has been adopted at the federal level, building and appliance energy efficiency standards, and the California Solar Initiative.
ARB is also working closely with our local and regional partners to implement Senate Bill 375. Projecting the benefits of these measures in 2020, we are confident that the state is well on its way to meeting the 2020 goal.

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AIR POLLUTION SPECIALIST SUROVIK: In 2008 and 2010, ARB completed a detailed economic analysis of the Scoping Plan. ARB's and other analyses found that the impacts of AB 32 were expected to be small relative to California's two trillion dollar economy. Many of the measures identified in the Scoping Plan have now been adopted, and are in the early stages of implementation, presenting challenges in the ongoing assessment of the economic impacts of AB 32. ARB is consulting with economic advisors, as the Scoping Plan measures are being implemented to guide us with our data collection efforts and to assist us with developing methodologies to better assess economic impacts.

As implementation progresses, ARB will continue to consult with experts to help us evaluate the economic impacts of AB 32 measures using the best available models and techniques.

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AIR POLLUTION SPECIALIST SUROVIK: Turning now to
public health, many of the strategies laid out in the Scoping Plan have health benefits. For example, cleaner and more fuel efficient vehicles are reducing criteria and toxic air contaminants, particularly in disproportionately burdened communities. And more sustainable communities are promoting more active transportation and physical activity. ARB is currently working to understand and address any unintended negative health impacts of AB 32 measures, including the creation of an adaptive management program to address potential localized pollution impacts from the cap and trade program.

As we move forward, new tools and data will be needed to help quantify public health impacts and monitor health benefits from implementation of AB 32.

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AIR POLLUTION SPECIALIST SUROVIK: AB 32 requires ARB to convene an Environmental Justice Advisory Committee to advise it in developing the Scoping Plan. The EJAC held two meetings before the discussion draft was released and developed eight pages of initial recommendations to inform development of the discussion draft before you today. These recommendations are appended to the update and address environmental justice policy, each of the Scoping Plan sectors, and the Cap and Trade Program.

This Committee met again earlier this week to
discuss metrics for tracking the impacts of AB 32 implementation and the discussion draft. Two representatives from the EJAC will share the Committee's views following my presentation.

The EJAC will meet again in early December to finalize written comments to the Board on the next draft of the plan.

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AIR POLLUTION SPECIALIST SUROVIK: Local and regional government efforts are critical to the success of AB 32. Local governments are reducing GHG impacts of their municipal operations and are adopting more sustainable codes, standards, and general plan improvements to reduce their community's emission.

Sustainable communities strategies are being implemented that link transportation and land use planning, reducing the impacts of vehicle use. Although these planning strategies are a critical component of reducing GHG emissions, resources remain a challenge to their implementation.

According to a recent survey, roughly 70 percent of California jurisdictions have or will complete GHG emission reduction programs and policies.

ARB is collaborating with the California Air Pollution Control Officers Association to identify
additional local and regional initiatives and priorities for the next draft of this update. You will hear more about this effort directly from CAPCOA following my presentation.

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AIR POLLUTION SPECIALIST SUROVIK: Looking now to beyond 2020, the latest climate science supports the continued need for reductions of GHG emissions beyond 2020 to reduce the likelihood of catastrophic climate change. California has established long-term climate goals to reduce GHG emissions to 80 percent below 1990 levels by 2050. However, a significant gap remains between the ongoing GHG emission reduction progress and this 2050 target. Emissions from 2020 to 2050 will have to decline several times faster than the current rate.

A 2030 midterm target should be established to ensure continued progress toward the 2050 target, provide greater levels of market certainty in the near future, and frame the next suite of emission reduction measures.

Determining an appropriate midterm target and how it would be established will require coordination with the administration, the Legislature, stakeholders, academia, and others.

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AIR POLLUTION SPECIALIST SUROVIK: Six key focus
areas comprising major components of the state's economy were identified to evaluate and describe the larger transformative actions that will be needed to meet the State's more expansive emission reduction needs by 2050. These focus areas include energy, transportation, including fuels, land use, and associated infrastructure, agriculture, water, waste management, and natural working lands.

State agency focus work groups were created to conduct these evaluations. Various State agencies took lead roles. For example, CEC took the lead on energy, and ARB took the lead on transportation.

The discussion draft contains several specific recommendations for each focus area. For brevity, I'll be presenting a high level characterization of them in the next few slides.

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AIR POLLUTION SPECIALIST SUROVIK: Reducing energy sector GHG emissions will require wholesale changes to the current energy system. The State will need to take on a key leadership role. There is no single party or agency that has complete responsibility for the energy sector. As such, the State needs an overarching energy plan to ensure long-term climate goals can be met.

The plan should include the development and
deployment of near zero emission energy sources while
minimizing costs and maintaining reliability.

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AIR POLLUTION SPECIALIST SUROVIK: Changing
California's transportation sector to one dominated by
zero and near zero emission vehicles is essential to
meeting federal air quality standards and California's
long-term climate goals. This will require fundamental
changes to how we develop and expand our communities, how
people travel, and how we move freight in the state.

Coordinated planning among State and regional
organizations will be essential. Vehicles and freight
must transition to electricity, hydrogen, and low carbon
renewable fuels. This will require expanding the market
for clean cars and trucks and low carbon fuels and
developing the associated infrastructure.

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AIR POLLUTION SPECIALIST SUROVIK: The
agriculture sector is a key economic driver for
California. The State provides food to support local,
national, and global populations. Potential emission
reduction strategies in the sector must be implemented in
a way that maintains the State's valuable agricultural
resources. A comprehensive plan should be developed that
identifies potential reduction goals, emission reduction
and sequestration opportunities, and needs for additional research and incentives for this sector, while also addressing the growing needs for adapting to our changing climate.

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AIR POLLUTION SPECIALIST SUROVIK: Recommendations in the water sector focus on reducing the energy associated with water extraction, treatment, conveyance, and usage, to reduce GHG emissions. A key to this is to improve water conservation and efficiency.

The State must maximize efficient utilization of all available water supplies, including surface water, groundwater and wastewater.

Revenue and rate structures need to be developed that support these goals, while at the same time ensuring access to needed water supplies for low income households. The full societal value of water needs to be considered when developing water policies. This includes not just the immediate cost to obtain the water, but also the impact of the policy on our ecosystems and society.

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AIR POLLUTION SPECIALIST SUROVIK: California's goal of reaching 75 percent recycling and composting by 2020 provides an opportunity to achieve substantial GHG reductions across the waste sector, while providing other
significant economic and environmental co-benefits. California must take advantage of waste materials to generate energy to power our homes and cars and to improve our working lands.

Achieving the 75 percent goal while committing to manage our waste at home will require substantial growth in the collection, recycling, and manufacturing industries within California. Developing these industries here helps ensure that GHG emission reductions, environmental co-benefits, and job growth all benefit California.

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AIR POLLUTION SPECIALIST SUROVIK: California's natural and working lands such as forests, range lands, and wetlands provide a multitude of economic and environmental benefits and are one of the few sectors that can sequester carbon. They will also play an increasingly important role in California's efforts to prepare for and adapt to the impacts of climate change.

California needs a comprehensive strategy such as a forest carbon plan, to protect, manage, and conserve these lands in ways that maximize opportunities to achieve GHG reductions and carbon sequestration.

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AIR POLLUTION SPECIALIST SUROVIK: On to our next steps. Staff will be taking the comments from last week's
workshop, written comments received, and direction from the Board to revise this discussion draft.

   The revised update will be released in late November for public comment. ARB will also release the environmental assessment of the proposed update at the same time. The environmental assessment will be developed according to the requirements of ARB's certified program under CEQA and will be available for a 45-day public comment period.

   The Board will consider the proposed update and the environmental assessment at its December meeting.

   Comments on the environmental assessment are due to ARB in mid-January next year, 45 days after its release. And the final proposed update and written responses on the environmental assessment comments will be presented to the Board for final approval in spring of next year.

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   AIR POLLUTION SPECIALIST SUROVIK: In conclusion, climate change represents a serious threat to the health of Californians, our natural resources, and the economy. However, our actions are driving down GHG emissions, spurring innovation, and improving air quality. Now is the time to develop long-term strategies that builds on AB 32's success.
Climate change has presented us with unprecedented challenges and will require California to continue to lead the world in pioneering bold and creative strategies. Meeting our long-term climate goals will require the engagement of all California citizens in creating and supporting low carbon, high quality lifestyles.

This concludes my presentation. Thank you.

CHAIRPERSON NICHOLS: Thank you.

So I want to get a little better sense of what's going to be happening between now and November and now and December. I think we understand that the Board is not going to be taking final action on this thing until we've been through a good deal more analysis of the environmental impacts and have had lots of opportunity for public input. But I'm sort of interested in the evolution of the plan itself. We're hearing and I'm seeing myself that there's an interest in getting a lot more specificity about some of the items. So I just like to hear from whoever Edie or --

DEPUTY EXECUTIVE OFFICER CHANG: Yeah, so this discussion draft that we released on October 1st is just that, a discussion draft. What we wanted to do is start to tee up these issues and tee up the problems and come up with sort of recommendations.
What we want to do now and what we've been doing is we had a workshop to take public comment, as Marcelle mentioned. We're taking written comments and we're interested to hear from the Board and have some direction from the Board as well as hear the testimony today.

The intention is to take that information, continue to work with our State agency partners, and to try to flush out the discussion drafts so that we have more specifics in the next round of the plan, similar to what we did in 2008.

CHAIRPERSON NICHOLS: Okay. What are you hearing so far? This has been out on the street for days.

DEPUTY EXECUTIVE OFFICER CHANG: Absolute days. We actually -- we're hearing similar things to what you mentioned that folks do want more specificity. And we're eager to hear their specific suggestions.

We actually have -- we haven't received very many comments on written comments yet. I suspect that part of it they want to hear -- they want to have a Board meeting. They wanted to hear what the Board had to say. They wanted to hear what other folks had to say. So we're actually looking forward to getting more direction and input.

CHAIRPERSON NICHOLS: Before we turn to Board member discussion, I do want to now introduce a couple of
guests that we invited to join us. And I guess is there
space for them at the table here. They're just going to
get up.

Barbara Lee, who is the Air Pollution Control
Officer for the Northern Sonoma County Air Pollution
Control District and Chair of the Climate Protection
Committee for the Air Pollution Control Officers
Association will be the first speaker.

Barbara has been instrumental in recasting the
CAPCOA/Air Resources Board relationship to one that is
much stronger and more positive than it was when we did
our first Scoping Plan, which is great success, great
action in and of itself. But in particular, we've
actually asked CAPCOA to take a role in this developing
this plan. So I'd like to hear more about that, please.

MS. LEE: Good afternoon, Madam Chairman and
members of the Board.

Madam Chairman, you've saved me quite a few
minutes in my talking points by going over not only who I
am, but also some of the things we've been working on,
CAPCOA and ARB together.

I want to start off by saying that the air
districts collectively and CAPCOA and individually have
strong support for climate protection and for the good
work that ARB is doing to achieve AB 32's goals. Working
together as a group, we have implemented quite a number of strategies and programs that have reduced greenhouse gases at the local level. And we also do a lot of work supporting local governments and community groups in their efforts to achieve greenhouse gas reductions and sustainable programs and infrastructure in their areas. And there is an awful lot of benefit to come from that. I think by your Scoping Plan update is going to highlight a lot of that.

We do this because we believe as you believe that the strategies that reduce greenhouse gas emissions pay tremendous dividends for clean air and for public health protection. And that's really what we're all about.

I want to say a little bit more strongly perhaps than the Chairman brought out that your staff has done a tremendous job implementing the original Scoping Plan that you approved in 2008, and they have earned high praise for the work that they've done.

And I want to especially recognize your Executive Officer, Richard Corey, for the fine job that he has done bringing the expertise and the resources of the local districts to support your staff in their work achieving your goals. He, along with Edie Chang and Cynthia Marvin and others on your staff work regularly, work productively, work in a truly collaborative way with
CAPCOA, achieving these program goals and program goals across many areas that we have interest in, both ARB and the local districts. It's a very positive relationship, and I think you will see it produces real results for you and for us going forward. I think we all have a lot of expertise and we all do good work individually. But working together, the sum of the parts is much greater.

CHAIRPERSON NICHOLS: Thanks.

I want to mention one other thing that we didn't highlight. I think I might have alluded to it in passing in the opening remarks. But reminding ourselves that global warming is a global issue. We're in a situation now because of AB 32 and really the worldwide interest that there is now in particularly the linking between air quality and climate and the co-benefits, as we call them, of controlling air pollution that you get for climate greenhouse gases and vice versa, that we're increasingly receiving requests for assistance. And we actually now have formal agreements with several provinces in China as well as countries in Europe and Latin America that are well beyond what Air Resources Board staff on its own can handle.

And of course, several of the larger districts, especially South Coast and the Bay Area have a long history of international engagement, Sacramento also I
know. And there are probably others I'm not so familiar with.

But one of the things that we will be talking to CAPCOA about is how collectively we can respond as efficiently and effectively as possible to the real opportunities that are out there to help ourselves accomplish our goals and help our businesses in many instances that have made investments or that would be interested in making investments in other parts of the world that can be supportive of this kind of clean energy development that we're talking about. So there is a whole world out there of opportunity. And I think a lot of this is going to be really getting much more attention in the coming year. So thank you for your leadership on these issues.

Are there any specific questions for Barbara? Maybe you could hang out and we'll see how this goes. Okay.

We also wanted to invite representatives from the Environmental Justice Advisory Committee. As people will remember, we reconstituted/appointed a number of new members and set them to work on a pretty fast time schedule to give us input. The EJAC, as they are called, has already met three times this year, including earlier this week to develop recommendations on the Scoping Plan.
update. We really appreciate the time and the energy and expertise that the twelve members of the EJAC are bringing to this effort.

I'd like to introduce two of the members who will share the Committee's perspective on their progress so far and to touch on the Scoping Plan's policies that are the most important to deliver on the promise of AB 32 benefits to disadvantaged communities.

The two we have with us today are Mary Rose Taruc of the Asian Pacific Environmental Network and Ryan Brisco Young of the Greenlining Institute. I reversed the order you're on my notes because it looks like Mary Rose you're ready to start. So please share some of your thoughts with us.

MS. TARUC: Thank you, Chair Nichols and the Board. I'm Mary Rose Taruc. And you are?

MR. BRISCO YOUNG: Ryan Brisco Young.

MS. TARUC: Not to be mistaken.

We were tasked by the EJ Advisory Committee to highlight key deliberations on the AB 32 discussion draft of the Scoping Plan by the EJ Advisory Committee. I'm proud to be part of the EJ Advisory Committee. It's an assembly of on-the-ground experts in areas across the state where the largest impacts of carbon pollution are making millions of Californians sick, in particularly and
disproportionately Latinos, Asians, and Blacks in those populations.

AB 32 acknowledged that our environmental justice expertise in this area so that the State doesn't leave our communities behind in terms of harm or benefits when implementing our State's climate programs. Environmental justice leaders see AB 32 as a great tool in achieving environmental health and economic improvements for our opportunities. And we help defend AB 32 against the attacks in 2010 when Prop. 23 was on the ballot.

The ARB and the EJAC still have a lot of work to do to accomplish that goal around environmental justice and AB 32, since many environmental justice communities still don't see or haven't seen the benefits of AB 32 right in our neighborhoods. But what we have are developed recommendations to close that gap.

Overall, the EJAC has had a good experience working with the ARB and other agency's staff so far to support our advisory capacity. And we want to thank the staff for the effort, Trish, Shelby, Cynthia, Steve, Mike, and others. We've had a very good working relationship so far.

We also see that even with these good intentions, EJAC sees that environmental justice is not very well understood by the staff or the ARB as it relates to AB 32.
So one of the big ideas that we actually have is developing an AB 32 tracking tool to measure environmental justice impacts, both the harms and benefits as we're seeing them.

So we recommend that the plan should commit to developing a more robust and consistent accounting of greenhouse gas emissions, co-pollutant, public health, and jobs co-benefits. This includes community level tracking of impacts and benefits to disadvantaged communities and should apply to all sectors, including implementation of the investment plan from the cap and trade proceeds. This effort to track impacts and benefits will better inform policy makers when considering regulatory measures and investment strategies.

We think more importantly it will provide the public with greater understanding of the transformations that are occurring in our communities as a result of our collective efforts to combat the climate crisis. There are many tools available now, like the Cal EnviroScreen, for this tracking effort. So we're halfway there and we look to you to support that.

MR. BRISCO YOUNG: Good evening, Madam Chairman, Board members.

In addition to the metrics issue that was discussed, I'm going to touch on some of the highlights
from the Committee's deliberation. Similar to what you have heard from the broader public at workshops, the Committee strongly supports the updates commitment to an interim 2030 target that gets California on the right track towards its 2050 goals. We are hoping the subsequent versions of the update includes some specific criteria for setting this target.

We also greatly support and appreciate the focus on short-lived climate pollutants and developing a strategy to reduce them as part of the overall GHG reduction strategy. This was a priority I think we all heard loud and clear from members of the public, and we're glad to see more focused attention on pollutants like black carbon and methane.

Members of the EJAC are looking forward to collaborating with ARB as it develops regulations to address fugitive emissions from the oil and gas sector, among others.

Across the board, regardless of sector, the Committee eagerly anticipates the next draft will contain specific enforceable control measures and specific regulatory time lines for adoption.

One area to highlight is urban forestry. A number of the members were glad to see the emphasis placed on increasing canopy cover and green space in
disadvantaged communities. Investment infrastructure offers many benefits, benefits that are magnified when integrated with other strategies.

Likewise, the members were pleased to see recommendations for further regulatory action to reduce emissions at landfills and divert organic waste.

The plan also rightly identifies the need to invest resources that build the capacity of community-based organizations and other trusted messengers, allowing them to engage communities directly in language and in culturally relevant ways. This is really critical to providing communities with the tools and information that enable them to meaningfully participate in our collective efforts.

There are a number of additional areas of ongoing concern, examples of other directions where we think that the update can evolve in a positive direction. Specifically, we'd like to highlight the need to promote affordability and access to public transit. The current draft makes high level references to transit, but neglects to differentiate between capital funding and then the operations and maintenance resources that actually result in the services that core riders like students need to get to school and work.

We're finding the guidance -- we'd like to see
the update refined to provide additional guidance on anti-displacement measures and the implementation of SCS strategies and transit oriented development. We're looking forward to offering examples of specific measures jurisdictions can take to avoid displacement of low income and communities of color that are benefiting from these mass transit investments.

We like to highlight policies such as the California Public Utilities Commission historic climate dividend, which, will among other things, help protect the income of low income families. These families tend to spend more of their income on basic goods and services, by necessity are more conservation than their main stream public, and needed resources make them more resilient.

Similarly, more action is needed to make energy efficiency and distributed generation technologies accessible and affordable to disadvantaged communities.

An ongoing area of concern for EJAC members, particularly those constituencies in the Central Valley, is the unintended air quality consequences of certain types of biomass incineration that are eligible resources under the RPS.

The Committee is very alarmed by the role of natural gas, particularly from unconventional sources in our climate future. It's very hard for the Committee to
imagine meeting our 2050 goals using natural gas as a central part of that strategy.

As you can see, our deliberations have been very robust and range of topics reflects the diversities of the constituencies our Committee represents, as well as the concerns of those communities.

The updates we are providing you today merely touch on some of these topics. EJ communities want to see our state achieve the carbon pollution reduction goals of AB 32, and we will support and, yes, we will push you to make AB 32 successful, knowing that there are polluting forces out there seeking to undermine them. Thank you.

CHAIRPERSON NICHOLS: Thank you very much. I really appreciate the fact that we are able to get your input in a way where we can have discussions. We may not agree on the substance of every item. But at least we have the opportunity in a not just polite civilized but in a substantive way to really engage on these discussions. So --

MS. TARUC: We did just on -- we covered the major sectors in the plan, and we wanted to just give one more comment on cap and trade.

CHAIRPERSON NICHOLS: Go right ahead. I didn't mean to cut you off.

MS. TARUC: So cap and trade was a big
contentious piece of AB 32 implementation that the EJAC --
the last EJAC brought up. We still oppose the cap and
trade system under AB 32 for these industrial emissions
because of the other problems that it creates that's
carbon trading around toxic hot spots.

In the mean time, however, the EJAC has been
studying the adaptive management plan that you have put in
place to protect communities from the harms of carbon
trading. And we want to affirm the adaptive management
plan and also recommend improvements for it. In
particular, to build in proactive measures that are ready
to go once you see that there are harms to specific
communities across the state. So that improvement to the
adaptive management plan.

Overall, we also want to see that AB 32 get to
direct emissions reductions from polluters and oppose the
ways these industries could avoid these responsibilities
through offsets and free allowances. So we know the
deliberations around the Cap and Trade Program is for
tomorrow, but wanted to communicate to you that we oppose
extended transition assistance to the industry. These
industries are some of the richest companies in our state
and are making profits off the backs and lungs of our
communities. And we think they can afford to pay for
their pollution.
And then lastly, we applaud the investment plan that you have created with other agencies in the Department of Finance and the Governor's office for the cap and trade proceeds. We like that it includes reduction programs that we already see starting to work in our communities. So we encourage more of these types of programs like low income energy efficiency programs, solar for low-income homes, transit operations, affordable transit-oriented development, and urban forestry, things that can actually satisfy the SB 535 De Leon law and requirement. And that we need these GHG reduction programs in the state where the most GHG emissions are generated. So wanted to make sure that was included in our comments.

CHAIRPERSON NICHOLS: Thank you. We heard your comments, and we'll continue to engage. Appreciate we're able to have the discussion. And I think the proof will be whether we get to a point where there's something there that you all can feel like you've achieved as a result of this.

MS. TARUC: Thank you we look forward to that.

BOARD MEMBER GIOIA: So have you prepared a sort of a list of recommendations of your review so far? I know you are having an input into the process. I think I saw that there was something you produced. Can you just
mention that? And maybe can we get a copy of that.

MS. TARUC: Yes, we have an eight-page set of
initial recommendations from the EJAC. It's on the
website. And also we're refining those based on the
meeting that we had this week and seeing what's already in
the discussion draft and what we'd like to see moving
forward. We've also started to develop some metrics for
this AB 32 EJ tracking we would like to see you all do.

BOARD MEMBER GIOIA: Great. Thanks for your
work.

CHAIRPERSON NICHOLS: Okay. I think we should
hear from the people who have asked to speak to us,
understanding, of course, we're at the beginning of the
process. But there are folks here that are anxious to let
us know their views about the Scoping Plan and how it
should evolve. We'll just start calling you off of the
list here.

BOARD MEMBER GIOIA: Just so I understand the
process, we're going to hear from public members today,
but we're really not providing input until the December
meeting. We're going to hear what folks are saying and
get -- I know there's a draft out. We're going to
actually see sort of an amended draft in December. That's
where our input will come; right?

CHAIRPERSON NICHOLS: Well, in a formal sense,
yes. But individual Board members to the extent that you have questions or comments at any time, you don't have to wait for the Board meeting. You can pick up the phone and add your thoughts. Please do.

Henry Hogo and then Dave Johnston.

MR. HOGO: Good evening Chairman Nichols and members of the Board.

Henry Hogo with South Coast Air Quality Management District. I first want to thank staff for the collaboration that we had with them during the public process. In particular, one of the regional workshop that was mentioned during the presentation over the summer was actually a joint workshop between our agency and your agency. It really shows the linkage that you mentioned relative to climate change and air quality -- local air quality needs. So it was an important collaboration. We appreciate that.

We do want to make a couple of preliminary comments tonight. And in particular, we do support the midterm target in the 2030 time frame. We also support inclusion of the short-lived climate pollutants. They're very important components to the climate change analysis here.

We do have a couple comments relative to the process for development of measures. I think that the
plan should have a bit more clarity on how that process will proceed and particularly in setting up the measures and strategies and development of the post-2020 reductions.

And lastly, we want to identify opportunities for further collaboration with the air districts. So some of those are some of our preliminary comments, and we'll be providing more detailed comments over the next week.

Thank you.

CHAIRPERSON NICHOLS: I would also add that this just tees off of the last discussion that we had. But many of the issues that the Environmental Justice Advisory Committee is concerned about have to do with direct regulation of stationary sources that the Air Resources Board actually regulates hardly at all. I mean, all the direct regulations are essentially local district regulations and rules, which a few exceptions. So it's really important that we make sure that you all are hearing and are participating in that dialogue as well because there is not something that even if the ARB wanted to, we could through AB 32 all by ourselves change permit requirements, for example, you know, for large stationary sources. So hopefully we can add that to the list of things that we're going to be talking about.

MR. HOGO: We've been working with staff on the
2007 plan. We identify co-benefits of our regulations with the greenhouse gases. Thank you.

CHAIRPERSON NICHOLS: Okay. So I think that time is becoming a factor here. I know we've lost a few witnesses just due to attrition.

But again, recognizing that there will be other opportunities for people in the audience to talk to the Board, for the Board to talk to the staff, for members of the audience to talk to the staff, I'm going to ask people to limit their testimony at this point to two minutes.

Let's go from three to two. So let's let -- we'll try to hear from everybody.

Dave Johnston, Frank Caponi, Chris Shimoda. I don't expect you're giving us written testimony. You can tell us you love it, you hate it. You don't want us -- whatever.

MR. CAPONI: I'll be brief. I'm Frank Caponi. I don't see Dave, so if Dave's here, I'm sorry. L.A. County Sanitation Districts. I'm here very briefly. And just overview I know we're going to be talking a lot more in the future on these issues.

Talk about the waste issues, essentially the waste sector plan. Enormous amount of effort went into developing that plan. And I want to commend staff's, ARB staff, and the partners CalRecycle. They really put a lot
of effort into that. We don't agree with every word on those pages, but I want to commend staff because they really went out of their way to meet with us, hear our concerns, but also ways that we can work with them to make a lot of this happen. And we really are committed to be partners and try not to pester them too much. Steve threatened to beat me off with his crutches last week. I think I disserved that.

There is a lot of challenges and I think you've heard some of them. The crown jewel of the plan is the 75 percent diversion. To get to that, we have to remove 22 million tons of waste from our landfills. A lot of that is organic waste. There is a huge, huge effort. Just don't forget that in 1989, we passed 939, which was a 50 percent goal. It took us about 25 years to get where we're at, including all the infrastructure. Now we want to go to 75 percent in a very short period of time. So it's going to take a lot of work, a lot of coordination. Some estimate some two billion dollars in infrastructure have to be invested. So we have a lot of challenges in getting there. Industry really is committed to working to try to make that happen the best we can.

There is a lot of opportunities, too. Time is short, so others are going to talk about opportunities. But we have a real opportunity to develop a lot of
bioenergy from all those organics coming out of the
landfills and, say, going to aerobic digester. So as I
said, others will talk to that.

2014 will be a very exciting year, and we look
forward to working with you. Thank you.

CHAIRPERSON NICHOLS: Thank you. That was good.
Okay. Chris.

MR. SHIMODA: Chris Shimoda, California Trucking
Association.

In the interest of time, I'll just say we
strongly support comments made in a coalition letter
submitted. Hopefully you guys have received it. Signed
by the California Trucking Association, the California
Natural Gas Vehicle Coalition, SoCal Gas and Clean Energy
with respect to remaining technology neutral with respect
to natural gas trucking. There is some language in the
discussion draft that does say that needs to be phased out
by 2050. We'd like to see that removed and that the Board
stay with establishing technology-neutral performance
standards.

I'd like to draw the Board's attention to another
portion of the discussion draft, page 24, where staff says
you will be considering measures in the future up to and
including new regulations intended to deploy short-haul
to zero emission port trucks in L.A. by 2020. I think you
guys got quite an earfull in the last Board Item with regards to the financial and fiscal impacts of the current measures. You know, I'd just like to say on the other hand, the discussion draft is talking about imposing new rules on sectors of the industry that have actually already complied with very stringent regulations. So port trucking is not a sector that generates huge profits. There's really not that much of a gap between the folks you just heard testimony from on the previous items and the folks that have already complied with 2007 requirements. I'm sure the dialog will continue under the sustainable freight plan. Those are my comments.

CHAIRPERSON NICHOLS: Thank you.

Edward Moreno and then Sam Applebaum.

MR. MORENO: Good evening. I'm Ed Moreno with Sierra Club California. Thank you for taking -- for this opportunity to comment. We will be submitting written comments but we'd like to emphasize the following.

The current climate impacts make obsolete the 80 percent below 1990s levels by 2050. This crisis requires CARB to set more aggressive post-2020 targets, including intermediate term targets.

The technology is available in the electricity sector to get greenhouse gas emissions 80 percent below 1990 levels by 2030. And you see there's no new major
natural gas plants are needed in light of the State's overprocurement.

Integration of renewables, ramping, system reliability and efficiency can now be achieved by affordable cleaner alternatives, such as storage.

For the water section of the report we feel that in order to develop an effective plan, a verifiable database needs to be created to capture where energy for water is consumed and to attract progress in reducing consumption -- energy consumption.

This strategy should include urban water infrastructure repair. This includes system water audits, leaks detections, and repair. We'd like to see an increased metering and pricing to encourage conservation and clean drinking water.

For the green building section of the plan, we submitted the following comments on net zero energy buildings. We need to accelerate the date that is required in the Title 24 programs for commercial buildings from 2030 to 2025.

And on financing and streamlining, we need to accelerate the renewable energy and energy efficiency financing through the following: Residential and commercial property assessed, clean energy, and on-bill repayment.
Thank you again for the opportunity.

CHAIRPERSON NICHOLS: Thank you. We'll look forward to hearing more.

Sam Applebaum.

MR. BARRETT: I'm sorry to report Dr. Applebaum was called away. I'll make a few comments. My name is Will Barrett. I do work for the Lung Association.

We appreciate all of staff's work to develop the draft to date and for taking the public comments so far. We look forward to working with you ongoing as the report moves forward.

We do support the inclusion of the short-term pollutants section, along with the 2030 midterm target. We think these are important steps to attaining both local and immediate health and climate benefits, but also to meeting our long-term goals.

We do understand on the health evaluation piece the challenges of evaluation of these plan's health benefits and impacts. We do encourage making every attempt to get that done. We do support some of the comments made by the EJ Advisory Committee folks on that topic.

We were encouraged to see in the plan the discussion of the development of land use modeling tools that can evaluate health benefits of various scenarios.
We think that will really help to better inform local land use and regional land use planning on sustainable growth health benefits.

We urge ARB to support the development of these and other tools to evaluate the health benefits of climate action.

We do recommend greater specificity in the plan regarding the post-2020 strategies. Listings of control measures, time lines, trends of emission benefits would all provide greater guidance as we go forward with the plan.

Creating the post-2020 project list and identifying cap and trade and other funding opportunities to support these plans is key. We think specifically we should be investing in clean vehicle and clean fuel deployment, sustainable freight strategies, smart growth planning, and renewable energy programs.

I'll end there because I have 15 seconds. And I'll just say we'll submit Dr. Applebaum's comments to the record. We'll submit our more formal comments and really do look forward to working with staff as this plan goes forward and commend all the staff for the great work and stamina shown throughout the day as well as all the Board members.

CHAIRPERSON NICHOLS: Mr. Quigley.
MR. QUIGLEY: I guess it's evening. Good evening, Madam Chair and members of the Board.

My name is Michael Quigley, Director of Government Affairs with the California Alliance for Jobs. I'm here today speaking as Co-Chair of the Transportation Coalition for Livable Communities. Speakers eight, nine, and ten had to go, but they will be submitting written comments. They're also members of our coalition.

Steering Committee is made up of the League of Cities, California Transit Association, State Association of Counties, the Alliance for Jobs, and NRDC. And we've put together a detailed proposal over the last year really looking at reinvesting cap and trade revenues back into the transportation sector. AB 32 states that 38 percent of our State's emissions are coming from the transportation. We believe that creates a great opportunity for us in bringing those emissions down through programs such as implementation of SB 375. That's one of the areas where our coalition is really focused in by applying cap and trade revenues towards developing infrastructure and transportation options that will reduce VMTs through a performance-based approach. I think that's one of the other areas that really sets our coalition's proposal apart from others is that we are looking at
performance-based and cost effectiveness. And using the greenhouse gas reduction as the metrics for that to really maximize the impact of the dollar and to utilize the partnership that we've already built with municipalities and regions who are in charge of implementing their SCSs. We believe our proposal also will have the best impact in achieving the goals of AB 32 by supporting SB 375.

And in closing, I would just like to urge you that we will continue to support AB 32 and continue to work with you guys. And I'd like to urge you to continue to focus on land use and transportation as the primary means of achieving AB 32 because those are the areas which we have the most emissions coming out of. Thank you.

CHAIRPERSON NICHOLS: Thank you very much.

We are going to start to lose people. We'll just keep going since we don't have to -- this is not a hearing, but we are interested in hearing what people's view is.

Ms. Peacock.

MS. PEACOCK: Yes. Tonya Peacock from the Southern California Gas Company.

SoCal Gas is concerned in the post-2020 period the Scoping Plan update puts forward a narrow vision by focusing on one source of energy electricity rather than acknowledging that a multi-technology approach leads to
more emissions reductions sooner and that this approach is actually necessary to meet both the goals of the greenhouse gas reduction goal and NOx reduction goals.

We think such an energy use mandate undermines the very technology investments needed to meet the short and midterm goals, which is acknowledged in the update. So we encourage ARB to set technology neutral performance standards in order to encourage innovation. And we request that you direct staff to remove the technology bias language from the Scoping Plan update and update it with performance-based outcome oriented policies.

Thank you. These are just preliminary comments, and we will be submitting detailed comments by the end of next week. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Erica.


I think there's a lot to be excited about in this Scoping Plan in terms of what we've already achieved and the opportunities we have for showing that we can decarbonize our economy even as we grow it.

And as we heard this morning, California's leadership is already baring fruit across the country around the world and in D.C. And we've submitted detailed
comments after the workshops that focus on almost all of
the areas that ARB has outlined and the areas where we see
continuing opportunity.

I just want to highlight a couple areas of
particular support in the Scoping Plan right now. We're
very supportive of the focus on short-lived climate
pollutants and the objective of coming up with a
comprehensive plan for how to reduce them.

We're also a member of the Transportation
Coalition for Livable Communities that's focused on cost
saving GHG reductions that can also benefit our health
from transportation and land use planning.

And finally, we strongly, strongly support the
recommendation to see a 2030 GHG reduction target. Because
of California's cap and trade market, a 2030 target will
mean immediate emission reductions as well as cost savings
and market stability going forward because of the strong
price signal. And we look forward to working with the
Board and sister agencies and local air districts to
achieve this vision. Thank you.

CHAIRPERSON NICHOLS: Thank you.

MS. HALBROOK: Claire Halbrook with PG&E.

First, I'd like to thank staff for all of their
work with PG&E to date on the current draft plan. The
draft update currently provides a broad compendium of
current and recommended future climate-related activities in California. However, PG&E and it sounds like several other stakeholders, believe the role of the Scoping Plan update could be further strengthened by greater detail and analyses. And we believe that such an approach should be incorporated and could be incorporated between now and the spring of 2014.

One example is that the update restates emission reduction targets for program measures from the original plan and the Governor's clean energy jobs plan. However, it does not endeavor to evaluate these existing program's process towards emission reductions or the cost effectiveness of any of the proposed future activities.

We just request that the final update uphold AB 32's core principle of cost effectiveness and technological feasibility and apply a solid analytical framework to evaluate the cost effectiveness of both current and newly proposed measures.

While we understand that many of these measures are in various stages of implementation, the application of a cost effectiveness metric would still provide some valuable information.

At the October 15th Scoping Plan workshop, staff acknowledged that future targets should "align with targets under consideration elsewhere in the developed
world." We also appreciate the Chair's acknowledgement of this issue earlier this evening.

PG&E strongly supports this approach as California represents only one to two percent of all fossil-fired GHG emissions, underscoring the importance of promoting action in all jurisdictions outside of California.

The recommended activities in the 2013 update should include efforts to actively seek partnerships and consider how to align action with other jurisdictions to achieve greater global emission reductions at lower costs. And we'll also be providing written comments. Thank you.

CHAIRPERSON NICHOLS: I've decided not to call on people because I think it takes extra time.

MR. CARMICHAEL: Tim Carmichael with the California Natural Gas Vehicle Coalition. I'll keep it brief because Chris Shimoda and Tonya Peacock referenced our letter that we submitted together.

Just want to make a couple of additional points. One is we are as an industry very supportive of the Scoping Plan and of AB 32. I personally am really glad this document exists. I think it's wonderful that California is leading the world in many ways in this area. And that's the back drop to us having a problem with one paragraph in your update. And if that paragraph wasn't
there, it would be a love fest.

So the only point they didn't make that I want to make is 2050 is 37 years from now. And if you'll indulge me, try to remember what you were doing 37 years ago. 1976. It was a long time ago. And as far as this agency is concerned, that was the year two-way catalysts were introduced and put into play. Three-way catalysts hadn't even come into play.

The point I'm making is a lot can happen in that period of time when it comes to technology development, especially in this transportation sector that we're talking about. So don't rule out the potential for natural gas in 2050 and certainly see us as a valuable ally in getting to other fuels, renewable natural gas, hydrogen over the next decade or two.

Thank you very much.

CHAIRPERSON NICHOLS: Thank you. I was here. Not in this building, but at the Air Resources Board.

MR. CARMICHAEL: I thought it polite not to go there.

(Laughter)

MR. BARBOSE: Tim, thank you for waking them up.

Jason Barbose with the Union of Concerned Scientists. We'll be submitting comments in writing likely hours before the deadline on November 1st, so I'll
just flag a few things to keep in your mind.

One is that we believe now is definitely the time to begin planning for reductions post 2020. And that the latest science says that we should be aiming for at least 80 percent below 1990 levels by 2050. And we believe that the interim targets that are being discussed, that those should be set to be at least consistent with a straight line path.

And keep in mind that at straight line path would be 27 percent reduction below 1990 levels each decade from 2020 to 2050. So much steeper than we are on right now.

In the energy sector, a couple things to flag. One is just long-term planning for orderly and cost-effective transition to emission free electricity is necessary. And as such, we think it's really important for the Scoping Plan to identify the opportunity and responsibilities among the State's energy agencies to conduct the analysis and the planning that's necessary to get us on that path.

And the second thing about energy is about the RPS, renewable portfolio standard. The utilities, I should say, are on their way to achieving and surpassing the 33 percent RPS by 2020. We believe the Scoping Plan should consider at least a 50 percent RPS by 2030.

In transportation, a few things to flag on
light-duty vehicles. Definitely, we support continuing the greenhouse gas standards in the ZEV program beyond 2025. We think it's important to identify sustainable funding for new vehicle incentives. That's a key part.

On heavy duty, the sustainable freight initiative has begun to be undertaken by CARB and coming before the Board in the next couple months. It's really important this process move quickly and it identifies specific strategies, time lines, and investments.

And the last note on water is just that the plan mentions nothing about agricultural water efficiency. Eighty percent of our human water use is in agriculture.

Thank you.

CHAIRPERSON NICHOLS: Got it. Okay. Thanks, Jason.

MS. RAU: Thank you. I'm Tiffany Rau with the Hydrogen Energy California Project, otherwise known as HECA. This is a proposed power plant and fertilizer manufacturing plant with 90 percent carbon capture and storage.

I'm here today to express our support for the draft updated Scoping Plan, and in particular, staff's recommendation for the post 2020 policies.

I'd like to draw your attention to the very real near-term opportunity for California by enabling and
embracing CCS technology and the HECA project. Of note, when the U.S. EPA recently proposed landmark limits on carbon emissions from future power plants, they designated CCS as the technology of choice for fossil units. And they highlighted the HECA project among a list of power large scale CCS projects as evidence of its commercial viability.

ARB's draft first update to the scoping plan acknowledges that CCS may represent one way to green up fossil fuels and further mitigate climate change. But it also states that significant work must still be done to ensure that sequestered emissions are not eventually released into the atmosphere and to demonstrate the technology on a large scale.

We believe the HECA project provides the near-term solutions sought by California and will demonstrate full carbon capture. CO2 will be permanently sequestered monitored and measured and verified according to approved plans and permits and consistent with enforceable quantification methodology.

In short, the HECA project will provide the answers and the framework necessary to enable further deployment of CCS throughout various sectors and showed significant reductions in GHG emissions can be achieved.

We hope that ARB will work with us to enable this
near-term opportunity for California to put a higher priority on CCS and that this will be reflected in the revised first update and through staff engagement. Thank you.

CHAIRPERSON NICHOLS: Thanks.

MS. THRONSON: Good evening, Madam Chair, Board members. Thank you for this opportunity and thank you for staff for previously meeting with us.

My name is Tara Thronson with Valley Vision, a local regional nonprofit. And I'm manage the cleaner air partnership which brings together the public health, the business community, and the local air districts to improve air quality such that it benefits public health and economic growth.

I'm also the resident broadband evangelist, as we staff the local regional broadband consortium. We're one of 14 in the state of California funded by the CPUC and working to bring high speed internet to areas that are underserved.

The draft update to the AB 32 Scoping Plan is missing an important strategy to help meet the long-term climate goals. There is no specific reference in the plan to the importance of wide spread access to broadband infrastructure. Broadband, or high speed internet, enables the transfer of data such that it serves as a
critical platform for existing and emerging technologies
that will help reduce greenhouse gas emissions.

Many of the rural and agriculture-based areas of
the state of California do not have sufficient Internet
access to implement new technologies, such as wireless
soil moisture sensors that enable farmers to reduce water
usage, which as noted in the Scoping Plan, reduces energy
demand and the associated emissions.

Technologies enabled by broadband allow
monitoring for fertilizer and pesticide usage, food safety
monitoring in the field, water quality, and other social
and environmental justice concerns. Of note, many of the
communities without broadband access today are underserved
community.

As the AB 32 Scoping Plan is the guiding document
of State policies and programs to reduce greenhouse gas
emissions, the final Scoping Plan update should include
broadband enable technologies and incentives to promote
deployment and use of broadband as a strategy to meet AB
32's greenhouse gas emission reduction goals. We and my
counterparts with the other consortia are happy to be a
resource to ARB staff in pursuing this strategy. Thank
you.

CHAIRPERSON NICHOLS: Thank you.

MS. KELLY: Good evening. I'm Trish Kelly with
Applied Development Economics. I'm here with Tara Thronson. Thank you, Madam Chair and Board members, for the opportunity to comment.

I'm a consultant for the Applied Development Consortium, the California partnership for the San Joaquin Valley on their economic strategy and SACOD on their rural-urban connection strategy.

So to go further on what Tara mentioned, through all of our work, we see every region needs this broadband technology to be able to implement these other technologies that will allow us to meet our greenhouse gas emissions goals, but also to promote sustainable economic prosperity.

Last week, Valley Vision convened a state-wide forum with more than 80 elected officials from around the state with their leadership organizations. And they all strongly stated that they cannot compete without broadband. They cannot access tele-medicine and other services or promote telecommuting, all central strategies which reduce vehicle miles traveled. And they do not want to be left behind in their regions.

Go Biz affirmed that broadband is a critical 21st century infrastructure. We're also working with the Governor's Office of Planning and Research on the environmental goals and policy report, which includes the
importance of broadband infrastructure in its visions for California's future.

So we're working on areas to integrate broadband planning on infrastructure and other transportation planning.

Our regional industry clusters, especially in the San Joaquin Valley with agriculture, water, and energy, manufacturing and health, they're all connected. They say they all need better broadband. They can't deploy those innovation technologies to reduce emissions and water and improve health, but also increase prosperity with broadband. As an example of this potential, federal labs and agencies are working with Fresno and Valley stakeholders to bring these new technologies to bear. We think this can increase the economic benefit happening across our regions. To note, the sustain community strategies will also benefit from broadband and help increase the viability of agriculture, which will keep our land in agricultural production. Thank you.

MS. HAGERTY: My name is Morgan Hagerty. I'm with CE2 Capital. We're a California-based company that invests in emission reduction projects.

CE2 supports the proposal and the Scoping Plan discussion draft to develop post 2020 emission caps for the Cap and Trade Program. And we ask that ARB initiate
this process as soon as possible. Investments in long-term emission reduction projects and activities are not economically justifiable without some certainty there will be a price on carbon in California beyond 2020.

In the absence of clear and definitive action from ARB, compliance entities, consumers, investors, and market participants will make financial decisions on short-term carbon outlook, leaving otherwise efficient and financially viable emission reduction opportunities untapped.

The magnitude of potentially foregone emission reductions will increase the nearer we approached 2020 without addressing the uncertainty of post 2020 emission caps.

As such, we encourage staff to initiate a public process this year and begin public workshops to develop and help inform staff's recommendations for setting specific post 2020 annual allowance budgets for the Cap and Trade Program. Thank you.

MR. WHITE: Madam Chair, members of the Board.
I'm John White with the Center for Energy Efficiency and Renewable Technologies.

I confess, thinking about 1976, I was here, too, in a different capacity working for the State Assembly for the Air Pollution Subcommittee. And we had just at that
point the first year of implementation of legislation that created the South Coast Air Quality Management District.

I do think I may not be here in 2050, but I do think thinking about these things with a long-term view in mind is important.

I want to thank the staff finally for getting us the beginnings of an effort on short-lived pollutants. I think there is much more work to be done. I'm also gratified to see the early engagement with the districts because we're going to need the districts to help the urgent task of moving on short-lived pollutants, especially methane.

I also think, Madam Chair, there is a special relevance to the international and national debate for California to be clear, not just in new policies and additional emission reductions, but what the science tells us and what the targets need to be.

So for example, we need to get EPA to eliminate the exemption for methane as a pollutant. That would solve a lot of things across the country. It's also something as we're talking to the Chinese and the Indians they should get to work on methane immediately, both for the global warming interest as well as for the health benefits we now know will result from ozone reductions associated with methane.
We also wanted to see hopefully more -- on this point, I do think we need 2015 to be the target rather than 2016 for the comprehensive plan. I know that's a lot of work in a short time. But at least for significant pieces of this, it needs to be sooner rather than later.

On the energy, we think there is much more work to be done in this plan. We know your sister agencies have been busy with the task before them. But we think the Scoping Plan needs to recognize the problem that we're going to have to face from the loss of San Onofre nuclear power plant.

Lastly, I think we need to give some thought to some additional incentive programs particularly targeted to clean energy. I've been thinking a little bit about something along the lines of a Moyer program to incent the technologies that we need but that are currently expensive, particularly in the area of methane reduction from the agriculture sector.

So I think there is some things to think about in this plan that we want to work with you and make further contributions in the discussion. Thank you.

CHAIRPERSON NICHOLS: Okay. Thanks.

MR. HARRIS: Chair Nichols, members of the Board, my name is Frank Harris with Southern California Edison. And I appreciate the opportunity to speak today.
As others have, I want to thank staff for the many times that we've been able to work with them. I have not yet been threatened with Steve's crutches, but I'm sure that's just a matter of time.

And I wanted to reinforce a few messages that have come out, mindful of what time it is and how long you've been here. We will obviously be submitting comments. As a previous witness mentioned, it will probably be submitted about two hours before the deadline.

Just really quickly to endorse a couple of key messages that come out. Certainly the idea the call for specificity has been a common theme today, and specifically with regard to the evaluation of existing policy. Many of these policies were recommended under conditions that have changed since that point. And with the aggressive target that California wants to pursue, we just can't afford to continue with a policy that may be not operational based on the current conditions I think as much as it was originally. The staff in the discussion draft has certainly indicated it wants to do that. We're seeking a greater out specificity in that.

Also want to reiterate the call to integrate continued California action with action elsewhere. As Chair mentioned, GHG is a global problem, and California gets a great deal of international attention. But the
emissions accounting is what it is. And without
integration with other parts of the world, California
actions cannot have the desired impact.

As I said, we'll be submitting further comments
before the November 1 due date and look forward to working
with staff as we move forward. Thank you.

MR. MASON: Good evening, Madam Chair, members of
the Board, staff. Paul Mason with Pacific Forest Trust.

I want to thank you and applaud your stamina for
still being here, listening so patiently.

Given the hour, I will be brief and focus my
comments on the forestry sections of the natural and
working lands section of the Scoping Plan. I was really
pleased to hear the comments both from Edie and Madam
Chair. They do intend for the next version -- the next
draft to have greater specificity because there really
is -- it's a very high level document right now.

I think it would be easy to lose track of how
much opportunity there is in forests given that you're not
really permanently a forest-oriented Board. Forestry,
it's our single largest opportunity to actually remove
carbon from the atmosphere. And given that so many of our
California forests are so long young right now, there's
tremendous capacity, particularly if we take actions
sooner rather than later to sequester an awful lot more
carbon on the forest landscape by 2050.

Compared with trying to achieve all those reductions, bringing them out of energy and transportation and planning, at a certain point, you're desperately going to be looking for other ways to achieve those reductions. The sooner we start taking actions in forestry to make forests older, storing more carbon in a more resilient manner, that will be helpful.

Just a couple of observations about what is there. The plan currently looks to CalFire and the Board of Forestry to develop a forest carbon plan. I'd suggest we really need to be thinking about a forest climate plan that recognizes that just stacking it all into really tight plantations leaves you with a really high carbon in the short-term very vulnerable to fire, like on the Rim Fire where you saw explosive standard placing events. Where plantations, once it burned up into the park into a more natural forest, it was a much more reasonable fire.

So how the carbon is configured on the landscape matters a lot.

I would close by suggesting that rather than just saying CalFire, Board of Forestry, work something out here. I think you'll have a much better outcome if you set some goals and give some guidance that we really need to figure out how we're going to maximize the amount of
carbon stored in California's forests by 2050 in a stable, 
resilient, natural condition. Thank you.

MR. WHITE: Madam Chair, members of the Board, 
Chuck White with Waste Management, also represent SWICS, 
the Solid Waste Industry for Climate Solutions.

On October 8th, several members of our coalition 
met with CalRecycle and ARB staff to discuss our earlier 
comments and our concerns that many the issues we 
previously raised were not adequately addressed in the 
various waste sector white papers and the Scoping Plan 
itself. We now understand the waste sector white papers 
will not result in specific measures in the Scoping Plan 
update. However, the waste sector papers will be an 
ongoing work in progress.

The staff did indicate they will consider 
proposed modifications to the Waste Management Sector 
Implementation Plan, and our coalition plans to submit 
comments by November 1st to try to create a phased 
recommended approach to implementing those provisions.

We are going to highlight some additional 
comments that we have about the waste sector. For better 
or worse, number one, landfills are an essential public 
service with little ability to control the amount of waste 
they must accept and are designed to protect human health, 
public safety, and the environment, and include minimizing
methane and other greenhouse gas emissions.

Landfills only accept those materials that are not economically feasible to reuse, recover, or recycle, unless otherwise prohibited.

We urge the plan to really focus on the economic structure and incentives to encourage materials that are currently being landfilled to make sure they can be economically and incentivized for other types of beneficial use. We think the potential is there to really make significant economic use of many of these materials that are currently being landfilled.

Another concern we have is that we think the plan in the scoping documents overemphasize the greenhouse gas emissions from landfills. We think there is a tremendous amount of progress that's been made over the last five or ten years. We plan to submit information documenting that.

We don't think the time is now to talk about putting landfills into a Cap and Trade Program until the benefits of the landfill methane rule have been fully evaluated, and that's going to take a couple more years to get a sense of that.

Please work with us to evaluate how landfills are doing to respond to the landfill methane rule, which is an early action measure we think you're going pleased with
the progress we're making in controlling those emissions.

    CHAIRPERSON NICHOLS: I have great hopes the
waste sector is not just going to be about landfills, but
is about really the full cycle of looking at waste as a
fuel. I'm extending the time a little bit here, but the
intent is to do something much more broad based.

    MR. WHITE: You are getting into an interesting
area where the previous plan focused on specific point
source emissions and now the waste sector plan is getting
into life cycle analysis, which is a different kind of
beast and how you merge the two I think is a bit of a
challenge. And I think more work needs to be done on
making sure we're not combining apples with oranges on
direct emissions with life cycle assessments. And we're
more than happy to work with you to try to see if we can
make sense of that whole structure. Thank you.

    CHAIRPERSON NICHOLS: Great. Thank you.

    Julia, welcome.

    MS. LEVIN: Good evening, Madam Chair and members
of the Board.

    Julia Levin with the Bioenergy Association of
California. We represent bioenergy, waste, and other
companies, as well as many public agencies and local
governments up and down the state. We represent such a
diverse range of interests, because bio energy provides
such a diverse range of benefits and solves so many
different problems. It's a great segue actually with the
discussion about the waste sector plan.

California continues to landfill about 15 million
tons of organic waste each year that bioenergy could take
and convert into very low carbon sometimes carbon negative
transportation fuels, as well as renewable base load
electricity. In addition, in the forest sector, Paul
Mason talked about the carbon significance of our forests.
But unfortunately, as we're seeing with the Rim Fire, many
of them are going up in smoke. The Rim Fire alone in the
first month emitted more carbon dioxide than five million
cars driven for a year. This is an enormous issue for
greenhouse gas emissions. The methane emissions waste
water treatment facilities, landfills, and dairies could
be used to create the lowest carbon transportation fuels
available according to your own staff. There are a lot of
opportunities.

We appreciate the Scoping Plan recognizing the
significance of bioenergy generally and particularly for
low carbon fuels. We disagree with the plan though that
there are sufficient incentives in place now. The low
carbon fuel standard is not a sufficient incentive because
it's relatively short term. The industry requires
long-term investment and long-term pay back periods.
I have lots of compliments I'm going to skip in
the interest of time and focus on the few areas we hope to
see addressed in the next draft. There is no mention of
bioenergy in the water or forestry or energy sector
descriptions in the plan, which is surprising given all
the benefits in these sectors.

We agree with all the comments about the need for
more specifics and all the different ways and particularly
about the need for funding. A lot of the opportunities
are cross sector and require incentives, like to get to
the low carbon fuels from uncapped sectors, like
wastewater, and linking it to cap and trade investment.
The revenue investment will be very important. Thank you.

CHAIRPERSON NICHOLS: Thank you.

MR. WANG: Good afternoon. Good evening.

Mike Wang with the Western States Petroleum
Association. I will be brief because we all recognize the
Board and staff's stamina and ability to absorb
information is rapidly reaching their limit.

WSPA cease this discussion draft as critically
important for several reasons.

First, it's an opportunity to incorporate new
scientific, economic, and technical studies commissioned
by stakeholders and ARB alike since the passage of AB 32.

Second, ARB can use this opportunity to modify
aspects of the Scoping Plan as a result of experience gained in the state and the U.S. and elsewhere.

Third, it allows ARB to reveal and identify the legislative and regulatory steps needed for plan implementation.

And finally, the update provides an opportunity for ARB, stakeholders, and the public at large to educate and understand the implications of AB 32 and its plan elements.

Now, in terms of the focus of the plan update, I think it's pretty clear that most see that the need is to look at the 2020 goals, focus on the 2020 goals of what's needed to achieve those elements.

We reiterate the recommendation that ARB limit the scope of the update to achieving the 2020 goals in a technically feasible and cost effective manner.

As we indicated before, there are numerable, technical studies that could be done to look at the cost of various implementation aspects.

Clearly, the idea of the term specifics has been raised. I think we need specific cost-effective analysis, including, for example, the comparison of the LCFS or the plan elements to the California economy and the difficulties that we have experienced in the past.

We will submit our comments. Thank you very
MS. DERIVI: Good afternoon. My name is Tanya Derivi. I'm the brand-new Director of Regulatory Affairs for the Southern California Public Power Authority, which is comprised eleven municipal utilities and one irrigation district.

SCPPA participants are working diligently to implement a wide range of mandatory programs that are already called for in California's aggressive climate change goals and are on target to meet or exceed these requirements.

We do have concerns with the directions of some of the future measures identified. After all, the Scoping Plan does indicate that a new utility business model may be needed to ensure that utilities remain financially viable. As we move forward, it must be a priority for the active programs and regulations to be pragmatic, to be flexible to accommodate unforeseen changes, and to be cost effective for our rate payers.

We believe that reasonable options exist to ensure that the program retains its environmental integrity and supports continued complimentary measures that relieve pressure on the Cap and Trade Program. The effectiveness of new cost containment mechanism will likely be contingent on market certainty beyond 2020 and
that the electric industry retains its allowances under the current methodology.

SCCPA looks forward to working with ARB and other stakeholders, particularly as it relates to the electric generation sector, and given the expanding role of intermittent renewable resources and the electrification of the transportation sector, which likely require added system flexibility and transmission system upgrades.

We support ARB's work to comprehensively address short-lived climate pollutants and we look forward to working with ARB and other stakeholders as the specifics of the Scoping Plan are developed to ensure the programs ultimately adopted by the State yield the most value.

Thank you again for your stamina.

MR. JONES: Thank you, Madam Chair, members. My name is Steve Jones. I had the honor of serving under two Governors at the California Integrated Waste Management Board appointed by Pete Wilson then by Gray Davis. So I can appreciate sitting up there and waiting for this to end. So I apologize.

I do congratulate you. And I think that dealing with the waste issues as part of AB 32 is in the right place here at the Air Board. I think that this forum of us being able to talk to you and exchange ideas are important. I've gone to two workshops with your staff,
and I've been impressed with their ability and their willingness to take ideas. I think that there is a lot more that can be done. We need the help of the ARB of influence with the Governor when it does come to cap and trade, because we need to be looking at instead of driving 80 to 100 miles to go to a composting facility, finding vacant industrial properties that we can do mass composting in-vessel, making anaerobic digestion, use technology that's been generated where we can keep emissions down, go through bioscrubbers so there is no impact on the neighborhood. And we can't do that with our own nickel.

I will tell you right now. I'm the managing partner of a fleet of 50 trucks in San Jose. I pick up 166,000 homes every week. I'm in the process of pulling out 47 diesel engines and repowering my existing chassis with compressed natural gas engines and new transmissions. I didn't want to throw the chassis away. They were too good. It's a lot of money. It's $150,000 a truck. They've already got the $380,000 investment for the DPFs on them.

We're doing what we can, but we do need your help. And as long as there is a forum where we have a chance to exchange ideas, I think it's going to be important.
When I look at something that says -- sorry -- recycle, reuse, and market, reuse material, it better get a lot more detailed than that or we're not going to make it work. Thank you.

MR. EDGAR: Chair Board, Board members. My name is Evan Edgar. I'm the engineer for the California Refuse and Recycling Council. And we are the recyclers, the composters, and the green energy developers within the waste sector. Chuck White is the landfill sector.

We are here to support all of your six technical papers. They are great papers that should make the appendices and roll up into the Scoping Plan. The waste sector is ubiquitous to every place. We are in the transportation sector. We make carbon negative fuel. We have 15,000 fleet on the road and we can make carbon negative fuel and CNG.

We are in the energy sector. We take biomass, like Julia Levin said, and bio methane, and we make carbon neutral energy for our recycling facilities and our compost facilities.

We're in the agricultural sector. We make compost to sequester carbon. We have higher food yields. We are farm, the fork to fuel to compost to farms again. We close the loop every day.

We're in the water sector. By using composting,
we save about 30 percent water within the agriculture sector.

And being back to the waste sector, we are not just the landfill sector anymore. We need your investment. We are in a sweet spot where we can make our own carbon negative fuel, carbon neutral fuel compost out of our waste byproducts using anaerobic digestion. We are the future.

We do support your 2035 plans to go net zero by 2035. Because by 2035, there will be no waste sector because we'll be making compost in the agriculture sector. We'll be making carbon neutral fuel. We be making carbon negative fuels. We be making the materials for the natural resources. We are net zero today by CARB using the math that we support. And we net zero for all facilities by 2035.

The rest of the recycling, compost, and green energy sector supports all the waste sectors six plants that need to be rolled up into the AB 32 Scoping Plan. Thank you.

CHAIRPERSON NICHOLS: Thank you.

MR. MAGAVERN: Bill Magavern, Coalition for Clean Air.

First of all, we endorse virtually all of the points that were made by Mary Rose and Ryan on behalf of
the Environmental Justice Advisory Committee.

A couple of overall points. The 2030 target is really essential to making sure we're on track to where we need to be by 2050. Also, it's good to see that the Board is moving more I think towards integrating the air quality planning with the climate planning in this document.

We are definitely among those that would like to see more specificity in the Scoping Plan. Although it clearly is not a regulatory document itself, I think that it is the appropriate place to put forth a schedule of upcoming regulations.

And some of the areas where we would like to see specific action and are glad to see them included in the plan, the freight sector. And we'll be working with you on the sustainable freight strategy in land use. And we're glad to see a recognition of the potential problems caused by displacement and the need to have affordable housing near transit.

In the waste sector, which has gotten a lot of attention, we think CalRecycle has done a very good job in its document working with your staff. There needs to be a quick phase out of organics from landfills and much more use of extended producer responsibility.

And finally, it's very important that the Governor's proposed budget in January include a detailed
plan for the best expenditures of the revenues coming from the auction. Thank you very much.

CHAIRPERSON NICHOLS: That concludes the list of witnesses and it concludes this item. I don't know that there is anything more that we have to do.

Is there anybody who signed up for public comment in general? Good, because we've had a lot have public comment already. With that, then I think we will simply declare ourselves adjourned until tomorrow. Thank you all.

(Whereupon the Air Resources Board meeting recessed at 6:51 PM)
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, 2013.

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