MEETING

STATE OF CALIFORNIA

AIR RESOURCES BOARD

CAL/EPA HEADQUARTERS

BYRON SHER AUDITORIUM

SECOND FLOOR

1001 I STREET

SACRAMENTO, CALIFORNIA 95814

THURSDAY, JUNE 26, 2014 9:04 A.M.

TIFFANY C. KRAFT, CSR CERTIFIED SHORTHAND REPORTER LICENSE NUMBER 12277

APPEARANCES

BOARD MEMBERS

Ms. Mary Nichols, Chairperson

Dr. John Balmes

Mr. Hector De La Torre

Mr. John Eisenhut

Supervisor John Gioia

Mayor Judy Mitchell

Mrs. Barbara Riordan

Supervisor Ron Roberts

Supervisor Phil Serna

Dr. Alex Sherriffs

STAFF

Mr. Richard Corey, Executive Officer

Dr. Alberto Ayala, Deputy Executive Officer

Ms. Edie Chang, Deputy Executive Officer

Ms. Lynn Terry, Deputy Executive Officer

Ms. Ellen Peter, Chief Counsel

Ms. La Ronda Bowen, Ombudsman

APPEARANCES (CONTINUED)

STAFF

Mr. Aaron Hilliard, Air Resources Engineer, Alternative Strategies Section, Mobile Source Control Division

Mr. Tung Le, Manager, Regulatory Assistance Section, Stationary Source Division

Ms Lisa Macumber, Innovative Strategies Branch, MSCD

Ms. Cynthia Marvin, Chief, SSD

Mr. David Quiros, Air Resources Engineer, Freight Emissions Assessment and Research Branch, Monitoring and Laboratory Division

Mr. Scott Rowland, Chief, Incentives and Technology Advancement Branch, MSCD

Mr. Erik White, Division Chief, MSCD

ALSO PRESENT

Mr. James Barba, Next Generation

Mr. Will Barrett, American Lung Association

Mr. Max Baumhefner, NRDC

Mr. John Clements, Motiv Power Systems

Mr. Steve Douglas, Alliance of Automobile MFGS

Mr. John Dunlap, Nissan

Mr. Rob Elam, Propel Fuels

Mr. Anthony Fournier, BAAQMD

Ms. Jillian Franzoia, CalCAP

APPEARANCES (CONTINUED)

ALSO PRESENT

- Ms. Veronica Garcia, Tune In Tune Up
- Mr. Larry Greene, Sac Metro AQMD
- Mr. Tony Gonzalez, Global Automakers
- Mr. Jaime Hall, CALSTART
- Mr. Henry Hogo, SCAQMD
- Ms. Bonnie Holmes-Gen, ALA
- Mr. Tom Knox, Valley CAN
- Ms. Jerilyn Lopez Mendoza, Southern Californai Gas/SDPGE
- Mr. Edward Lovelace, XL Hybrids
- Mr. Bill Magavern, Coalition for Clean Air
- Mr. Jim McKinney, CEC
- Ms. Carishma Menon, Natural Resources Defenses Counsel
- Mr. Jose Marin, Tune In Tune Up
- Mr. Ed Pike, Energy Solutions
- Mr. David Reichmuth, Union of Concerned Scientists
- Mr. Seyed Sadriden, South Coast AQMD
- Ms. Rosemary Shahan, CARS
- Mr. Aaron Tilton, Blue Castle Holdings
- Ms. Eileen Tutt, Cal ETC

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1 PROCEEDINGS CHAIRPERSON NICHOLS: Good morning, everyone. 2 3 The June 26th, 2014, public meeting of the Air Resources 4 Board will come to order. Before we take the roll, we normally say the 5 6 Pledge of Allegiance. I'll ask you all to please rise, 7 and Mr. Eisenhut is going to lead us this morning. 8 (Thereupon the Pledge of Allegiance was 9 Recited in unison.) 10 CHAIRPERSON NICHOLS: All right. Madam Clerk, 11 would you please call the roll? 12 BOARD CLERK JENSEN: Dr. Balmes? 13 BOARD MEMBER BALMES: Here. 14 BOARD CLERK JENSEN: Ms. Berg? 15 Mr. De La Torre? 16 Mr. Eisenhut? 17 BOARD MEMBER EISENHUT: Here. 18 BOARD CLERK JENSEN: Supervisor Gioia? 19 BOARD MEMBER GIOIA: Here. 20 BOARD CLERK JENSEN: Mayor Mitchell? 21 BOARD MEMBER MITCHELL: Here. 22 BOARD CLERK JENSEN: Mrs. Riordan? 23 BOARD MEMBER RIORDAN: Here. 2.4 BOARD CLERK JENSEN: Supervisor Roberts?

Here.

BOARD MEMBER ROBERTS:

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BOARD CLERK JENSEN: Supervisor Serna?

BOARD MEMBER SERNA: Here.

BOARD CLERK JENSEN: Dr. Sherriffs?

BOARD MEMBER SHERRIFFS: Here.

BOARD CLERK JENSEN: Professor Sperling?

Chairman Nichols?

CHAIRPERSON NICHOLS: Here.

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

CHAIRPERSON NICHOLS: Thank you very much.

A couple of announcements, before we get started.

First of all, for anybody who is not familiar with our proceedings, if you wish to testify on any item, we ask that you fill out a request to speak card. They're available in the lobby outside the boardroom and that you turn it into the Clerk over here or Board assistant prior to the item that's being called.

We do impose a three-minute time limit, although that can be shortened if things get to be out of hand.

But we don't expect that's going to be a problem today.

We do ask you to summarize your testimony and put it in your own words rather than reading it, just because we will receive the written testimony anyhow and it's easier for the Board and easier for you to keep to your time if you can go straight to your main points.

For safety reasons, please observe where the exits are around the room. And if we are required to evacuate, which would happen if there was a fire alarm sounded, we will go down the stairs and out of the building until we get an all-clear signal to come back and resume the hearing.

Now, before we begin this morning with our regular agenda, we have to take a few minutes to observe a very important occasion other than the World Cup that's happening today, which is the retirement of the Board's Liaison of the last 14 years, Charlyn Frazier. We had an opportunity last night to toast her a little bit. But it's also important I think that we observe the occasion in a more public fashion. Because while many of you may not have worked with her, if you've ever communicated with the Board members or set up a meeting with the Board, you cannot have failed to meet Charlyn. She has made an incredible contribution to our overall well being. And we can't let this occasion go by without noting it.

Charlyn's job is to be the interface between the public and the Board members. And it's an amazingly busy job. As the Board has actually grown during her time in office as well, the number of meetings she has to schedule, the volume of activity partly as a result of AB 32 and the Board's seemingly ever-expanding

responsibilities has made her job a really challenging one.

And while doing all of this with quite amazing aplomb and juggling all these various needs, she's managed to keep the Board members well fed during Board meetings, make our lives brighter with flowers that that she scours the farmers market for and just in general to be a fixture of our activities.

Resolution for Charlyn. And I'm not going to read it all because some of it is sort of inside jokes, which she probably wouldn't appreciate sharing, but I'm going to mention a couple of things about Charlyn that perhaps not everybody knows, one of which is that she didn't actually start her career in State service with ARB. She began at the Department of Health Services. And before that, she had a number of years of experience -- I'm not going to say how many -- in the private sector, including working at KTLA Channel 5 in Los Angeles, which may explain some of her flare for the dramatic. We can't really say.

But she is very well known within the Board for having undertaken a new hobby in recent years of running and having become a passionate marathoner and someone who really sets an example for all of us in terms of being able to stay fit and active at any point in your life. So

for that alone, Charlyn, you have been an inspiration.

I'm going to ask you to come up. I think we have the actual Resolution somewhere, do we not? Yes, we do.

Okay. So we can give it to you.

And then before we let you go, Supervisor
Roberts, who seems to have won the contest for the person
who's known you the longest on this Board -- there was a
little competition last night. Mrs. Riordan I think might
be equal. We won't resolve that one.

Anyway, Supervisor Roberts has also brought along something that he wishes to present.

Charlyn, let me just give you this Resolution on behalf of all of us and wish you every success.

(Applause)

BOARD MEMBER ROBERTS: Thank you. As only one of two who have been here longer than Charlyn, in spite of that, we've all been trained by her in terms of what to expect and how to do it and where we need to be. When my colleagues on the Board of Supervisors heard that one person was doing all of this work and had kept me out trouble for 20 years here, they felt that it would be appropriate for us to do something.

We have a Proclamation that mirrors some of the things that Mary has alluded to in our Board proclamation that also talks about the wonderful lunches and the superb

delicatessens that Charlyn has sought out over the years to make sure we're well fed. I suspect that's kept us in far better mood and far more productive in every way.

It also alludes to what she is planning on doing in here retirement, tending to her cats and her cow, Patty, and of course her running, of which she will have more time. I'll have more to say about that in just a minute.

But the Board in San Diego, County Board of Supervisors throughout the county of San Diego has proclaimed this to be Charlyn Frazier Day in honor of her service.

(Applause)

BOARD MEMBER ROBERTS: This would normally make you immune from traffic tickets in San Diego. We'll get you a pass for when you're down there.

But even more importantly, because of your running, there is somebody in San Diego that heard about your late start in your career but your accomplishments and marathon and several half marathons, numerous 5 Ks and 10 Ks. And he was very impressed and wanted me to pass this on. It says, "To Charlyn. Thank you for all your support. Best wishes. And now you have even more time to run. Run to win." And it's signed by Meb Keflezighi.

Meb is the first American winner of the Boston marathon

about half a century ago. So this is for you.

(Applause)

CHAIRPERSON NICHOLS: Would you like to say a few words?

MS. FRAZIER: I'd had an opportunity to say a few words to the Board and staff last night. We had a festive event. I really don't think it's goodbye. I think I've said this before that I'm sure I'll be back. It will be hard to stay away from Board meetings. It's been 15 years. I figure I've been to at least 150 Board meetings. I didn't think of it that way.

But for some reason in the middle of the night last night, when I'm awake, I don't think I'm retiring.

It's June and summer break and it's time to take a vacation. I want to go to summer camp and get out and get some fresh air and take up some crafts.

CHAIRPERSON NICHOLS: You're welcome back any time, Charlyn.

MS. FRAZIER: Thank you all so much. This is really a treasure.

(Applause)

CHAIRPERSON NICHOLS: An important milestone.

Let me now move onto the regular calendar. We have first a consent item on the approval of the 8-Hour Ozone State Implementation Plan Inventory Submittal.

And I need to ask if anyone has signed up to speak on this or if anyone wishes to take it off of consent? There seems to be a conference going on over here. So sorry.

Madam Clerk, we're on the consent item. Did you receive anything? No. No comments. Okay. No nobody wishes to take it off.

May I have a motion?

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BOARD MEMBER RIORDAN: Move approval.

BOARD MEMBER EISENHUT: Second.

CHAIRPERSON NICHOLS: Very good. All in favor, please say aye.

(Unanimous aye vote)

(Board Member De La Torre not present.)

CHAIRPERSON NICHOLS: Any opposed or abstentions?

Mobile Source Measurement Capabilities. This is a report that accompanies the wonderful demonstration that we had last week out in the street of some of our capacities. And we thought that it would be useful for the Board members to get a chance to hear a somewhat more formal informational report. So this is a more comprehensive picture of some of those instruments and methods that you saw on display at the showcase last month, including a

description of how they're actually used to support our regulatory programs.

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I think the Board members appreciate the fact that we are using some very sophisticated technologies to assess what's going on out there in the real world of cars and trucks and to make sure they're as clean as possible. These tools are obviously at the heart of what we do, including some of our most critical regulations and are consistently going to be under scrutiny. And we need to make sure that we are utilizing the very best technologies and doing them and using the data as well as possible.

So I'm going to turn it over at this point to Mr. Corey to introduce this item.

EXECUTIVE OFFICER COREY: Thank you, Chairman Nichols.

So today's presentation will describe the evolution of our mobile source testing capabilities, beginning with the establishment of ARB more than 50 years ago. We'll highlight the variety of new measurement tools we've developed over the years to meet changing and increasingly complex program needs. And we'll conclude with a preview of our emissions testing priorities, including our plans for expanded testing facilities.

And David Quiros of our Monitoring and Laboratories Division will now give the presentation.

David.

(Thereupon an overhead presentation was presented as follows.)

AIR RESOURCES ENGINEER QUIROS: Thank you, Mr. Corey.

Good morning, Chairman Nichols and members of the Board.

In our informational briefing today, we will describe how ARB's mobile source measurement capabilities have evolved since the early 1960s to support expanding regulatory and programmatic needs.

We will then discuss the major sources of air pollutants from vehicles and the tools ARB has developed and deployed to measure them. We will conclude with a summary of our current testing capabilities and our future measurement priorities.

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AIR RESOURCES ENGINEER QUIROS: Last month, a number of you had the opportunity to view the mobile source measurement showcase as part of our Board meeting. The selected exhibits demonstrated some of the mobile source measurements that are used today.

This presentation serves to provide the fundamental background behind these measurement tools, and in addition, present the chronological development and

future direction of ARB's mobile source programs.

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AIR RESOURCES ENGINEER QUIROS: In the 1950s,
Arie Haagen-Smit and other Southern California scientists
determined that motor vehicles were one of the main
sources of air pollutants resulting in photochemical smog
blanketing the region.

To address this problem, in 1959, the Legislature created the California Motor Vehicle Pollution Control Board, the predecessor to the ARB, and gave it the authority to test vehicle emissions and certify emission control devices. This was the beginning of ARB's mobile source emission measurement program, which in its early years focused on controlling passenger car emissions.

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AIR RESOURCES ENGINEER QUIROS: As this slide shows, there are many potential sources of air pollution associated with vehicles, including fuel composition, refueling losses, tailpipe exhaust, brake and tire wear, leakage of air conditioning refrigerants, and evaporative losses.

Over the past 50 years, specialized test methods and instruments have been developed to measure these sources of vehicle emissions, beginning with the most obvious source, the internal combustion engine and

associated tailpipe exhaust.

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AIR RESOURCES ENGINEER QUIROS: Dynamometers were

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first commercially developed for emissions testing applications in the 1960s. A dynamometer, or "dyno" for short, simulates road loading of an engine or vehicle, thus allowing reproducible tests to be conducted in a controlled laboratory setting.

In some cases, the engine is tested outside of the vehicle on the engine dyno, while in other cases the entire vehicle is tested on a chassis dyno. ARB has used both engine and chassis dynamometers to evaluate vehicle control technologies, including most notably the three-way catalyst and diesel particulate filters.

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AIR RESOURCES ENGINEER QUIROS: A chassis dynamometer can be thought of as a treadmill for vehicles. As this diagram shows, the drive wheels of a car are placed on a large roller, and the exhaust is connected to a rack of analytical instruments. A driver then follows a prescribed driving cycle that is displayed on a screen, accelerating or braking as needed. A fan is used during the test in place of the cooling normally provided by wind resistance. Tailpipe emissions produced during the test, including gaseous particulate and greenhouse gas

pollutants, are collected and analyzed by a range of instruments.

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AIR RESOURCES ENGINEER QUIROS: This photograph shows a passenger car being tested on a chassis dynamometer in ARB's Haagen-Smit laboratory in El Monte. Clearly visible in the photograph are the dyno roll under the front wheels of the car, the driver display, the cooling fan, and the rack of analytical instruments.

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AIR RESOURCES ENGINEER QUIROS: Another major source of air pollution from motor vehicles is evaporative emissions of hydrocarbons produced by engine heat and diurnal changes in ambient temperature.

In the late 1960s, the concept of sealed housing for evaporative determination testing, or shed testing for short, was developed to measure evaporative emissions from cars. It involves placing a car in a sealed heated enclosure. The hydrocarbons are released over the course of one or more days and are measured as the car experiences diurnal changes in temperature typically 65 to 105 degreed Fahrenheit.

Although the shed testing approach was first used for passenger cars, ARB has since expanded the method to measure evaporative emissions from other gasoline powered

vehicles, including off-road recreational vehicles, watercraft, and lawn and garden equipment.

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AIR RESOURCES ENGINEER QUIROS: This schematic shows how evaporative emissions of a passenger car are measured using the shed. The car is sealed in the shed. The ambient temperature is cycled over the course of one or more days, and the resulting evaporative emissions are measured using a gas analyzer.

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AIR RESOURCES ENGINEER QUIROS: Here, a passenger car is ready to be tested in one of the sheds at the Haagen-Smit Laboratory.

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AIR RESOURCES ENGINEER QUIROS: Beginning in the 1970s, ARB recognized the health benefits of reformulated vehicle fuels, as well as the need for cleaner fuels to enable advanced pollution control technologies.

One of the first fuel regulations adopted in the 1970s removed led from gasoline, enabling the use of the catalytic converter for emissions control.

In the 1990s, establishing sulfur limits for diesel fuel allowed the diesel particulate filter to be adopted.

Fuel analysis capabilities employed at ARB's

Haagen-Smit Laboratory have played a tremendous roll in the development and enforcement of new fuel standards, including implementation of the reformulated gasoline and clean diesel standards.

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AIR RESOURCES ENGINEER QUIROS: This slide shows ARB's mobile fuels enforcement laboratory that has the capabilities of a fuel scale analytical fuels laboratory on a mobile platform. This enables ARB to have fuel analysis capabilities available throughout the state at refineries and dispensing facilities. Fuel samples can be analyzed within a one-day period, thereby providing a rapid indication of potential enforcement issues.

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AIR RESOURCES ENGINEER QUIROS: With the success of emissions standards and control technologies for passenger cars came an understanding that emissions from other types of motor vehicles needed to be controlled in order to meet air quality standards.

In particular, heavy-duty vehicles were identified as major sources of nitrogen oxides and particulate matter.

Beginning in the 1980s, heavy-duty vehicles began to be tested routinely using engine and chassis dynamometers.

Then in the 1990s, dynamometer cycles and methods were developed for a variety of off-road sources, such as watercraft, recreational vehicles, and motorcycles. These measurements methods were developed by ARB and were the basis of regulatory programs that have since achieved major emissions reductions from a broad array of heavy-duty and off-road vehicles.

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AIR RESOURCES ENGINEER QUIROS: Now let's take a moment and watch a short video clip showing the testing of a heavy duty truck at ARB's MTA facility.

(Whereupon a video presentation was given.)

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AIR RESOURCES ENGINEER QUIROS: One of the types of assessments that we can do at the heavy-duty MTA facility is to evaluate the effectiveness of the diesel particulate filter for controlling particulate emissions. This slide shows laboratory filter samples collected from a truck with and a truck without a diesel particulate filter. Our studies have shown that diesel particulate filters reduce particulate matter produced by diesel engines by more than 90 percent.

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AIR RESOURCES ENGINEER QUIROS: This slide shows once of the two motorcycle dynamometers at the Haagen-Smit

Laboratory. Similar to the light-duty and heavy-duty dynamometers, the laboratory provides a controlled environment where a pre-defined test cycle is followed and emissions are measured accurately.

ARB has used these motorcycle dynamometers to conduct exhaust testing in support of more stringent standards for on and off highway motorcycles, as well as all-terrain vehicles.

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AIR RESOURCES ENGINEER QUIROS: Prior to the 1990s, motor vehicle emissions testing was limited to the laboratory environment.

In the early 1990s, ARB recognized that measurement tools were needed that could be used in the field to measure emissions from large off-road equipment, as well as better understand real world operations.

Advances in measurement technology allowed previously bulky laboratory instruments to be packaged into small compact, portable emissions measurement systems known as PEMs. PEMs have enabled ARB to make real world measurements of particulate matter and other pollutants from a wide range of vehicle types, including not just off-road equipment, but also cars, trucks, and motorcycles.

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AIR RESOURCES ENGINEER QUIROS: This photograph provides one example of how ARB is deploying PEMs to measure real world emissions. In this application, the PEMs is mounted temporarily to the roof of a front end loader, and the emissions from the exhaust are piped into the PEMs for measurement and analysis.

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AIR RESOURCES ENGINEER QUIROS: Emissions detection tools were miniaturized again in the form of on-board diagnostics, or OBD. But rather than measuring emissions, OBD monitors the components of emissions control, such as catalyst censors, which if malfunctioning may indicate elevated emissions.

OBD was required for passenger cars beginning in the late 1980s and for heavy-duty trucks beginning in 2010. OBD enables the monitoring of virtually all the vehicles in the fleet to ensure that vehicles remain clean throughout their working life.

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AIR RESOURCES ENGINEER QUIROS: ARB also measures mobile source emissions from the fleet at-large to better understand vehicle technology turnover, verify the benefits of adopted rules, and improve emissions factors that are used to support air quality modeling and assess exposure.

Approaches for tracking fleet emissions include surveillance testing, where a representative sample of in-use vehicles are acquired and tested in the laboratory and field measurements by remote sensing of plumes from passing vehicles, or roadway environment measurements conducted routinely or by targeted campaigns.

As many of these studies require the use of specialized and unique equipment, ARB frequently contracts these studies or partners with academic institutions and other government agencies.

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AIR RESOURCES ENGINEER QUIROS: One tool used to track fleet emissions is the mobile measurement platform that was developed in-house by ARB staff. Shown on the left, this all-electric vehicle is equipped with state-of-the-art instrumentation that measures on-roadway concentrations of gaseous particulate and greenhouse gas pollutants while driving through live traffic.

ARB has developed the mobile source measurement platform in support of numerous studies, including assessing how roadway emissions have decreased due to the benefits of ARB's truck rules.

The figure on the right shows the results of measurements made using the mobile measurement platform on the I-710 freeway in Los Angeles between 2009 and 2011.

Over that time period, we have measured a 70 percent reduction in black carbon, reflecting the benefits of trucks complying with ARB's drayage truck rule.

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AIR RESOURCES ENGINEER QUIROS: This slide shows another tool that ARB is deploying to measure trends in heavy-duty truck fleet emissions. In this case, we are collaborating with the researchers at the University of Denver to set up a temporary heavy-duty emission tunnel to collect snapshots of fleet level emissions at two locations in California.

The study, which began in 2013, will continue in 2015 and 2017, providing a longitudinal assessment of the benefits of ARB's implementation of the truck and bus rule. As shown in the photograph, trucks drive through a temporary tunnel and their emissions are captured and analyzed in the mobile lab shown on the left. This set up allows the emissions from more than 2,000 randomly selected trucks to be measured over the course of a typical one-week sampling period.

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AIR RESOURCES ENGINEER QUIROS: As shown by these two examples, both in-house and extramural research play a critical role in understanding mobile source emissions and guiding future measurement priorities.

Since 1970, over 200 mobile-source-related contracts have been funded. ARB staff are often key initiators and participants in these research efforts. Results of ARB's in-house and extramural research are typically peer reviewed and published in leading scientific journals.

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AIR RESOURCES ENGINEER QUIROS: ARB's Mobile Source Measurement Program is a critical underpinning of our rulemaking efforts and benefits from sound science, rigorous test methods, and an open public process.

As shown in the slides related to the tracking of fleet emission trends, ARB typically uses multiple independent emissions measurement approaches to understand a particular issue. We work closely with U.S. EPA and industry in developing appropriate test methods. In all of our rulemaking efforts, we share test methods and results through a public workshop process.

Finally, ARB solicits expert review through working groups, such as the Coordinating Research Council, and through publication of peer-reviewed journal articles.

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AIR RESOURCES ENGINEER QUIROS: The measurement tools discussed in this presentation are currently being used to support a wide range of ongoing ARB program needs,

including certification and enforcement activities.

However, there are a number of new program areas requiring a focusing of measurement resources in the coming year. A major focus of our light-duty measurement program will be supporting the LEV III mid-term review, in particular the ability to measure particulate emissions at very low levels.

For heavy-duty trucks, new measurement projects will include evaluating the feasibility of further reducing certification values for oxides of nitrogen. In addition, we are working with the U.S. EPA to develop Phase 2 standards to reduced greenhouse gas emissions from heavy-duty trucks.

More broadly, we will continue using our measurement capability to assess advanced near-zero emissions cars and trucks, such as hybrids and alternative fuel vehicles. Many of these vehicles will require the development of new test methods and tools.

Finally, ARB will need to consider approaches for measuring new pollutants, such as ultra fines, as well as unrecognized new sources of emissions.

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AIR RESOURCES ENGINEER QUIROS: ARB's mobile source testing capabilities are currently housed at three facilities in California.

The Haagen-Smit Lab in El Monte, which was inaugurated in 1973, is the hub of our light-duty testing activities and is equipped with engine and chassis dynamometers, evaporative testing sheds and PEMs. The Haagen-Smit Lab also includes a comprehensive laboratory that conducts chemical analysis of fuels and vehicle emissions.

The MTA test facility in downtown Los Angeles, which ARB began leasing in 1998, is one of our two heavy-duty testing facilities and is equipped with an engine dynamometer and a chassis dynamometer.

Our Depot Park facility, located in Sacramento, is our other heavy-duty testing facility and was commissioned in 2010. We will be upgrading Depot Park with the addition of a chassis dynamometer in late 2014.

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AIR RESOURCES ENGINEER QUIROS: Our current testing capabilities continue to provide critical measurement capabilities. However, advanced testing is needed for the new technologies that will further reduce emissions from motor vehicles and other engines.

The two Southern California facilities have limited capacity for upgrading the infrastructure and instrumentation necessary to provide this advanced testing. Therefore, ARB is proposing to build a new

State-of-the-art testing facility in Southern California. A contract was awarded in May to complete a feasibility study for the new facility. The study will document program needs and provide a cost estimate. We expect the feasibility study to be completed by fall of 2014.

We will use this information to work closely with the Department of General Services and the Department of Finance to complete the approval process. We expect the approval process to take about a year.

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AIR RESOURCES ENGINEER QUIROS: In summary, we have a solid scientific foundation to support our future mobile source rulemaking. We are in the process of commissioning a new test facility in Northern California and are planning a new facility for Southern California. More than 100 ARB staff are engaged in mobile source emissions measurement testing and analysis, are recognized for their expertise, leading the country and the world in developing new tools and methods. We are leveraging this in-house expertise with academic and government partnerships.

Finally, we recognize that just as our

Measurement Program has evolved over the past 50 years,

new measurement tools will be needed in the coming years

to meet new program needs and critical air quality and

climate goals.

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That concludes our formal presentation.

CHAIRPERSON NICHOLS: Thank you very much.

We don't have any witnesses who have signed up, but I have a few comments.

And before I give mine, I think Mrs. Riordan wanted to make a comment.

BOARD MEMBER RIORDAN: Yes. First of all, staff, thank you very much for the presentation, but even more importantly, for the opportunity to view your efforts at our last meeting. And while I was there, I indicated my interest in the mobile measurement platform within the vehicle that has been now dramatically changed and with wonderful equipment. And so I had the good fortune of going about two weeks ago on a trip in that vehicle holding the computer with a driver -- fortunately with a driver. But along the 710 and watching the measurements along that particular freeway in Southern California. I was very impressed, first of all, with the fact that that was developed in-house and the ingenuity it took to develop that system. And then for the staffing that is a part of that, such enthusiastic young members of the ARB team.

So I would encourage any Board member who had the opportunity to take that trip. And they're doing it

several times because they monitor it over a period of time to understand what's happening as we make our regulations and the effects of those regulations.

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I also had, Madam Chairman, came back to the heavy-duty dynamometer there at the MTA, which I had been to many, many years ago. And I watched a test there. But also realized how that area has grown and how our needs are for I think ultimately having a facility of our own. Because obviously the MTA had expanded and it's been a wonderful relationship hopefully that we've had with them. But it's probably about time that we have our own.

CHAIRPERSON NICHOLS: Our relationship would probably be better if we would move out.

BOARD MEMBER RIORDAN: But it was a great opportunity. And I want to say thank you for those who hosted me that morning and encourage my colleagues here on the Board to take advantage if you're in the Southern California area because it is incredible what we are able to measure today. I'm so impressed.

CHAIRPERSON NICHOLS: Thank you for that.

Where are the photos of this event? I trust there are photos somewhere that document your ride-along on the journey.

BOARD MEMBER RIORDAN: I'm not sure that there are any photos for the ride-along. Somebody was taking

some photos at the dynamometer, but I'm not sure where those are. They may have wanted to destroy them after they saw the character in the picture.

CHAIRPERSON NICHOLS: A break down of our communication department because if I had at least one of those, I would be tweeting it this minute. That's what we should be doing to take advantage of exactly that kind of diligence on the part of our Board members.

Well, I just wanted to add, obviously, the message here is, you know, we're doing a tremendous amount. And I don't think we even really noted all the places along the way where the equipment that we're using is designed by and invented by people in-house. So much of this program has evolved over time with ARB doing the measurements and then figuring out what could be done to solve the problem.

But I just want to underscore the fact that this facility, which I was present at the christening of the Haagen-Smit Laboratory, is of enormous importance to our overall operation. And it's going to be a major undertaking to replace it. We can't just fix it up on the spot that it's in because we don't have enough land there to do it. We don't control the land around it. So we are going to have to go through a quite elaborate process.

I know that the other State agencies that are

working with us on this are considering some very innovative ideas about how to go about financing and building a facility, which will be unique literally in the world and how to make it also into a zero net energy building and green laboratory. And we have many objectives in building a new building. The State doesn't get to build new buildings very often.

So this is going to be a very large project and already, as you heard, is being thoroughly investigated and documented and all. So stay tuned. But this is a project I'm very hopeful will actually see the light of day in Governor Brown's next term.

Any other comments or questions? If not, we can move onto the next item. Thank you very much.

Our next item is a proposal to amend the State's Enhanced Fleet Modernization Program, commonly referred to as EFMP. EFMP is the State's program to reduce emissions from existing motor vehicles by providing incentives to speed up the retirement and replacement of older high polluting vehicles.

The 2007 State Implementation Plan includes a commitment to achieve reductions equivalent to the early retirement of 60,000 vehicles per year combined in the South Coast and San Joaquin Valley air basins. EFMP provides critical funding towards meeting these State

Implementation Plan commitments.

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ARB works closely with the Bureau of Automotive Repair, otherwise known as BAR, in developing the program guidelines and also in assessing the program's performance. A review of the EFMP program in early 2013 as well as legislation from last year has prompted staff to propose modifications that are being presented today. These proposed amendments should improve the program's performance, better assure participation by low income consumers, and as we will hear in the following agenda item, also leverage low carbon transportation funding to supplement or support pilot programs that will better enable lower and middle income consumers to be able to move into clean advanced technology vehicles. So this is an important program from the perspective of both of our smog and climate programs, and it will be interesting to see how these two things work together.

I understand we're also going to be hearing from the two principal air districts that are involved in implementing this program, and that will be after the staff presentation.

EXECUTIVE OFFICER COREY: That's correct.

 $\label{eq:chairperson} \mbox{CHAIRPERSON NICHOLS: Great. So I'll turn it}$ over then to Mr. Corey.

EXECUTIVE OFFICER COREY: Thank you, Chairman.

EFMP is a vehicle retirement and replacement program that was authorized by Assembly Bill 118 in 2007. The program is funded by the one dollar surcharge on motor vehicle registration, translated into about 30 million each fiscal year.

ARB in consultation with the Bureau of Automotive Repair adopted guidelines in 2009 to administer two separate program elements: Statewide retirement only element operated by BAR, that has provided retirement incentives to over 90,000 vehicles to date, and a retirement and replacement program which is intended to provide greater benefits by directly assisting consumers to get into newer cleaner vehicles.

Unlike the retirement only element, which is oversubscribed each year, the replacement program has had participation that we'll address as part of the staff presentation and associated recommendations. The proposed amendments presented today are in response to both review of the program and in response to directives of Senate Bill 459.

Today, we're asking the Board to approve the amendments that we believe will improve the effectiveness of the program, address the directives of SB 459, and provide a mechanism to leverage low carbon transportation funds for low-income consumers in disadvantaged

communities.

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I'd now like to turn the presentation over to

Aaron Hilliard with our Mobile Source Division who will be
providing the staff presentation. Aaron.

(Thereupon an overhead presentation was presented as follows.)

AIR RESOURCES ENGINEER HILLIARD: Thank you, Mr. Corey.

Good morning, Chairman Nichols and members of the Board.

Today, I will present staff's proposed changes to the Enhanced Fleet Modernization Program. Staff's proposed changes will better ensure the program's emissions benefits are achieved, while continuing to assist low and moderate income Californians get into cleaner more efficient vehicles.

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AIR RESOURCES ENGINEER HILLIARD: Today's presentation will consist of a brief overview of the program's background and achievements to date, a summary of the legislation and program review that prompted today's proposal, a description of the proposed amendments, and staff's recommendation.

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AIR RESOURCES ENGINEER HILLIARD: The Enhanced

Fleet Modernization Program, also known as EFMP, is a voluntary vehicle retirement and replacement program originally authorized by Assembly Bill 118 in 2008 and extended through 2023 by Assembly Bill 8 in 2013.

In 2009, the ARB adopted the EFMP program guidelines, which were developed in consultation with the Bureau of Automotive Repair, or BAR. The program consists of two separate elements: A Retirement-Only Program to compensate motorists to scrap their vehicles, and a replacement program, which provides funding towards a cleaner replacement vehicle.

Currently, 90 percent of the total annual funding of \$30 million is allocated towards the retirement only component of the program, leaving around \$3 million annually to fund the replacement components.

Statute directs that the program should be focused on the areas with the greatest air quality problem and considers cost effectiveness and impacts on disadvantaged and low income populations.

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AIR RESOURCES ENGINEER HILLIARD: EFMP was established to assist in the efforts to achieve ambient air quality standards. Many region of the state continue to struggle with the air quality problems. California's 23 million passenger cars and light- and medium-duty

trucks, which travel close to 865 million miles per day, contribute significantly to this problem.

As illustrated here, emissions from older vehicles certified to higher emissions standards are significantly greater than newer models that comply with more stringent emission standards. Thus, measures that encourage the early retirement of these older higher polluting vehicles can play an important role in cleaning the air.

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AIR RESOURCES ENGINEER HILLIARD: The 2007 State Implementation Plan, or SIP, recognizes the role that vehicle retirement programs can play and includes goals to retire approximately 60,000 vehicles each year in the South Coast and San Joaquin air districts through expansion of vehicle retirement programs.

Although by itself EFMP is of insufficient scope to meet the entire goal, it is expected that the program improvements proposed today in conjunction with other local efforts to identify and remove older higher polluting cars from the road will continue to make significant progress towards achieving the needed emissions reductions in both the South Coast and San Joaquin Valley areas in the near future.

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AIR RESOURCES ENGINEER HILLIARD: The success of that goal depends on a partnership between several agencies. While ARB develops and adopts the EFMP program guidelines, the implementation is handled by others.

BAR administers the statewide retirement only component of the program, providing a base incentive of \$1,000 per vehicle retired. In the accordance with the focus on low income motorists \$1500 is provided to those with an income below 225 percent of the federal poverty level, which for a family of four is approximately \$54,000 a year. This income threshold and the incentive levels provided are consistent with BAR's consumer assistance program, which provides funds for scrapping vehicles that fail a smog check.

Both EFMP Retirement-Only Program and the Consumer Assistance Program share the same application process and both include a minimal vehicle functionality test prior to application approval. This consistency allows for a combined operation of both programs transparent to the participants.

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AIR RESOURCES ENGINEER HILLIARD: The replacement program, on the other hand, is limited to motorists in the South Coast and San Joaquin Valley. Accordingly, implementation of the replacement program is handled by

these local air districts. The replacement program offers up to \$2500 voucher in addition to the incentive offered through the retirement component to purchase a newer cleaner replacement vehicle.

The existing pilot voucher replacement program requires applicants to apply for retirement funding through BAR, scrap the retired vehicle at a BAR-contracted dismantler, and then apply to the air district for a replacement voucher. This complicated process contributed significantly to low participation in the program.

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and BAR staff conducted an assessment of vehicles retired through EFMP to determine the program's effectiveness and to identify opportunities for improvement. A full report on the assessment was presented to you last November, so I will provide a brief summary of the key findings.

The program assessment confirmed that the vehicles entering EFMP retirement are generally high emitters, but also generally at the end of their useful life.

The overall conclusion of the assessment was that while EFMP is meeting program goals by purchasing and retiring high emitting vehicles, the cost effectiveness and emission benefits of the program could be

substantially improved by ensuring that only vehicles with significant remaining useful life are allowed to participate.

In addition to assessing the performance of the retirement program, staff investigated the replacement element's low participation rate and whether the incentives offered were appropriate for the target motorists and vehicles.

Staff found that the process was overly complicated, did not encourage participants to chose the cleanest replacement vehicle, and identified avenues to improve the process.

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with the program assessment, Senate Bill 459 was passed. SB 459 emphasizes the need for EFMP to serve low-income consumers and directed ARB to promote cleaner replacement vehicles, enhance emission reductions, and increase outreach to community-based organizations. It also specified several goals that are consistent with what staff determined from the assessment mentioned in the previous slide. Finally, it required ARB to update the program no later than June 30, 2015.

Given the goals set forth by SB 459, the conclusions of the 2013 program study, and the discussions

with our program partners and with stakeholders at workshops held in Sacramento, Fresno, and Diamond Bar, staff has developed today's proposal.

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AIR RESOURCES ENGINEER HILLIARD: For the Retirement-Only Program, we believe that there are only a few changes needed at this time. To better ensure benefits to low income motorists, staff proposes limiting participation to making less than or equal to 225 percent of the federal poverty level. Restricting program participation should better ensure that limited funds will be available to low-income consumers throughout the year.

To increase the emission benefits and cost effectiveness of the program, staff proposes requiring the successful completion of a smog check test. Successful completion of this test, whether the result is a pass or a fail, is a good indication that a vehicle can be driven on the road, and that retiring it will provide real air quality benefits. Staff also proposes that follow-up data be collected to gain insight into the transportation choices participants make subsequent to vehicle retirement.

To ensure the program's goals are being achieved,

ARB and BAR staff will monitor participation in the

program. If participation drops sufficiently to indicate

that the retirement program will fall short of expending its annual funding, staff is proposing that incentive amounts for vehicles passing the smog check test could be raised incrementally up to \$2500 total per vehicle to improve participation. Also based on feedback from BAR, staff has already identified a few minor clarifying 15-day changes that will be made following today's hearing.

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AIR RESOURCES ENGINEER HILLIARD: For the pilot retire and replace program, staff proposes a greatly revised program to effectively respond to the requirements of SB 459 and stakeholder concerns.

First, staff proposes to limit the program to low and moderate income consumers with household incomes less than 400 percent of the federal poverty level with incentives tiered to focus on the lowest income motorists.

Second, staff proposes to establish minimum program requirements with flexibility to allow the implementing air districts to determine how they meet the proposed program requirements. This may include, but is not limited to, models such as the community outreach model used by the San Joaquin Valley's Tune In Tune Up Repair Program or a dealer-based model similar to the Carl Moyer Voucher Incentive Program for heavy-duty trucks.

To ensure that the proposed program has

sufficient resources to be viable in each region, staff proposes that the \$3 million annual funding for the program be split evenly between the South Coast and San Joaquin Valley air basins. Both the San Joaquin Valley and South Coast districts are here today and will provide more details on their plans to implement the pilot programs following staff presentation.

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AIR RESOURCES ENGINEER HILLIARD: Staff's proposal includes a number of specific steps to increase effectiveness in terms of participation, emission benefits, and the promotion of advanced technology replacements and alternative mobility options. Under the proposed guidelines, air districts have the flexibility to implement solutions that work best within their respective regions.

As with the Retirement-Only Program, ensuring only functional vehicles are accepted is of paramount importance. However, in contrast to the proposed amendments to the Retirement-Only Program, implementing air districts would not necessarily be limited to the smog check test for that purpose and would have flexibility to propose an alternative. Alternatives can include a process by which cars are operated as they progress through a series of check stations, similar to how the San

Joaquin Valley's Tune In Tune Up event is run. Such operation can provide sufficient confidence that they are cars that are actually in regular use and have remaining useful life.

The proposed revisions would also allow for an increase in the minimum incentive amounts available for the down payment of a replacement vehicle and provide improved funding options for advanced technology replacement vehicles and alternative mobility options, as well as expand outreach and incorporate comprehensive consumer protections.

Now that I've given a broad overview of staff's proposal, I will provide more details on some key areas.

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AIR RESOURCES ENGINEER HILLIARD: The first of these are the proposed incentive levels. The proposed incentives are tiered to provide the highest compensation for lowest income eligible participants as well as additional compensation for higher fuel economy and advanced technology replacement vehicles, such as hybrids, plug-in hybrids, and zero emission vehicles. Please note that these are initial minimum incentives. As with the Retirement-Only Program, staff intends to closely monitor participation and adjust the incentives upward if needed to ensure meaningful participation rates. These

adjustments would be limited to a maximum of an additional \$1,000 and would only be implemented after consultation with the implementing air districts and at public workshop in each region.

The first replacement option would provide a total of \$4,000 towards the purchase of a new or used eight-year-old or newer vehicle meeting minimum fuel economy standards by model year, starting at 20 miles per gallon for cars and 19 miles per gallon for minivans. This option would only be available to low-income participants.

The second replacement option is the purchase of a new or used vehicle that meets or exceeds a fuel economy of an EPA combined 35 miles per gallon. This option would be available to both low and moderate income participants, with a total incentives of \$4500 and \$3500 respectively.

The third replacement option is for the purchase of a new or used advanced technology replacement vehicle such as a hybrid, plug-in hybrid, or zero emission replacement vehicle.

Under the staff's proposal, the program would provide total incentives of \$4500 for low-income participants, \$3500 for moderate income participants, and \$2500 for participants making up to 400 percent of the federal poverty level.

Note that there will be additional incentives available for low income motorists through the EFMP Plus Up Pilot Project, which will be discussed in the next presentation.

The fourth option would provide an incentive for the purchase of alternative mobility options in lieu of the purchase of a replacement vehicle. Total incentives available under this option would equal those just described for advanced technology replacement vehicles.

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AIR RESOURCES ENGINEER HILLIARD: In implementing this option, air districts are encouraged and given the flexibility to pursue ways in which these incentives could be leveraged to provide a greater overall benefit to participants.

Staff proposes to expand the alternative transportation mobility options that can be utilized with EFMP funding to include items such as car sharing memberships, and to expressly permit the option of splitting the incentives among several different travel modes to better meet participants mobility needs.

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AIR RESOURCES ENGINEER HILLIARD: Discussions with program partners and stakeholders during the regulatory development process has made it evident that in

order to increase participation by low-income motorists, implementing air districts must have the freedom to develop and pilot strategies to target outreach and provide significant assistance to low-income motorists in disadvantaged communities.

Staff's proposal would require the districts to conduct targeted community outreach and encourages partnerships with trusted community organizations and financial institutions to better assist local motorists in completing vehicle replacement transactions.

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AIR RESOURCES ENGINEER HILLIARD: To provide additional resources that could supplement the incentives provided by EFMP, staff is proposing a number of pilot projects using low carbon transportation investments that will benefit residents in disadvantaged communities. EFMP participants that live in disadvantaged communities could be eligible for an additional incentive for the purchase of a new or used hybrid, plug-in hybrid, or zero emission vehicle through the proposed EFMP Plus Up Pilot Project.

This proposal will be discussed in greater detail during the next item regarding the Air Quality Improvement Program Funding Plan.

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AIR RESOURCES ENGINEER HILLIARD: In conclusion,

the staff recommends that the Board approve the proposed amendments along with any necessary clarifying 15-day changes.

The amendments proposed today were developed after careful consideration and discussion with stakeholders. The proposal is consistent with the directives given to the ARB by SB 459 and addresses the areas of improvement identified by the 2013 program study.

Overall, the proposal contains provisions to improve cost effectiveness and emission benefits by requiring functional vehicles, focuses incentives on low to moderate income California motorists and promotes cleaner, sustainable vehicle replacements. Additionally, the proposed changes incorporate mechanisms to closely monitor program progress and course correct if necessary.

Thank you.

Mr. Seyed Sadredin from the San Joaquin Valley Air District and Mr. Henry Hogo from the South Coast are now ready to provide some remarks on the respective programs. Thank you.

CHAIRPERSON NICHOLS: Gentlemen, welcome.

MR. SADREDIN: Good morning, Madam Chairman, members of the Board. It's an honor and a pleasure to be here before you to testify on this important item that is before you.

First of all, I wanted to express my gratitude to your staff. They always do a bang-up job working with us as partners to exercise both oversight as well as helping us when we need their expertise and leadership on these issues. And the proposal before you today reflects a great deal of working together to come up with a proposal that hopefully will enhance participation by low income and disadvantaged community members.

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I have a few slides. I will go through them very quickly.

(Thereupon an overhead presentation was presented as follows.)

MR. SADREDIN: I know you are familiar with the socioeconomic challenges that the Valley faces. We appreciate your Board's care and attention to the San Joaquin Valley over the years and we hope to continue that partnership.

But just quickly, a couple of things I wanted to highlight here is that San Joaquin Valley -- and we have 22 of the top 30 census us tracks on CalEnviroScreen in terms of cumulative impact and need in San Joaquin Valley. This is a program that is definitely needed and should receive a great deal of attention in San Joaquin Valley.

In our district, we have a high percentage of low income communities. And the problem with personal

passenger vehicles is that about ten percent of the vehicle population in our district accounts for over 50 percent of the pollution from passenger vehicles. So this is an important area to look at.

And finally, I appreciate your staff's attention to this and providing flexibility in that one-size-fits-all will not work in this area for -- and different regions of the state. And program complexity and the cost have been a major barrier to low income members that participate in these programs.

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MR. SADREDIN: Just quickly, a couple of programs that the district has been administering to these areas.

First, the past program, the Polluting Automobile Scrap and Salvage Program, we have put in \$2 million in that program. And it was targeted at low-income members with a \$5,000 incentive. We scrapped over 500 vehicles and replaced over 200 vehicles in that program.

The Tune In Tune Up Program that you heard quite a bit about last week, our Board appropriated another \$4 million into that program for a total of \$12 million. Now they have been very successful in reaching out to the low-income disadvantaged community members. We do hand-to-hand outreach. We hire people from those communities to go out to these communities, hand out

flyers, talk to people, go to mercados and other places in the community to actually get those people that really need these programs to participate.

And I have to tell you, we have testimonials that shows that this program has been life changing for many of these members of these communities. It has been a difference between can I feed my family or repair my car or can I go to work or not with the car that they can register and passes the necessary smog requirements.

Today, we replaced over -- or repaired over 7600 vehicles. If you can go to the next slide.

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MR. SADREDIN: And 50 percent of the participants have been from the low-income EJ communities. Two out of every vehicle repaired were last registered in an EJ community, and 98 percent of the vehicles with labs registration have successfully now registered and are back in the system and they count.

The replacement program -- pilot program that our Board approved about two months ago with the help from your staff, we designed it and implemented it. And they were actually present at many of these events to see what we can do to make it even better. This program was designed to build on the success of the Tune In Tune Up Program, and it utilizes existing vehicle repair events to

identify and engage candidates for replacement. We do realize that for some vehicles, replacement is really the way to go as opposed to retirement.

Now, the targeted vehicles in this pilot program that we run with \$100,000 of local funding were pre-1996 model years with pre OBD II, onboard diagnostic systems that really impact fuel efficiency and emissions. And they also have to either pass -- to fail the smog test to qualify for these replacement dollars.

And also an important change that we made in this program was that we also allowed unregistered vehicles to participate. Unfortunately, in the past, if you're not registered, you don't count. And the fact of the matter is these vehicles are real and they do emit and they do operate in San Joaquin Valley and other places. So we did let other unregistered vehicles also to participate with a \$5,000 incentive. And the new vehicle criteria is listed out over there for you eight years or newer and less than 100,000 miles. Of course, they have to pass the smog certificate.

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MR. SADREDIN: The results were very favorable, this replacement program. With \$100,000, we could replace 18 vehicles. And we actually replaced 18 vehicles in that program, which is quite a bit just for a three-month of

time to be able to do that.

But a couple of lessons that we learned is that this process is very labor intensive and requires hands-on assistance. We cannot just give these guys a voucher and say you're on your own. Go find a dealer and finance a company and get funding for that. So we have to be ready to -- and San Joaquin Valley is giving them ongoing hands-on assistance as they go through this program.

Financing was a huge challenge for these people, even with a \$5,000 incentive that we were providing for them. Many of them have difficulty qualifying. And if they did, they were facing exorbitantly high interest rates. So we are working with a number of financial institutions to actually have them as registered partners in this program with especially designed financing packages for these low income individuals. That's a key challenge as well. As you said, the minimum incentive level -- keep that in mind -- even with \$5,000 that the district is providing, it was very difficult.

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MR. SADREDIN: Here's just a list of some of the vehicles, the first eleven, that we were able to replace and give you information on. The only think I point out in that slide, the vehicles that have asterisks next to them, these are the vehicles that under the proposed

minimum mileage requirement of 24 miles per gallon will not qualify. As can you see, many of these vehicles are 20-plus years newer. Significant emissions reductions, as you discuss, and the matter today and also talking about your Executive Officer flexibility, keep that in mind that there are some well-intentioned proposals that set high mileage requirements. But for people in these low income communities, the vehicle serves a great purpose. It's not just a quick commute back and forth to work. This is their only vehicle. And they have to be able to fit groceries, families, and a host of other things in their vehicles. Some of the high mileage vehicles just by two or three miles will make a difference between them being able to get a car they need or not.

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MR. SADREDIN: We have a few -- three quick suggestions for you as you discuss the flexibilities that you need to give to your Executive Officer or perhaps even taking a position on some of these issues today. We'd like to ask you to raise the minimum base incentive for low-income participants from 4,000 to 5,000. We had a very tough time with these low income communities even with the \$5,000 incentive to get them through the process.

Do the same thing with the fuel economy requirements. Set the minimum at 20 instead of 24. We

can make adjustments. If program is overly subscribed and exceeds all of our expectations -- we still have a long ways to go to get to our 60,000 vehicle replacement target in the SIP.

And then, finally, we'd like you to -- both in terms of how you set up this program and also your funding targets to really target all of this funding to low income and EJ community members.

There are other programs that are available for zero emissions and plug-in hybrid -- your next item, CVRP and others, they will take care of those people that for low-income participants, this is really the key program that will enable them to get to a cleaner car.

That was my presentation. Madam Chair, I want to thank you, your Board, and your staff for continued partnership and guidance from you.

CHAIRPERSON NICHOLS: Thank you very much.

Just one question about your efforts to get people into the more efficient replacement cars. What kind of response have you had from the dealerships on this? You mentioned how labor intensive it is to take someone and literally walk them through the whole process, including financing. I'm just curious whether you've been able to get some additional help from the private sector on this.

MR. SADREDIN: Our experience has been that you have to be very careful in terms of who you let into this process. We can not let the participants to go on their own and have to go through the whole used car, you know, sales market and all that.

So in our program, we actually wanted the dealerships actually to register with the district ahead of time. And they have to meet certain requirements. And they have to have pre-specified prices for the vehicles that they will charge anyone.

So in our pilot program, we actually partnered with CarMax, which is a regional dealership as you might know. And also they have up-front pricing. So there is no haggling with trying to raise the price because these people are getting \$5,000. So those are some of the key requirements that we think we should pay attention to.

CHAIRPERSON NICHOLS: You found that was helpful.

MR. SADREDIN: That was helpful. And all the vehicles we were able to get these people into, they were significantly cleaner than the other vehicles that perhaps if they had been on their own they could have received. So the experience has been positive, but this is definitely something we have to pay attention to. Again, you cannot have a free-for-all and just go any dealership, here's a voucher, see what you can get.

CHAIRPERSON NICHOLS: It's very good to hear. Thank you very much.

Mr. Hogo.

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MR. HOGO: Good morning, Madam Chair, members of the Board.

Henry Hogo with South Coast Air Quality Management District.

I just want to keep my comments very brief actually and just say that we want to thank staff also for working with us on the EFMP program. And we encourage your adoption of the proposed amendments today. And the South Coast AQMD stands ready to move forward with implementation of the program. We already crafted a request for proposal that we've taken to our Technology Committee, Governing Board Technology Committee, and will be heard by our full Board in July.

We do recognize that there are two parts to this program, which are challenging. First is getting the participation, and second is the financial situation. So what we wanted to do was start from a fresh slate. We're open to whatever approaches are out there that people are looking at in terms of outreach to low income community to ethnic communities and just a broad base outreach program.

And then secondly, once we find those participants, how they're going to go through the process.

Staff mentioned today two models, the weekend event and the dealership model. We've seen both, and we've actually seen both work effectively. The dealership model, they identify the participants and they arrange the financing and so forth. So we think that if the right team of outreach experts along with the people that understand how to assist low-income people in moving a car into the scrapping program and then ultimately getting a replacement vehicle, that would be the ideal team. And we believe there will be multiple approaches that will be proposed to us. And we're open to actually looking at potentially awarding to multiple entities to do this program. So we stand ready to move forward with the program.

CHAIRPERSON NICHOLS: I think that's great. Your openness and willingness to accept innovative and creative ideas as opposed to trying to design it all in-house and then try to make it work is clearly a good way to go with something like this where we're still experimenting. But we know that there's a target audience out there that we haven't reached yet. So hopefully we will find the way to reach them. Thank you.

Additional Board questions or comments before we move onto the rest of the witnesses?

BOARD MEMBER MITCHELL: Thank you, Chairman.

I think we've heard from both the air districts the challenges of this program. We know that it wasn't successful in the past, and I think the difficulties of administering it are fairly high.

So I, as a representative from South Coast, listened with very keen interest to what San Joaquin Valley was doing. And I know we do have an open sort of slate here, blank slate, to work on in our district. And our district is different from San Joaquin, obviously. And so I think the flexibility in how we approach this -- and staff has provided that. I think that's very important.

And this is an important program. But we looked at this last year and saw that the EFMP was not as successful as we thought it could be. There's certainly some very high level of need to move moderate income and low income people into cleaner cars and advanced technology. This is a mechanism to accomplish that.

And so I look forward to working with my district to move this program forward and be successful in accomplishing the goals that we set out to accomplish with this.

So thank you, staff, for your hard work on this. We really appreciate that.

CHAIRPERSON NICHOLS: Thanks.

Dr. Balmes.

BOARD MEMBER BALMES: I only have a brief comment.

When I first saw the Enhanced Fleet Modernization Program was on the agenda, you know, before I read any further, I was thinking of truck fleets or commercial fleets. So I think the name has totally mischaracterized the program. So are we calling it Retirement and Replacement Program, R&R Program? Because I would think that's a much better name.

CHAIRPERSON NICHOLS: Certainly, the acronym does not trip off the tongue, that's for sure. We can do better.

Yes?

BOARD MEMBER SHERRIFFS: Thank you. Thank all for their work. And I think the model that the San Joaquin Valley is building on is an important one.

Wondering if staff or others have considered rather than a miles per gallon or emissions per mile minimum and also whether we want a bigger differential between better mileage and then encouraging the plug-in hybrids EEV. Because right now the incentives are the same. And wondering about providing a little more push. Because we really need that in terms of long-term solution. And I think we also see that we get more

benefit for a longer period of time by encouraging and enabling people to get plug-in hybrids EEV models.

CHAIRPERSON NICHOLS: Okay. Thank you.

Why don't we turn to the audience then? We have several witnesses who wanted to speak on this item. And we'll start with James Barba. You can see yourself on the list up there. James Barba and then Tom Knox and Bill Magavern.

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

Next Generation has submitted written comment for the public record. I'm here today just to reinforce our appreciation of ARB's great work on this program.

As Next Generation has noted in our published work, replacing high polluting and inefficient vehicles with newer, cleaner, safer, and more efficient cars represents an opportunity to further expand the benefits to California's ground-breaking clean transportation policies to low-income car-dependant families who may be less likely to benefit from investments in public transit or zero emissions vehicles.

With the aim of moving the EFMP further towards this expanded vision, we ask the Board and ARB staff to consider the following recommendations:

First, we recommend that ARB increase minimum

fuel efficiency standards for all replacement vehicles, including those purchased by the lowest income households, which will be allowed to purchase vehicles with efficiencies as low as 20 miles per gallon under currently proposed regulation. Recent analysis by Next Generation indicates a substantial number of vehicles with efficiency ratings in the 27-plus mile per gallon ranges are available in California's auto market at prices comparable to vehicles that meet ARB's proposed criteria.

Low-income households stand to benefit substantially from the cost savings offered by moderately more efficient vehicles and increasing efficiency would strengthen the EFMP's greenhouse gas reduction potential.

Our second recommendation is that the ARB staff make the low-income financial assistance policy described its most recent staff report a continued and central focus of EFMP implementation efforts. Our analysis suggests that the EFMP will not be successful in reaching low-income households without a strong effort to increase the availability of affordable auto loans to low-income households. In the interest of flexible implementation, we do not recommend any specific changes to the regulations, but we encourage ARB staff to make this aspect of the program a high priority in improving district pilot level programs.

We believe these changes will provide for an enhanced fleet modernization program that improves air quality, reduces greenhouse gas emissions, and improves economic outcomes. And we believe that SB 459 provides the legislative intent to make this transformation of the EFMP a reality. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

MR. KNOX: Good morning, Board members and Chair.

I'm Tom Know of Valley Clean Air Now. Thank you for the chance to speak on this.

This is a date we've been very excited about for the last six or eight months. Thank you, staff and management, for just a really wonderful experience during this time. They have been incredibly helpful, open-minded, and very flexible in helping us to start to experiment with an EFMP type program with Valley Air District.

The lessons that we've learned from that I think are valuable. We've been sharing them with staff. We'll have a more detailed report now that we've done the 18 vehicles. The first round of funding for the Valley Air District, we'll be sharing that with staff along with the lessons we learned during that. The main lesson being that we need to be as flexible as possible when dealing with the low-income vehicle purchasing audience. We've

got to find people that are aware of the problem that are motivated to change. We've got to get them through financing. We have to get them into a vehicle that works for their family. There's a lot of steps to keep people with a lot of challenges and distractions in their life through. If we can't move quickly, we lose the customer. So we'd like to work with goals rather than guidelines. The more rules that are involved here, the more chance we're going to lose those customers. They're well meaning. They want to do the right thing. We need a clear path to get them into a vehicle that works for them.

So we do ask that the fuel efficiency guidelines in the staff report are followed. We think they're reasonable. It's going to trim some of the vehicles that we've got available. I think we can deal with that. But if the mileage requirements are increased, it severely decreases the number of vehicles available. And it really skews it up toward a hybrid range. We're looking for vehicles in the \$12,000 range to increase up to 27 miles per gallon. It's going to add to one to -- that puts it out of range for our target low-income audience. So it probably takes 75 percent of the vehicles that are feasible replacement vehicles out of contention for these customers.

And then our one other request is we've seen that

\$5,000 works. The math works for our customers. \$4,000, you don't have the same kind of loan-to-value ratio. It's a lot more difficult to qualify for financing, which is already difficult in the first place. \$5,000, we see the light turn on. The math works. They can get the financing. They can get a monthly payment that works for them. To us, it's really the threshold that the program really starts to work.

And that's all for now. But we look forward to a long rapport in the future. Thank you.

CHAIRPERSON NICHOLS: Thank you.

MR. MAGAVERN: Good morning. Bill Magavern with Coalition for Clean Air.

And today is an exciting day, not only for soccer fans, but also in the air quality world. Because I think there was a period when the importance of retiring older vehicles and helping low-income people get into cleaner vehicles was not getting the attention that it deserved in this state. But lately, we've seen with the law passed by -- authored by Senator Pavely, as well as the excellent work done by your staff over many months now, these programs really are getting the attention they deserve. And you have a really good proposal in front of you today. We certainly urge you to adopt it.

As you've heard, not only are the benefits of

getting some of the dirtiest cars off the road and the major decrease in criteria air pollutants we get from that, we also see benefits from the perspective of reducing emissions of greenhouse gases and also just helping people obtain more reliable, safe, clean transportation, which is really significant for a lot of people in this state.

In this retirement proposal, we agree with the limit to low-income drivers and also with the smog check requirement to prove functionality. We think that makes a lot of sense. In the retirement and replacement area, we agree with the limit to low and moderate income. We strongly agree with the inclusion of the community outreach model. Tune In Tune Up is a model that really has worked, and we should be building on that.

We support the higher incentive levels for the reasons that Tom Know just gave. And we also really like the improved funding options for transit and alternative mobility and advanced cleaner vehicles. So you're creatively finding ways to meet the transportation needs of Californians with different kinds of transportation needs.

The pilots in the disadvantaged communities match up very well with what we're working towards in the Charge Ahead California campaign.

We would suggest that you not lower the miles per gallon requirements that are in the proposal. And that as the pilots move forward that we look for ways that we could in the future increase those levels as more used vehicles become available with higher miles per gallon which will happen over the years in response to the clean cars law also authored by Senator Pavely and implemented by this Board. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

Rosemary Shahan.

MS. SHAHAN: Chairman Nichols and Board members, I'm Rosemary Shahan, President of Consumers for Automobile Reliability and Safety. We're based here in Sacramento. We're a nonprofit consumer group. We work on a state and federal level on behalf of consumers.

And we haven't taken a position regarding the proposal, although we very much support the goals. And we feel very strongly it's very important for the program to succeed.

We met with them. I bonded with some of them, going to Valley CAN, and getting up at very early hours of the morning and seeing people lined up. Some of them had waited all night in order to get into the program. And that can help create a real reality check on, you know,

these are the people that we're dealing with and how motivated they are to have vehicles that are functional and that they can register and operate legally in our state.

Pavely's legislation, SB 459. And definitely want to see the program succeed. And that's why we're asking for more consumer protection built into the program. And I believe that the staff got it right when they wrote on page 14 of the proposal that consumer protection is essential to ensuring that the program benefits are realized by the participants. And this is a program that's going to depend to a great extent on public perception and the perception of consumers that they can get into the program and get a fair deal. And they won't be harmed economically or that their safety won't be jeopardized.

And it's important to note that although I understand our friends at car dealers have said that existing laws is adequate to protect consumers that I wish it were. But it isn't. Under federal law, new cars that are under safety recall cannot be sold to consumers by a new car dealer. When they're under safety recall, the dealer has to put them aside and wait until they are fixed. There is no comparable law either at the federal level or the state level that prohibits dealers from

selling used cars under safety recall. And unfortunately, they do sell cars under a safety recall. And we've been working with consumers who were sold -- for instance, I'm submitting this for the record the New York Times front page story David Clayton in Fresno bought a certified car that was under a safety recall. CarMax, we just submitted a petition regarding CarMax --

CHAIRPERSON NICHOLS: Your time is up -MS. SHAHAN: They also sell cars under safety
recalls.

CHAIRPERSON NICHOLS: Thank you.

Carishma Menon.

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MS. MENON: Thank you, Ms. Chair Nichols. And good morning to the Board.

My name is Carishma Menon. And I, on behalf of the NRDC, and the Charge Ahead, a California company, I commend staff for a comprehensive report on their proposed amendments to the EFMP.

Staff has effectively responded to the directives contained in Senator Pavely's SB 459 in ensuring that older, heavily polluting vehicles are retired and replaced with newer, cleaner, and more efficient ones. These efforts align with the interest of the Charge Ahead California campaign which has sponsored by Assembly Member De Leon SB 1275.

We support the limitation of retirement-only incentives to low-income households. These populations are most significantly effected by low air quality. And this restriction will help ensure that the program targets these groups. Also means that more funding can be channeled towards the retire and replace portion of the program.

We also support staff's proposal to require a smog check to assess vehicle's functionality to ensure that high-polluting vehicle retirements provide meaningful emission reduction goals.

We also support the modifications staff has proposed to the retire and replace program. A strong emphasis on outreach and education to low-income and disadvantaged communities will be key to the success of the program. This also aligns well with the directives contained in SB 459.

We also welcome the tiered incentive approach whereby high incentives given out to lower income populations and where more efficient vehicles. Additional incentives to participants to go CARB free are also in line with the mobility option contained in SB 1275. This proposal is, in fact, precedent setting and is a combination of VMT reducing strategies with vehicle retirement programs. Such incentives will further drive

cost savings in.

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In proposing a minimum efficiency requirement, staff has created a way for participants to see additional savings by opting for cleaner vehicles at similar price points. Bringing this requirement in the future will facilitate greater operative savings and emission reductions.

We also fully support the program's proposed outreach and education components and note that the program compliments the EFMP plus up financing and car sharing pilots in disadvantaged communities proposed by the AOIP funding plan.

We recommend the Board coordinate implementation of the retire and replace program and these closely related pilot programs in disadvantaged communities.

Once again, we applaud the Board for its hard work and continued commitment to tackling air quality issues through sustainable transportation efforts. Thank you.

CHAIRPERSON NICHOLS: Thank you.

MR. MARIN: My name is Jose Marin. I direct outreach and community partnerships for Valley CAN and the Tune In Tune Up Program.

I just want to reinforce the importance of community organizing and community inclusion in the Tune

In Tune Up Program events, both with the smog repairs and now with the check retirement and replacement program. We work with the large and growing number of community organizations and local groups throughout the San Joaquin Valley. And I just want to thank you for the support for these communities, these very low income communities and want to applaud for your staff who has done a wonderful job at supporting these communities, who I have the fortune of organizing a large group of on these communities for one of our meetings in Fresno. And they all send their support for this meeting today. Thank you.

Ms. Garcia.

CHAIRPERSON NICHOLS:

Ms. GARCIA: Good morning. My name is Veronica Garcia, and I actually coordinate the Vehicle Retirement and Replacement Program for Valley CAN.

Thank you.

From personal experience, during these vehicle retirements, it is imperative that we maintain the flexibility while we are guiding our participants through the vehicle purchase process. The participants that we've been dealing with, they look forward to fuel-efficient cars. It's an idea they now consider, but by necessity, by the financial necessity, they have -- they're very cost conscious. Most of the cars that our participants have chosen are in the \$12,000 range. And if it was possible,

they actually look for something that was less expensive because of the type of financial situation that they're in. The jobs they have are not jobs where they make a lot. They're minimum paying jobs.

As Mr. Know mentioned, imposing additional requirements for higher fuel efficiency would by a minimum increase the prices of these vehicles anywhere from 1,000 to \$3,000. And again from personal experience, retiring these 18 vehicles, this extra cost will place a program out of reach for many, if not all, of our low-income participants. Thank you.

MR. BARRETT: Good morning. I'm Will Barrett with the American Lung Association of California.

First of all, we want to support the amendments and thank staff for the work to ensure it truly works to improve air quality and public health, especially in the South Coast and San Joaquin Valley as you heard earlier.

We appreciate the emphasis and the commitments on the community outreach component and education components of ensuring that the program really does target the lower income drivers and the highest polluting vehicles and takes vehicle that would not continue to be on the road, really make sure we get the right vehicles retired.

We appreciate the incentives for transit. We think this component really does work well with SB 375

goals. That's something we've been working on very closely in the San Joaquin Valley. We think that's a really important step to get people option for not having to drive. So appreciate that.

We also join with our colleagues in the Charge
Ahead Campaign and the recommendation for the ongoing
review to update the efficiency thresholds to maximize air
quality and cost savings under the program going forward.

So that's all. I just want to thank you for the work and support the efforts and praise for Charlyn. Did appreciate that. Thank you very much.

CHAIRPERSON NICHOLS: You're allowed to take time for that. Thank you.

That concludes the list of witnesses that I have.

I wonder if staff had any additional comments before we bring this back to the Board. We heard a number of comments about the need to give the greatest possible flexibility to the districts and to their partners in implementing this program as we move forward.

I understand that we don't want to just keep on tinkering constantly with the program, for one thing, because we need to get good data. That's probably as important as anything else. We have acted in response to information that indicated that this program was not achieving its goals. I think we've come up with a number

of recommendations that will clearly improve it.

I'm always mindful of the fact that if you keep on fiddling, you might be able to make improvement but you might also sacrifice progress. So I think in general we've heard enough to indicate that we should move forward with the proposal as it is. But we could hear some suggestions or concerns. So I'd like to hear the staff's response.

MSCD CHIEF WHITE: Eric White with the Mobile Source Control Division.

First, let me say I'm very pleased to hear from the stakeholders that staff's proposal really is going to provide that flexibility that we heard is so crucial to help not only bring people into the program but to help them successfully navigate the transaction process and get into that cleaner vehicle.

As we've listened today and worked on this proposal, there's really two areas that I think where there's some comments about whether or not the staff proposal should be changed. One was about any minimum fuel economy requirements for the replacement vehicles. What that's referring to is those that meet the eight years or newer requirement. We think that in order to allow the maximum flexibility -- you heard about the sensitivity and the price, which these participants have.

It's important to make sure that we have as many vehicles available into the program.

One opportunity we have though is as we experience successes with this and we start to see the successes that we're expecting, we have the ability to work with the districts to increase those minimum mileage requirements through future year programs and solicitation. So we think we have a mechanism to address that. And I think it's also important to note that there is a strong educational requirement in this that will be part of the district's program. So educating consumers about the benefits of a more efficient vehicle that is available through the program we think will really help address some of those issues because there are cost savings for the more efficient vehicles.

CHAIRPERSON NICHOLS: In terms of operation, you mean?

MSCD CHIEF WHITE: Yes. On a monthly basis in terms of fuel savings for the participant.

The other relates to what is the appropriate minimum amount for these vehicles. Should it be 4,000? Should it be 5,000? Our experience has been that this program has not been successful so far. And what we really want to do is be able to build on some success and make sure that we can fund as many vehicles as possible.

The proposal that staff has sets a floor. The \$4,000 is a floor by which we can increase as time goes on and if we see participation is not at the levels I think everyone in this room is hopeful and expectant that it will be. We have the ability to offer higher levels moving forward and stand ready to do that in conjunction with the districts.

CHAIRPERSON NICHOLS: Thank you.

Supervisor Gioia.

BOARD MEMBER GIOIA: Thanks.

Just on the discussion of how to improve participation by low-income voters, I think that's always going to take some effort. And I know you've talked a little bit about that in the slide. Can you go into a bit more on your initial thinking how to do this? I think it should involve greater partnerships with community-based organizations in these communities. Having a statewide program, even though it's regional, be successful is a challenge. So talk about how you're thinking of developing the outreach and more the process of how you're going to do it. Because I do think it would be useful to give some thought to that.

CHIEF ROWLAND: My name is Scott Rowland. I'm with the Mobile Source Control Division.

One of the things that we learned from the

previous iteration of the pilot program for retire, replace is that outreach is crucial. It does need a lot of one-on-one sort of contact. And what we heard early on was advocates of the San Joaquin Valley Tune In Tune Up process as a very good way of reaching that target demographic.

And so that basically informed our approach in realizing that there is a need not necessarily to mimic that process exactly, but to enable the districts to have the resources to engage on a very direct level with folks.

And so as you've heard, a big part of our proposal is the flexibility for the districts to determine what's going to be the approach that works best for their communities and their constituents. But one of the things we did to sort of sweeten the pot, if you will, or to help them be able to do that is we are proposing that they get an additional amount of administrative resources of the funding to basically partner with local community groups. And it's going to be up to them to determine which ones are the appropriate ones.

I think San Joaquin Valley, you know, obviously they're building on the success of Tune In Tune Up, which I think is quite wise. South Coast, very different circumstances. They're taking -- again, I think a wise approach of basically saying, okay, our previous ways of

doing this didn't really hit this demographic. Let's have an open mind.

So in some ways, that's probably not a real good answer to your question. But I think the bottom line is the districts need that ability to figure out what is going to work best for them.

BOARD MEMBER GIOIA: So the South Coast Air

District will take the lead on determining the strategy of how best to do outreach?

CHAIRPERSON NICHOLS: Yes.

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CHIEF ROWLAND: They have the RFP out. ARB staff has submitted to work with them to help evaluate the responses to that RFP and to work with them in determining, you know, essentially is the bid that you got sufficiently responsive to the requirements of the program.

BOARD MEMBER GIOIA: I know we have a Board member from South Coast up here. Is there sort of discussion up until now on this?

BOARD MEMBER MITCHELL: This discussion is just beginning. The Technology Committee of the Governing Board approved last Friday the issuance of an RFP to determine how to administer this program to look at various proposals for administering the program. The Governing Board will take that up at their July meeting.

And we will then look at what is proposed by various proposers and determine what we think -- in conjunction with the ARB staff what we think will work.

I do have another comment, Chairman Nichols.

CHAIRPERSON NICHOLS: I just wanted to say I've seen different districts do some criteria if they have a little bit of money to spend to target people for replacement, certainly in the truck area, you know, all kinds of community events and fairs and other things were done, BBQs, you name it, wherever we could find people that were part of the targeted audience.

BOARD MEMBER MITCHELL: I wanted to comment I know staff haven't fully developed the EFMP Plus Program. I'm going to make a suggestion. You probably already thought of it. That if an additional incentive could be offered for putting folks into hybrids or hybrids plus, however it's better. Because one goal we want to reach in this state is further market penetration of the clean hybrid cars. And we want to do that with this lower income and moderate income segment of our communities. And this program provides a road to do that. And strongly encourage you to consider that as part of the program.

We heard people mention incentives should be 5,000 instead of 4500. You could add an additional 500 to

get to that 5,000 level, but then we ask them to be put into a hybrid or better car. And that also complies with the goals of SB 459 as well. So just a suggestion. And something to take a look at. Thank you.

CHAIRPERSON NICHOLS: I think it is already under consideration at this point. So thank you. Any other -- yes, Dr. Balmes. And we need to move this onto a vote.

BOARD MEMBER BALMES: I told staff when I was briefed how much I like the alternative mobility options. But since my briefing, I wondered have we market tested this, if you will? Do we know this is -- it sounds good. I'd love to see people give up their cars and use public transit. Do we know is this likely to be a popular option?

MSCD CHIEF WHITE: I think I would say we don't know yet. And there's certainly going to be challenges from the very practical standpoint that many residents may need to travel through different counties, different transit agencies. But we will work with the air districts to -- we'll work with their local transit agencies to put together a package that may include both transit and ride sharing and other types of travel modes together in a way that will work.

This is -- I think this is somewhat in a sense uncharted territory. But it has such potential. And we

certainly understand the importance of trying to make this work. So this will be really be a good incubator for trying to make programs like this work that hopefully can be expanded into other programs as we move forward.

BOARD MEMBER BALMES: One other comment about one of Seyed's slides about the cars that didn't meet current MPG requirements. There are three Chevys: The 2011 Chevy Malibu, 2012 Chevy Malibu, and the 2012 Chevy Cruise.

First of all, I find this amazing and not a very good sign for the new GM. But I do also feel these are much better vehicles than what they were replacing. So I will say I think say it was arguing for more flexibility in this regard. I'm supportive of that.

CHAIRPERSON NICHOLS: Okay. Well, I think it's time to move on. So I should officially close the record, which I didn't do before. But the record is closed on this item. And I'll ask for a motion.

BOARD MEMBER EISENHUT: So moved.

CHAIRPERSON NICHOLS: Dr. Eisenhut.

BOARD MEMBER BALMES: Second.

21 CHAIRPERSON NICHOLS: All right. All in favor, 22 please say aye.

(Unanimous aye vote.)

CHAIRPERSON NICHOLS: Opposed?

Abstentions?

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Very good. Thank you very much. This is a really exciting new opportunity. And I'm looking forward to seeing how this evolves. I think the public transit agencies are going to jump on this. If given an opportunity, this will be an opportunity for them to.

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Our next item which is related in a very obvious way is the funding plan for the Air Quality Improvement Program, or AQIP, as it's been called around here.

Funding for low carbon transportation investments from cap and trade proceeds. This funding plan will serve as the blueprint for spending \$22 million for incentive projects in fiscal year 2014-15. For the first time, this year's plan also includes \$200 million are predicated from the greenhouse gas reduction fund for low carbon transportation investments. These greenhouse gas investments will support a substantial investment in disadvantaged communities as well, with half of the \$200 million allocated specifically to benefit these communities.

These funds are critical to continue to support the early introduction of the next generation of clean vehicles and equipment to California's fleet. It is important to see these two things are working in tandem with each other, even though they have separate legislative sources and separate funding sources. We need

to make sure that they are coordinated with each other.

The success of the effort is no more readily apparent than in the Clean Vehicle Rebate Project, or CVRP, which has gathered a great deal of attention where we issued over 60,000 rebates since 2010. And as we heard at our Board meeting in April, the funding ran out early once again. And so we had to initiate a waiting list which was fulfilled with the recent passage of the state budget. Overall, the investments made by this year's plan are an important step in the transformation of the California vehicle fleet to one with widespread use of zero and near zero emission vehicles.

This year's combined AQIP and low carbon transportation investments will help the state begin to make considerable progress towards meeting our air quality and climate change goals. I would say we've already begun. I think it will accelerate.

Mr. Corey, would you please introduce this item?

EXECUTIVE OFFICER COREY: Yes, thank you,

Chairman.

AQIP has traditionally provided about \$25 million annually to invest in the clean vehicles and equipment projects that reduce criteria pollutants and air toxics and often concurrent with greenhouse gas reductions. AQIP expands ARB's air quality incentive providing the

opportunity to fund projects not covered by other incentive programs which focus on near-term emission reductions from old commercialized technology.

AQIP is ARB's only incentive program structured to enable investments in technology advancement in projects that also provide immediate emission reductions. In the program's first few years, the program has helped accelerate the introduction of the advanced motor vehicle technologies just coming to market, such as hybrid trucks and buses and zero emission passenger cars. Widespread use of these technologies is critical for meeting our post-2020 air quality emission reduction targets, as well as the climate change reductions.

This year's combined funding plan includes a long-term vision for how AQIP incentives should continue to support market transportation management compliance formation in the future and identifies metrics for measuring the success of the projects funded.

The funding plan further establishes ARB's priorities for the funding cycle, describes the projects we should fund, and sets funding allocations. The funding plan maintains coordination with the Energy Commission's portion of AB 118, which supports the necessary infrastructure foundation for cleaner cars and trucks.

Lisa Macumber of the Innovative Strategies Branch

will present staff's proposal. And at the conclusion of staff's presentation, Jim McKinney at the Energy Commission will provide some comments on staff's plan and how it coordinates with the CEC's efforts. With that, Lisa.

(Thereupon an overhead presentation was presented as follows.)

MS. MACUMBER: Thank you, Mr. Corey.

Good morning, Madam Chairman and members of the Board.

Today, I will present staff's recommended fiscal year 2014-2015 funding plan for the Air Quality Improvement Program, commonly known as AQIP, and low-carbon transportation investments generated by the state's Cap and Trade Program.

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MS. MACUMBER: Last year at this time, we brought you the current year's funding plan and highlighted the growing command for incentives and the limited sources of funding available.

This year, we are excited to tell you that the Governor, Legislature, and our stakeholders agree that more investments in criteria and greenhouse gas emission reduction projects are needed.

This year's state budget builds on AQIP's past

successes with a \$22 million allocation, and also includes \$200 million in new funding from cap and trade auction proceeds to expand existing projects that help further the purposes of AB 32, with an emphasis on investments in light-duty advanced technology vehicles and the freight sector and significant support for disadvantaged communities.

AQIP offers a successful framework for allocating this funding since the program support's mobile source technology advancing projects that are critical to meeting California's post-2020 air quality and climate change goals, while also achieving immediate emission reductions.

For today's presentation, I will provide you with a brief overview of our program before presenting staff's recommendations for allocating a total of \$222 million from AQIP and low carbon transportation investments.

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MS. MACUMBER: First for some background, AQIP was established by Assembly Bill 118 and updated last year by Assembly Bill 8. Assembly Bill 8 extended the fees that support AQIP through 2023. AQIP is ARB's only incentive program that funds the deployment and demonstration of advanced technologies, which are the basis for the transformation of the vehicle fleet necessary to meet our long-term air quality and climate

change goals.

Each year, staff brings the Board a proposed funding plan, which details the priorities and projects to be funded in the upcoming year. As part of this year's funding plan, and to be included in future years, Assembly Bill 8 requires ARB to conduct a benefit cost analysis to score projects eligible for funding. Staff conducted that analysis, and I will present the resulting projects proposed for funding later in the presentation.

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MS. MACUMBER: AQIP was established alongside two other programs: The Energy Commission's Alternative and Renewable Fuel and Vehicle Technology Program, which provides both direct and indirect support to AQIP by co-funding some of our projects, and funding infrastructure to support our deployment projects. And the Bureau of Automotive Repair's Enhanced Fleet Modernization Program, which you acted upon in the item prior to this one.

ARB works closely with both agencies on the implementation of these programs. For example, ARB's partnership with the Energy Commission has been essential to the success of AQIP as their co-funding for the Clean Vehicle Rebate Project over the past two years has ensured the project's critical continuation.

The Bureau of Automotive Repair has also provided significant investments to support clean car rebates this past year by helping to fill the waiting list demand from the past three months. Further, the Energy Commission's significant investments in fueling infrastructure remains vital to ensure a successful zero emission vehicle roll-out in California.

To help highlight our partnership, the Energy Commission staff is here with us at the table today and will provide a few remarks at the conclusion of my presentation.

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MS. MACUMBER: Now for an update on ARB's advanced technology investments. Since the program's inception, AQIP has invested over \$250 million, resulting in over 12,000 tons of criteria emission reductions, and six million metric tons of carbon dioxide equivalent for the last, administrative of the vehicles and equipped funded. AQIP deployment projects which offer rebates for clean cars, vouchers for advanced technology trucks and buses, and loan assistance for truck upgrades or replacements, have seen the largest investments and concurrently have provided the most significant benefits thus far.

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MS. MACUMBER: Now I will present staff's proposed funding plan. As mentioned previously, this year the funding plan has proposed allocation for the \$22 million from AQIP and \$200 million from the new low-carbon transportation appropriation in the state budget.

Low-carbon transportation funding is intended to support greenhouse gas reduction projects that also achieve co-benefits, provide benefits to disadvantaged communities, and be consistent with the administration's three-year investment plan. These investments provide an incredible opportunity to build upon AQIP's success.

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MS. MACUMBER: But before I present the list of projects proposed, I'd like to highlight an important element of this year's plan. Last year, the Board directed staff to evaluate the long-term need for AQIP incentives. Despite the success of AQIP to date, there remains an ongoing need for incentives in the mobile source sector. Incentives will remain necessary until main stream consumer acceptance and broad market diversity is achieved and the costs associated with advanced technologies comes down.

This slide illustrates the evolution of incentives from the demonstration to commercial, to transitional phases, in which technologies are tested in

the field, introduced to the market, produced in larger numbers, and then finally accepted by main stream consumers and transitioned into other populations.

Incentives are needed to support technologies across this entire spectrum, with the highest cost investments for smaller projects in the demonstration phase to lower incentive amounts for a much greater population of vehicles or equipment in the commercialization phase, to more highly targeted incentives for specific demographics, such as low-income populations or disadvantaged communities in the transition phase.

Later in the presentation, I will highlight for you where each of the projects we are proposing to fund fit within this landscape and what tools we expect to use to measure each project's progress as they move along the incentive funding horizon and actually transition away from incentives.

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MS. MACUMBER: Now for key elements of our proposal; the projects. This year, staff is recommending dividing investments into three primary categories:

Light-duty vehicle projects, heavy-duty vehicle and equipment projects, and loan assistance programs. A very small portion of the funding from AQIP is recommended as a

reserve for revenue uncertainty.

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This slide lists each of the proposed projects within the primary categories and the amount of funding from the two funding sources: AQIP and low carbon transportation investments.

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MS. MACUMBER: As you can see, staff is recommending that the bulk of funding for this year be directed to light-duty vehicle projects, namely, the Clean Vehicle Rebate Project, or CVRP. However, substantial investments are also recommended in the heavy-duty vehicle and equipment sector, particularly for new pilot projects that deploy zero emission trucks and buses and advanced technology demonstrations in the freight sector.

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MS. MACUMBER: One important aspect of this funding plan is that staff is targeting 50 percent of the low carbon transportation funding to benefit disadvantaged communities.

To illustrate, the middle column of this slide now displays the low carbon transportation funding allocation for each project. And the far right column displays the proposed percentage and corresponding amounts of that allocation that will be targeted to benefit disadvantaged communities.

As you can see, staff is relying greatly on heavy-duty vehicle and equipment projects to provide these benefits, as they currently are the type of projects that provide direct benefits to disadvantaged communities.

How we determine these benefits is still under development. But staff expects that guidance will be available later this summer.

In the next few slides, I will cover these projects in more detail, including providing an update on the implementation of existing projects. I'll start first with light-duty vehicle projects.

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MS. MACUMBER: CVRP offers rebates to consumers that purchase or lease light-duty zero emission and plug-in hybrid electric vehicles. CVRP is designed to accelerate the widespread commercialization of these vehicles by partially offsetting higher costs relative to comparable conventional vehicles. These higher costs not only include sticker prices, but higher taxes, license fees, and annual license renewal costs.

Currently, the rebate is \$2500 for a zero emission vehicle, such as a Nissan Leaf or Ford Focus electric, and \$1500 for a plug-in hybrid, such as a Chevy Volt or Toyota Prius plug in. The rebate can be combined with a federal tax credit of up to \$7500 for those that

qualify, HOV lane access, and other incentives offered at the regional or local level.

To date CVRP has issued over 60,000 rebates, totaling \$132 million, which is more than double the amount of rebate activity reported to you last year at this time.

Since April, when the \$30 million waiting list was issued, about 12,000 rebates have been reserved.

While the zero emission passenger vehicle market continues to grow, it remains at a critical development stage and is just now beginning to transition beyond early adopters to main stream consumers. In order to achieve the goal of deploying one and a half million zero emission vehicles in California by 2025 as directed by the Governor's Executive Order, continuing to support incentives for these vehicle remains critical.

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MS. MACUMBER: For the 2014-2015 fiscal year, staff is proposing to allocate a total of \$121 million for CVRP. This allocation for CVRP includes \$5 million in supporting investments from our partners at the Energy Commission.

Because of the tremendous success we've experienced with VRP this year, staff spent considerable time evaluating the needs of the project going forward.

Staff held several workshops, workshop meetings, and individual meetings with stakeholders to discuss the many possibilities for how to structure the project for this upcoming year.

Staff analyzed a significant amount of vehicle data survey data collected as a part of CVRP to consider the consumer and market impacts of various potential project modification options that support the core principles listed above.

Staff projections for CVRP indicate that between \$130 million and \$200 million may be needed to support the project in its current form for the upcoming year.

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MS. MACUMBER: Since projections indicate a need above the proposed budget for CVRP, staff's original funding plan proposal would have reduced rebates by \$500 for both battery electric and plug-in hybrid electric vehicles. However, after continued dialog with stakeholders and considering that market variability in terms of future demand continues, today staff is proposing to maintain current rebate levels for battery electric and plug-in hybrid electric vehicles.

Staff will continue to monitor market activity closely and will return to the Board, if necessary, with recommendations for mid-course adjustments if demand grows

above expectations.

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Also, because fuel cell electric vehicles are just beginning to enter the market, staff is proposing to increase their rebate amounts to \$5,000. This amount is consistent with battery electric vehicle rebate levels when the program began and when they were at that same stage of commercialization.

Since CVRP is intended reach consumers who have yet to acquire the technology, staff is proposing to limit the lifetime number of rebates for individuals and businesses to two overall so that a greater number of consumers can participate in the program. This limitation would not apply to fleet or car share purchases, nor would it apply to consumers that purchase fuel cell vehicles.

Staff is also proposing to allow the Executive Officer flexibility to utilize a waiting list, as we done in several years past to help bridge a potential gap between fiscal years.

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MS. MACUMBER: Over the course of the next year, staff plans to work with stakeholders to continue to refine market demand projections so that we can be better informed moving forward.

Staff will also continue to evaluate options for the best ways to motivate consumers to purchase advanced

technology vehicles and continue evaluating research on the vehicle market and on incentives.

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Finally, staff proposes to develop and solicit new ARB-sponsored research in addition to research underway to inform when and possibly how to transition and eventually end incentives for the light-duty vehicle market.

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MS. MACUMBER: To compliment the efforts made through CVRP and bring cleaner technologies to disadvantaged communities, staff is proposing to allocate \$9 million to four pilot projects.

First, larger incentives are proposed for public fleets that traditionally cannot take advantage of the federal tax credit. Second, car share projects will help bring cleaner technologies to those in multi-family dwellings and other areas where the vehicles and infrastructure currently don't exist.

Next, staff is proposing to offer an added incentive, above the amounts approved in the previous agenda item for the enhanced fleet modernization program for the purchase of cleaner new or used replacement vehicles.

And finally, financing assistance, such as loan loss guarantees or interest buy down programs is proposed

for consumers that need additional financing support.

This investment will be used to evaluate the viability of these projects, collect data, and achieve immediate emission reductions from the vehicles deployed. Staff expects that these projects will be developed in a way that allows us to build upon them in future years so that they can become strong supporting projects that achieve significant emission reductions that benefit disadvantaged communities.

Development of these pilots will resume in the summer and fall with continued opportunities for public input and coordination.

MS. MACUMBER: Now it's time to move on to our recommendation for the heavy-duty vehicle and equipment sector.

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MS. MACUMBER: I'll begin with the hybrid and zero emission incentive project, or HVIP. HVIP continues to be successful in accelerating commercialization of new hybrid and zero emission trucks and buses. To date, over 1600 vouchers have been issued, totaling over \$50 million.

Currently, hybrid vehicles make up the most significant portion of the project's demand, with about 75 percent of the vouchers going toward hybrid vehicles.

Demand for these vehicles remains strong and continued

HVIP investment is considered critical to ensuring availability of these vehicles in the marketplace.

In contrast, demand for zero emission vehicles has been flat over the past four years, averaging only about 100 vehicles annually. Fleets have purchased zero emission trucks when they have been able to obtain local, state, or federal co-funding, which when combined with HVIP vouchers approaches full incremental cost. Additional incentives are needed to increase market demand for these vehicles.

Of the 25 percent of HVIP funding that has gone towards zero emission vehicles, the bulk has been for partial delivery, namely UPS, trucks, food distribution, and a variety of other trucks.

Because additional support is needed to help boost the placement of electric trucks, staff is proposing some modifications I'll discuss on the next slide.

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MS. MACUMBER: This year, staff is proposing to allocate up to \$15 million towards HVIP. The amount of funding allocation from a low carbon transportation will be dependent upon the criteria by which benefits to disadvantaged communities is defined. As mentioned earlier, efforts are underway to develop guidance for defining how projects will be evaluated as benefiting

disadvantaged communities. Once guidance is available later this summer, staff will determine the amount of HVIP funding that will be directed specifically to benefit disadvantaged communities.

If HVIP is unable to support \$10 million in low carbon transportation investments that benefit disadvantaged communities, only \$5 million will be allocated with the other \$5 million directed towards the zero emission truck and bus pilot projects, which I will discuss more in the next slide.

Also because zero emission truck and bus sales have been relatively flat, staff is proposing to increase the base voucher amounts for zero emission vehicles. To support increased deployment of disadvantaged communities, staff is proposing an additional increase in the voucher amounts for zero emission vehicles purchased to support those areas.

Staff is also proposing to strengthen hybrid vehicle eligibility requirements which includes adjusting the emissions testing requirements for vehicles that do not undergo fuel vehicle certification.

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MS. MACUMBER: In addition to the proposed modifications for HVIP that further support sales of zero emission trucks, staff is proposing to allocate up to \$25

million for zero emissions truck and bus pilots that support emission reductions in disadvantaged communities. This pilot is intended to be transformational in a way the first-come first-serve model HVIP cannot be by allowing vehicle purchasers to leverage resources, thereby helping bring down costs through larger vehicle purchases.

These projects would place a significant number of zero emission trucks and buses in a handful of strategic truck or bus hubs to encourage advanced technology including infrastructure, marketing workforce training, and other synergies. Staff believes that the Incentive amounts exceeding incremental cost and charging or refueling infrastructure funding may be needed.

Some examples of the types of projects that may be funded include zero emission transit or school buses, which could provide much needed support to offer the cleanest public transportation option or zero emission freight or delivery trucks, which could be centered around facilities like distribution centers or warehouses.

Similar to the light-duty vehicle pilot projects discussed earlier, staff expects that this investment will seed these projects such that they may be expanded upon geographically and among other fleets in future years.

In the coming months, staff will prepare a broad solicitation with public input that allows flexibility for

several project types to compete. The solicitation will be held open for multiple months to allow fleets time to maximize co-funding partnership opportunities.

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MS. MACUMBER: For the first time, staff is proposing to allocate a significant portion of funding for much needed advanced technology freight demonstration projects. These funds will target pre-commercialization demonstrations of advanced freight technologies that provide real and immediate emission reductions to disadvantaged communities.

The focus of past demonstrations have been directed at small scale projects with fewer than ten vehicles or pieces of equipment. This year, staff is proposing to focus the bulk of funding in the two specific areas in order to take advantage of the freight technologies that are currently ready for large pre-commercial demonstrations. Of the \$50 million proposed for this category, staff is recommending up to \$25 million to fund the demonstration of zero emission drayage trucks, up to \$25 million to demonstrate multiple types of zero or near-zero technologies, working cooperatively at distribution centers, warehouses, and intermodal facilities. And if available, up to \$10 million for other smaller scale freight projects.

In order to help inform planning for future years, staff is proposing to initiate a request for information process to solicit input from industry and stakeholders regarding future investments in advanced technology demonstrations. The input received will help us better assess the current state of technology and inform future funding plans.

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MS. MACUMBER: And now to discuss our last category of funding, loan assistance programs. The Truck Loan Assistance Program enables lenders to provide affordable financing to small business owners that fall just outside conventional underwriting standards and may not qualify for traditional financing. Financing is used to upgrade or retrofit trucks facing existing in-use fleet rules. Without this program, there may be no financing option for those business owners.

This program is currently administered by the California Pollution Control Financing Authority, or CPCFA, who also joins us at the table today.

What makes this program so unique is that it reaches California's fleets most in need of economic assistance. For example, 76 percent of loans are single truck owner-operators. Ninty-three percent of loans are to companies with ten or fewer employees. And 80 percent

of borrowers self-identify as a member of a minority group.

So far, ARB has invested over \$39 million in the program, supporting about 4200 loans and leveraging nearly \$280 million in financing. This equates to over seven dollars in private financing for every public dollar invested.

Staff is proposing to allocate \$10 million from AQIP. With the recent amendments to the in-use truck and bus regulation that extended deadlines for small fleet owners, staff anticipates that continued support for these truck owners will be needed.

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MS. MACUMBER: As mentioned earlier in the presentation, each of our projects is targeted toward supporting the transition of technology across this conceptual evolution of incentives.

To tie our projects together, this slide now identification where the light-duty projects, heavy-duty vehicle and equipment projects, and finally loan assistance projects fit within this incentives landscape.

Our proposed advanced technology demonstration projects and the zero emission truck and bus pilot are examples of projects still in the demonstration phase because they are focused on supporting large investments

to demonstrate the viability of technologies in smaller volumes.

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Because of the slow roll out of heavy-duty electric trucks and buses and the need to continue larger incentives for these vehicles, HVIP supports both the transition of these vehicles from very low deployment to commercialization. HVIP also helps spur market growth of hybrid vehicles which remain in the lower volume production phase.

CVRP and the light duty pilot projects support the commercialization of hybrid and electric light-duty vehicles whereby different vehicle types currently reside in different stages of commercialization.

Plug-in hybrid electric and battery electric vehicles are just entering the higher volume stage while fuel cell electric vehicles are now being produced.

Incentives funding remains critical for maintaining momentum towards full commercialization of these vehicles.

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MS. MACUMBER: And last, the Truck Loan
Assistance Program targets incentives for fully
commercialized technology toward small trucking fleets
that need incentives to adopt cleaner technologies.

While this project is the only one currently supporting the transition phase, staff expects that some

of the light-duty pilots, for example, car sharing and financing assistance, will help to serve this purpose in the future by bringing cleaner technologies into disadvantaged communities.

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MS. MACUMBER: AQIP incentives have traditionally been prioritized and structured to accelerate the advancement of vehicle technologies, first from demonstration to full main stream commercialization. And second, from the light-duty sector to heavier vehicle sectors as vehicle technology has typically migrated in this fashion.

Staff believes that AQIP should remain focused on supporting these transitions and recommends these priorities continues with the proposed fiscal year 2014-2015 investments.

Further, staff is developing long term visions for each of the proposed projects that addresses more specifically how evaluations or metrics can be used to gauge success in transitioning projects across the incentives funding horizon and eventually ending incentives for each technology or sector type.

Some examples of metrics staff will evaluate include market penetration of technology types, manufacturer diversity, technology costs, consumer

acceptance, and others. Each project, depending upon where it is within the incentives funding horizon, will have different criteria by which it will be evaluated. Staff intends to continue to refine these criteria and update the Board each year.

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MS. MACUMBER: This year's plan includes a series of investments aimed at reducing both criteria and greenhouse gas emissions in the near and long term, promoting the advancement and commercialization of the cleanest technologies available today and helping to bring emission reductions to disadvantaged communities that need them the most.

As in the past years, the funding plan also includes contingencies to address funding shortfalls, increases or other changes that may arise, and provides a comprehensive update on all of our projects to date.

With that, staff requests that you approve the proposed fiscal year 2014-2015 funding plan for AQIP and low carbon transportation investments with the inclusion of modifications to the original CVRP proposal.

This concludes my presentation.

At this time, I would like to invite first Jim McKinney, Manager of the Alternative and Renewable Fuels and Vehicle Technology Program at the California Energy

Commission to speak. And then Jillian Franzoia with CalCAP, Manager with the California Pollution Control Financing Authority, to say a few words.

Jim.

MR. MC KINNEY: Great. Thank you very much.

Good morning, Chairman Nichols and members of the

Board.

As Lisa said, I'm Jim McKinney. I'm the Program Manager for the Alternative and Renewable Fuel and Vehicle Technology Program at the California Energy Commission. We are the sister incentive program to ARB's Air Quality Improvement program.

On behalf of the Energy Commission, I'm here to offer our support to the staff proposed AQIP funding plan for 2014-2015. I and others from the Commission staff participated in many of the working group workshop level meetings that ARB staff posted for many parts of the funding plan, including CVRP, HVIP, the new ABA required metrics, and how to allocate GGRF funds.

Your staff has been thorough and inconclusive throughout the public vetting of these multiple option. A lot of these public meetings have included vigorous debates among the stakeholders, and again your staff managed that well. And we support these recommendations. A few I want to highlight are the new funding levels for

the fuel cell vehicle vouchers. It's very exciting. Hyundai has been first out the gate. Many of us went down to an event a couple weeks ago where the very first consumer in California was able to take possession of a commercially available fuel cell vehicle. So we think that CVRP \$5,000 voucher amount will be critical in helping to launch this part of the ZEV vehicle program.

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We're also extremely pleased to support the pilot program for disadvantaged communities. I think as we heard in the 88 deliberations at the Legislature, this is a critical function for us. As we learned from you and the air districts, it really is the people residing in the San Joaquin Valley and parts of the South Coast air basin that suffer most from pollution effects from the transportation sector.

We're also really excited about the ZEV truck demonstration funding level of \$50 million. We have been providing funding in the space since our program inception. And today, we've done about 70 million in investments for 36 projects. It's a very expensive technology class. Also critical if you kind of think through where the emissions comes from, both CARB and criteria and particulate matter emissions from the truck sector. So we really welcome this major influx in funding.

As we approach the 100,000 vehicle milestone in California, we celebrate the success of CVRP in helping to create the commercial market for light-duty electric vehicles. We know from our own experience with ARF that it's challenging to manage incentive programs as the early markets begin to gain momentum and transition from early adopter to fast follower. A key challenge is modulating its incentive levels so the program can stay within its budget parameters. This is critical. Again, a big part of the deliberation and the success with ABA, which we authorize our programs.

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In my view, they entrusted us to continue be stewards and wisely distribute these funds so we can promote these ZEV technologies. But they express concern on cost, cost effectiveness, and equity. So we take this as a serious responsibility.

And again, I want to applaud the ARB staff. It's very, very hard work to modify incentive programs. And no stakeholder wants to hear that funding levels for the technologies they promoted may have to be reduced and eventually phased out. But again, these are market transformation programs. These are not programs designed to fund implementation of other regulatory programs.

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MS. MACUMBER: I want to briefly share some of

our advise to ARB staff during the deliberations.

So first, use AQIP and GGR funds strategically to motivate the undecided consumer. In my mind, this is the key to continue building new market for electric vehicles. Let's not use the limited funds to reward consumers that have already made the decision. This may make everyone feel good, but it risks dramatically cutting the fund or diluting it so it's no longer a critical motivator for the undecided.

One of the measures that Lisa Macumber hinted at was some modifications for FEV vehicle eligibility. And I'd like to highlight that a FEV 40 is a very different feature from a FEV 10 in terms of how consumers are maximizing emiles out of a FEV 40 vehicle, like the Volt.

In terms of our contributions to CVRP, again, we're very pleased to have been able to offer the level of support we do. It's been \$49 million in total to date. We estimate that's about 21,000 vouchers. That's about one-third of the total voucher amount that ARB has been able to offer. So this includes the \$5 million that Lisa mentioned in our 14-15 investment plan that was just approved in April.

Summarizing some of our infrastructure investments that Richard Corey highlighted, in total, for the infrastructure side of the program, we now have \$38

million invested for over 8600 charge points and charges throughout California. I think we heard in other testimonies that some stakeholders are concerned we're falling behind.

But again, when you buy one of these cars, you can't take it home and plug it in. It's critical that we leverage that and build upon that as we work to get the infrastructure needed and the commercial zones, the destination areas, and the fast charger corridors.

For the hydrogen fuel cell part of our program, we now have \$80 million invested in funding. This will total 48 new and upgraded stations. And we think in 2015 when all these should be online, we'll have about 51 total stations. This's just critical because you can't take your new fuel cell vehicle home and plug it into the gas line at your house. This is a long way out.

In total, so we're coming up on the half-billion dollar mark in investments. We're proud to play the role we do. I think it's critical to just start moving the ball. We're seeing the needle move off zero as we start to see sizable numbers in the fleets, both from the infrastructure side and the vehicle side.

And lastly, I just want to just highlight some of the multiple collaborative efforts between the Energy Commission and the Air Resources Board. So first for the

investment plan, Dr Ayala has become a fixture at our Advisory Committee. And we always welcome his input and insight into this. This is great. Thank you, Dr. Ayala, for all your insightful comments to us.

The Integrated Energy Policy Report, Commissioner Ganeo Scott has been on a force march as we do the 2014 HYPR update to focus on transportation. Long series of workshops. And again, we hope these are informative and help inform parts of the ARB programs. And we really appreciate the participation of State Board Member Burg and others from ARB staff.

On the EVSE planning side, we are moving ahead with our NRELL assessment. And we'll convert that to a statewide plan as for the Governor's action plan. We want to acknowledge the staff efforts at ARB for planning for EVSE deployment. That's critical. We think these two things compliment one another.

On hydrogen-station planning and financing, the contribution from your technical staff have been great.

Mica Shuca, Gerhard Achtelik, Analisa Bevin, have all been integral parts of our planning team for the solicitation.

It was very well received.

ZEV truck deployments, we just love working with Joe Calavita and now Earl Landberg on that. We collaborate with you on LCFS and bio fuels.

The ARB technology assessment that's underway right now we think will be critical for the truck sector. And we're pleased to make the contributions we can to informing that dialogue.

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And most recently, I've been able to meet with Todd Saxton and work with his team as we try to educate the Board at AC Transit to stay the course on their fuel cell bus program. Both agencies have been able to contribute to those efforts.

In conclusion, I want to paraphrase a famous line from Casablanca, "Louie, this is a beautiful friendship."

BOARD MEMBER GIOIA: I was wondering which quote you were going to use.

CHAIRPERSON NICHOLS: All right. Let's top that one.

MS. FRANZOIA: I don't know that I can. Good morning, Madam Chair and members of the Board.

I'm Jillian Franzoia, the Program Manager for the CalCAP program at the State Treasurer's office. We administer the ARB On-Road Loan Loss Reserve Program. This program has been a collaborative effort and an excellent partnership between the Air Resources Board and the Pollution Control Financing Authority at the State Treasurer's Office. And the ARB staff has been so great over the past five years to work with facilitating such a

successful program.

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I think the success of the program speaks for itself by providing financial incentives to encourage lending. The program has put close to 4900 compliant trucks on the road and helped retrofit an additional 330.

In addition, the \$300 million in loans has contributed to creating or retaining over 9,000 jobs throughout the state. And over 75 percent of the loans were made in areas of high unemployment.

CPCFA and the State Treasurer's office support this additional funding as it would be beneficial to the small business borrowers who still need to upgrade their vehicles to meet compliance standards. Our statistics show that the demand is as strong as ever and continuing to grow. And although I don't have a quote from Casablanca, I would like to show our support for this funding plan.

CHAIRPERSON NICHOLS: Thank you very much. Appreciate your coming over too.

MS. FRANZOIA: Thank you for having me.

CHAIRPERSON NICHOLS: Okay. Shall we turn to the witness list then? Okay. Beginning with the Bay Area Air Quality Management District.

MR. FOURNIER: Good morning, Madam Chair, members of the Board.

My name is Anthony Fournier, Director of Incentives for the Bay Air Area Quality Management District.

I'd like to start off by thanking staff for their detailed presentation and all the hard work they put into the recommendation you prepared today. We've submitted written comments. I'm not going to restate all of them.

I'd like to highlight a few.

First, we are in support of the CVRP recommendation presented by staff. I would like to see a more detailed, longer-term lan to provide greater certainty for consumers and interested stakeholders.

We also are in support of the proposed increase for HVIP funding for zero emission truck and bus fleets. But the opportunities for freight demonstrations projects should be prioritized to areas with the largest population exposure to emissions from these sources and greatest potential for adoption.

We believe that the Vehicle Retirement Program and Replacement Plus Program should be open to all areas of the state with highest vehicle populations, traffic congestion, and lengthy commute times.

Finally, we believe the use of the CalEnviroScreen tool needs to be evaluated to ensure that funds are used to benefit those with the greatest need.

We are a care program. We spent the past decades working to identify communities within the Bay Area that are most impacted by air pollution. And we used this local analysis to get several of our local air district initiatives. Many census tracts in the Bay Area do not have CalEnviroScreen scores in the top 20 percent on a statewide basis. But nonetheless have helped areas within the top 20 percent for asthma and low birth weights.

On the basis of this, 18 percent of the Bay Area Census tracts would qualify as impacted. However, CalEnviroScreen scores show only three percent actually qualify.

We realize a long-term solutions would be technically difficult and time consuming, but we believe a two-step approach for allocating cap and trade leads to a practical solution.

Step one would be to allocate the funds to regions in proportion to the region's population.

Step two would be within each region distribute funds to impacted and disadvantaged communities based on localized method and where there is not a localized method, you could consider using the CalEnviroScreen tool on a regional basis.

The Bay Area stands ready to continue and work with ARB and OEHHA to further refine the CalEnviroScreen

tool. And I thank you for your time and the opportunity to comment today.

CHAIRPERSON NICHOLS: Thank you.

Mr. Hogo again.

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

Henry Hogo with South Coast AQMD.

I just want to express our support of the funding plan as proposed by staff. It's sends a really strong message to the community and to actually project proponents, goods movement expansion projects, especially project proponents for the 710 expansion and some of the other facilities that are expanding to incorporate the growth in goods movement. That zero emission vehicles, zero emission technologies will be there when they move forward.

And I just want to point to the 710 project proposal, because they're planning to analyze how dedicated zero emission truck freight corridor that will run along the I-710 for about 25 miles or so. So this is important signal to them that these trucks will be available if such a corridor is built.

So with that, I just urge moving forward.

CHAIRPERSON NICHOLS: Thank you.

Mr. Greene.

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MR. GREENE: Good morning. Larry Greene with Sac Metro AQMD.

We appreciate the work that ARB has put into AQIP and will continue our collaboration and strong support of the program. Specifically, we'll participate in the pilot program working groups and believe we have many opportunities in the Sac regional communities, especially for our disadvantaged communities, for high quality projects.

Our approach in the Sac region has been to focus on a full range of cap and trade funding streams that might benefit our region. As soon as the Governor's initial budget came out, we began to meet with our other regional partners such as cities, counties, SACOGs, transits, the Sacramento Housing and Redevelopment Authority, Sac Tree Foundation, and Valley Vision. All of these partners have training and funding programs for projects which would benefit from low and zero emission vehicles and infrastructure. And all share our goal of lowering greenhouse gas and criteria pollutants emissions.

Our common interest was that especially within the disadvantaged communities identified by CalEnviroScreen we could identify specific project areas where multiple funding streams could be leveraged. For example, we can likely leverage funding into areas already

identified in the SACOG, sustainable communities strategy, and CalEnviroScreen as disadvantaged to benefit from cap and trade funding for improved transit, urban trees, home energy efficiency, low and zero emission vehicles and infrastructure.

As we move into applying for project funds through ARB and other agencies also make applications in their traditional program areas, we will work to coordinate our efforts in this and subsequent years. We believe we have identified a range of project locations and partners in disadvantaged areas that will provide excellent greenhouse gas reductions as well as good co-benefits for reducing criteria pollutants. We will bring those ideas to the pilot program working groups and hope these good programs will turn specific and long-term funding for such programs.

We also intend to participate in the HVIP and zero emission truck and bus pilots. Our participation in AQIP, but really all the cap and trade funding areas, is very important to the Sacramento region, not only for greenhouse gas reductions, but because we're a severe ozone non-attainment area. Under the new tighter federal standards, we will continue to gain emission reductions for many years.

We look forward to close relationship with CARB

staff over these months as we develop and fund high quality projects under a cooperative relationship and develop a program for funding cycles in the future.

Thank you.

CHAIRPERSON NICHOLS: Thank you.

Mr. Clements.

MR. CLEMENTS: Good morning, Madam Chair and Board members.

It's an honor to be here today and actually say that I'm representing somebody else other than Kings Canyon Unified, which is Motiv Power Systems. They're the folks that provide the propulsion system that saved our electric bus project that's listed in your AQIP brochure.

They support this project. They see a number of opportunities in the near future, as I do, to serve the San Joaquin Valley. I think Seyed said it very eloquently, the folks that need that car crush program, we're talking about retirement here. I'm retired. I don't feel like I was retired because I've been chasing buses and trucks this year, electric ones.

But that said, those are the students that -- the constituents for that car crash program, those are the students that are riding on those Iwo electric school buses today. I have personally driven them home, as the Director of Transportation. I get to go back now as the

substitute driver in my retirement. And have personally driven them home. We're seeing that outreach as kids say why is this bus different. Second day I took them home, they said, "Can you honk the horn? Because my mom can't hear the bus coming." This was an added value in addition to the reduced emissions.

So currently I'm working with Motiv and a sales company here in California. And I think in the near future, we're going to see a larger school bus, an OEM school bus, that will come to the stage that will be all-electric that can continue to benefit the rural disadvantaged community.

I wanted to also mention as you talk about transportation hubs, this past week I visited an ag packing facility, one of dozens in my community. And was able to go there and offer a demo truck from another manager here in California, hybrid extended range electric that will run on natural gas that will be Kings Canyon Unified customer for natural gas. We have our CNG station, thanks to CEC and some other folks along the way. They were telling us there were 80 semi-trucks that leave that facility every day, six days a week. And all those products come on light and medium-duty diesel trucks currently.

So here's an example of an electric truck that

Kings Canyon Unified just look delivery of this past year that's all-electric, including the reefer. When we talk about serving disadvantaged, this is food distribution happening at a school level. We serve 10,000 students a day. That 600-mile region is on page 105 of the CalEnviroScreen map. And these are all free and reduced lunches going on a zero all-electric truck now.

So thanks for the opportunity to -- and I want to thank the staff for putting up with me during this retirement period.

CHAIRPERSON NICHOLS: Well, thank you. I think you're one of our more effective marketers. Appreciate it very much. Now if we can just get the CNG to be made from renewable gas, it's like a completely closed loop system. It's wonderful.

Mr. Pike.

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MR. PIKE: Hello, Chairman Nichols and members of the Board. My name is Ed Pike. I am with Energy Solutions California.

Thank you for the opportunity to provide comments today. We support the disadvantaged community pilot funding. And we think that would be a great match for a fuel efficient tire incentive replacement tire program focused on disadvantaged communities.

We appreciate CARB's recent Scoping Plan update

which recognized the potential benefits of fuel efficient replacement tires and also the potential for an incentive program to help permanently transform the market through enabling standards and ratings as well.

The Union of Concerned Scientists, Energy Solutions, and Mountain View Tire have submitted comment letters supporting the AQFP and the low carbon transportation fund as a potential resource for funding an incentive program. And the Energy Commission estimates on a statewide basis a fuel efficient replacement tire incentive program could save consumers almost \$900 million annually and reduce greenhouse gases by close to 3 million metric tons per year, which would be equal to 12 percent of the Scoping Plan update long-term transportation target.

We understand that staff would like to further vent the idea for further consideration in the 2015-16 plan, and we appreciate the constructive dialogue we've had with CARB staff thus far. And we look forward to continuing this helpful dialog.

In the meanwhile, we encourage CARB to note the potential benefits of an incentive program in the 14-15 plan as an informational item similar to the Scoping Plan update.

We also note that several commentors have

recommended that CARB retain some level of discretion in the plan for the disadvantaged community pilot funding. And we would similarly like to see CARB retain some discretion, if needed, for activities that staff decide are needed to further evaluate the proposed fuel efficient tire program at a level that couldn't diminish any of the other pilots.

Thank you again for the opportunity to comment. And again, we look forward to continuing our helpful dialog with staff.

MR. REICHMUTH: Chairman Nichols and members of the Board. My name is David Reichmuth. I'm speaking on behalf of the Union of Concerned Scientists.

I'd first like to recognize the work of ARB staff on producing a comprehensive plan to support transportation solutions that will reduce emissions and air pollution.

We have submitted written comments on support of the plan, including specific recommendations for heavy duty and freight. But I'm going to focus today on the CVRP program. UCS agrees with staff's recommendation to keep CVRP rebates at the current levels. With current rebates, we forecast CVRP program costs could range between 130 and 161 million, with a base line estimate being 137 million as shown there.

Now these estimates include protective rebate cost of fuel cell vehicles and program administrative costs. If no changes to the eligibility or incentive amounts are made, there is a substantial risk that the program costs will exceed the 121 million allocation in the funding plan. So we urge the Board to consider a combination of methods that will allow the program to function without a reduction in rebate amount.

First, we ask the Board to authorize a year-end wait list of up to 30 million. This will allow the funding for CVRP under our base line scenario. As you can see, they're not under a high demand scenario. Therefore, we believe the Board should adopt eligibility criteria based on annual household income to further reduce the risk of exceeding the proposed funding levels.

Data from a recent CVRP survey shows a potential correlation between higher household income and lower importance of CVRP in the purchasing decision. Setting an income cap would decrease the demand for rebates and also improve the effectiveness of the program. Based on staff's analysis, an income cap of 400,000 would save an estimated ten percent cost, which I show here. Yet, staff estimates only one percent decrease in EV sales overall. This greatly minimized the risk of needing a wait list, but these savings only happen if we implemented this at

the start of the year.

Now, UCS is not recommending a particular income level, but does recommend that ARB examine the raw survey data from CCSE to determine the optical criteria for CVRP eligibility.

We also like to note that the income cap is not an eligibility provision. However, the alternative of across-the-board cuts would have the most impact on the lower income households and more affordable models. That would negatively impact equity.

Finally, we agree with the recommendation to allow midyear changes to the program to keep the program costs with an allocation or within the wait list limit.

I'd like to thank staff again for the hard work on this plan and for the workshops and calls and the Board for the opportunity to comment here today. Thank you.

MS. MENDOZA: Good morning, Chairman Nichols and Board members.

My name is Jerilyn Mendoza here this morning -still morning -- on behalf of the California Air Resources
Board -- I'm sorry -- on behalf of Southern California Gas
Company. I looked up to say hi to LaRonda and I waived to
her and I said -- so I apologize for that. Please forgive
me for that.

So I'm here to say several things on behalf of

the Gas Company. One is we are definitely in support of the AQIP program as put forward by staff. Personally, I also would like to extend my thanks and hope it goes forward as my husband and I leased a beautiful Nissan Leaf last month. And we are very much looking forward to the rebate. And I will say in response to the previous comments, the rebate was actually a significant factor infrastructure our decision making. So we're really excited about that.

At the same time, I have to wonder when I look at the AQIP plan for about \$228 million, where the funds for deployment. There is a lot of money in there for research and development of pilot projects, but there are natural gas vehicles available now in the heavy-duty sector particularly effecting freight movement that are available right now that can significantly reduce particulate emissions criteria pollutants and GHGs to help us move forward on all of our goals. And there is no funding for that. There is no funding for moving those kinds of advanced technologies forward.

I've been told by legislators not to even bother trying to get natural gas funds or funds to move forward natural gas technologies from ARB because there is a singular focus on electric vehicles. And that makes me frustrated.

mentioned before, I served on the Harbor Commission for the Port of LA from 2005 to 2010. I'm going bring it up again. Because we reduced criteria pollutants by 80 percent in five years, primarily by transitioning out dirtier trucks for clean fuel, natural gas, heavy-duty trucks. And this was in a disadvantaged community. This was in a community that had struggled and continues to struggle with environmental justice issues and in working closely Brighton right near the Port of L.A. in East Long Beach, West Long Beach. Board Member Mitchell, you know what I'm talking about, the area I referred to.

So if we're talking about action taken today that can reduce emissions, that can improve our air quality, the natural gas technology is there. And there is no funds for it.

And yesterday, we had a seminar that we sponsored and Dr. -- may I just close on this point? Dr. Matt Misado from the South Coast Air Quality Management District was there. He talked about the importance of a multi-prong approach, different technologies reducing for different sectors. I just want to know where does the natural gas element fit. I think there is a role for us in the freight sector. Thank you.

CHAIRPERSON NICHOLS: Thank you.

MR. MAGAVERN: Bill Magavern, Coalition for Clean Air and also speaking on behalf of the Charge Ahead California Campaign.

I think, first, this plan shows ARB's commitment to reducing emissions from the freight sector. And so we're very glad to see the proposed investments in heavy-duty vehicles, the zero emission truck and bus pilot, as well as the advanced freight technology demonstration program and the extra bonus under HVIP for zero emission vehicles in disadvantaged communities. And the fact that all of this funding is slated to benefit disadvantaged communities is really great to see. We appreciate working with the staff on those programs.

Moving to the light-duty area, we're strongly supportive of the pilots, which again are targeted for disadvantaged communities, as well as for the continued funding for the classic CVRP program. We think it's premature at this point to reduce the rebate amounts so really appreciate the staff making that adjustment to keep those whole.

We do think that in order to make sure there is enough money to go around that instituting an income cap is the best way to go. And I second the testimony of Dave Reichmuth from Union of Concerned Scientists. This policy is not about punishing anybody or making a social

statement. It's simply really echoing what the Energy Commission said, that we want to give rebates to motivate purchase decisions. And when people get above certain level of income, the availability of the rebate is not what's motivating their purchase decision.

So we think it makes sense to focus the rebates on those who need them and therefore are motivated by the rebate in making their purchase decision. Therefore, having a sensible and moderate income cap is the best way to go. We don't know exactly what's the best level to do that. But would delegate that to data-driven analysis by the ARB staff.

Thank you. And I also want to add on behalf of the Coalition for Clean Air our thanks to Charlyn for all of her great works over the years and congratulations on a well-earned retirement.

CHAIRPERSON NICHOLS: Thank you. Okay.

Mr. Lovelace.

MR. LOVELACE: Good morning, Chair Nichols and Board members. I also submitted written comments, but I'm just going to present a portion of those here.

At XL Hybrids, we're appreciative in the AQIP funding plan for 2014-15 and agree with the basic principles and structures that have been proposed.

The concept of a funding level and time line that

declines as technology becomes more mature makes complete sense to us. However, we believe, of course, that such a plan needs to be comprehensive and a weighted portfolio to maximize the opportunities to achieve those long-term goals that are set forth for the funding sources.

On April 15th, XL hybrids provided feedback to broaden the H Class II PHEV at a properly weighted lower voucher level. The program currently supports Class III and up HEVs, but only PHEVs and EVs in the Class II B space.

ARB staff responded in their final plan document on May 23rd as follows, "Zero emission and zero emission range extended vehicles in the Class II A and II B classes are currently HVIP eligible due to their ability to achieve zero emission miles. However, non-plug-in hybrids are not HVIP eligible. As mentioned in this document, HVIP is intended to facilitate deployment of the cleanest technology, particularly in the larger tech classes that pose the greatest technical challenges."

At XL Hybrids, we believe the current program rightly places value on HEVs towards supporting a low emissions future as evidenced by support for Class III. But the staff response does not explain why by contrast the Class III HEVs are included in the program. Why is a 10,001 pound HEV more challenging than a 999 pounds HEV?

Why is a 10,001 pound HEV cleaner than a 999 HEV? The answer to all these are clearly no. The implication may be that Class II BHEVs are already main stream. It is well known that the major OEMs have pulled out of the HEV space, and therefore that's not true.

At the last page of my written comments, there is a chart of the nine vehicle classes and the three electrification classes. You can see there's only one square in the 27 that isn't supported.

The only class to which there is no incentives are Class II as summarized on this chart. The major OEMs sell to consumers in Class I. And some Class II pick-ups and SUVs and AQIP CVCR programs supports clean alternatives in those classes. The HVIP program supports Class III to eight, but not including the HEVs for Class II B.

CHAIRPERSON NICHOLS: Understand. I'll ask a question about that later. Thank you. Jaime Hall.

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

My name is Jaime Hall. I'm Policy Director for I CALSTART. We're here today in support of the staff proposal.

It's been busy couple months on this front, and we really enjoyed the opportunity to work with staff and

all of you. I'm sure they're really happy to have this plan finished. And they've done a great job.

I just wanted to provide some quick thoughts and reactions on the plan. The first on CVRP is we have been working with the broad coalition of auto makers and CalETC submitted extensive comments. I'll keep it short and sweet on this program.

CVRP is an important program. It's working. And all Californians benefit from the deployment of these vehicles. Therefore, agree it's not the time to cut rebates or limit eligibility at this time. And for those reasons, we support the staff proposal for both CVRP and the pilot programs. And we'd really like to thank staff for being responsive and working with us on this plan.

I want to change gears and discuss the mediumand heavy-duty investments briefly. We support the higher
HVIP incentives for the zero emission trucks and buses and
think staff should be commanded for recognizing the needs
of the market and recommending an increase to those
incentives because what the previous levels were not
enough to move the market.

We also strongly support the inclusion of the pilots and demonstrations. And as I think some of you know, we've been working with the coalition of zero emission bus manufacturers and suppliers and end users and

are particularly excited about the potential for the zero emission bus pilot projects.

I just want to leave you with some overarching thoughts on the structure of the plan. With this big increase in funding and with all the eyes on California right now and on what's happening with this program, we think it makes sense to maintain a little bit of flexibility and make sure you're able to achieve your goals. There are two specific areas I'm thinking of.

First, we think you may want to retain the ability to shift funds between pots depending on the proposals that come in and the needs of the market. And if available, if there are good deployment projects available, it would be nice to get more vehicles out in the near term to get benefits to point to.

Second, we think it makes sense to consider additional technologies, potentially including down the line additional technologies not currently in the program. I just mention the Class II B hybrids. There are some aftermarket solutions. And as Jerylin mentioned, there are some alternative fuel and near zero emissions from long haul freight opportunities you may wish to consider down the line.

Flexibility is particularly important given the goal and the medium heavy duty sector of directing

100 percent of these funds to disadvantaged communities. Definitely going to need some flexibility and creativity to make that happen.

So overall, this is an exciting opportunity in the plan. We support the proposal. We think it would be stronger with more flexibility. A lot of this can be handled in the implementation phase, and we're going to take part in the working groups and look. Good plan. And thank you.

CHAIRPERSON NICHOLS: Thank you.

MR. ELAM: Madam Chair, Board, my name is Rob
Elam from Propel Fuels. We have submitted comments in
support of AQIP's funding plan. I had a couple of quick
additional thoughts I'd like to submit.

First, a little context. Propel Fuels is
California's largest alternative fuel retailer, serving an imbedded fleet of vehicles, diesel and flex fuel vehicles.
Over half of our locations are located directly in disadvantaged communities. And over 80 percent of our locations are within a 15-minute drive time of disadvantaged communities.

We have been serving disadvantaged communities since 2008 with low carbon fuels. Approximately 49 percent of our customer base in the Inland Empire and San Joaquin Valley is Latino. And we understand the value of

price point fuels and vehicle limitations to the customer base in disadvantaged communities.

Two quick points. One, I'd like to echo we would support increased flexibility for staff to make technology choices across the portfolio, particularly to engage disadvantaged communities directly. So we would encourage staff to. You've heard from a number of folks about today.

Two, there's sort of a co-mingling of funds between AB 118 and GGRF. And 118 does not follow fad under SB 535. So we just wanted to note that.

But again, support the program. These are exciting times. And thank you for my comments.

CHAIRPERSON NICHOLS: Thank you.

MR. BAUMHEFNER: Thank you, Madam Chair.

Max Baumhefner on behalf of the Natural Resources
Defense Council and the Charge Ahead California Campaign.

I commend staff for developing a comprehensive plan to move the state's cars, trucks, and buses to zero and near zero emissions operations while improving access to cleaner transportation areas of the state suffering too long from air pollution.

We are strong proponents of the proposed medium and heavy duty projects and the proposed pilots and disadvantaged communities which align well with the vision

articulated by the Charge Ahead California Campaign and that of SB 1275 authored by Pro Tem Elect De Leon. We look forward to engaging with staff in the workshops to further develop these programs.

With respect to the CVRP, we support the decision to not adopt a significant rebate production at this juncture before the long-term planning that SB 1275 would require has occurred. This strategic planning would articulate an exit strategy for the program with rebates stepping down at pre-determined sales volume, taking the guesswork out of program planning.

Earlier this week, the Assembly Natural Resources Committee amended 1275 to include an income cap that would need to be implemented by June of 2015. And we note that early action by the Board in response would obviate the need for a midyear rebate production to keep the program within its means.

ARB staff have already analyzed various rebate income caps, revealing that significant savings can be achieved with little adverse impact on vehicle sales.

We presume this reflects the fact that many affluent respondents that the owner survey reported to ARB is they would have bought their cars anyways. Not all that data has been made public, but ARB staff has access to the underlying survey responses and could calculate an

income cap at a level that would prove the program's effectiveness without undermining progress towards our clean vehicle goals.

We also believe the administrative barriers to an income cap have been overstated. And we rely on a similar structure in the EFMP and believe we can do so here and have every confidence that the agency that administers the world's most comprehensive carbon pricing screen can build an income cap.

Accordingly, we reiterate the course of action outlined in our comments, which would be to implement an income cap now to provide immediate and significant budget savings but does not undermine progress towards our long-term ZEV deployment goals; second, monitors program sales and make midyear adjustments to the income cap, if necessary; and finally, in the unlikely event the previous two events provide a sufficient savings, you can always implement a wait list at the end of the year with full knowledge that this broad group of stakeholders will be continuing to advocate for full funding for low carbon fuel transportation. Thank you.

CHAIRPERSON NICHOLS: Thank you.

MS. HOLMES-GEN: Chairman Nichols and Board members, Bonnie Holmes-Gen with the American Lung Association in California.

We're very pleased to be here to support the staff's recommendation. We've been a supporter of the AQIP program since its inception and believe it's a key tool on a state's air quality strategy. And of course, it's incredible now to see the acceleration and expansion of this program with the 200 million GGRF funds. We appreciate the staff has been incredibly helpful in reaching out and sharing with us all of their proposals as they move forward.

We also appreciate the partnership that's developed between your agency and the CEC. It's incredibly important to have these agencies working together so closely to ensure success of these programs.

We support the CVRP program and will defer to the Charge Ahead campaign comments.

In terms of the heavy duty, I want to say we're incredibly pleased with the recommendation up to 85 million in incentives from this sector. We know it's incredibly important. We cannot meet our federal air quality goals and our GHG goals without transformation of our entire vehicle fleet. And we have a lot of work to do and heavy duty.

We support increasing the incentives for truly zero emission trucks and buses. We're supportive of the freight demonstration projects, not just commercial

projects, but pre-commercial projects and moving those forward.

And pleased with the truck and bus transit and the truck and bus hubs. We think these program funds can really help to re-energize to focus on school buses. And getting transit in disadvantaged communities is incredibly important.

There's been a lot of discussion about metrics around all of these programs. And that's, of course, incredibly important. But we also want to mention there needs to be a focus on communication. And we hope we can work with you in getting the word out about the good news that these projects that are improving the air, improving public health, moving us toward clean energy economy, and a focus we have on disadvantaged communities. So we'd like to help get the word out, promote how these state funds are helping communities at the local level. I think that's really important.

And I have to say that on a note about Charlyn, because she has been such an incredibly helpful person to us. She's been gracious, cheerful, and incredibly helpful over the years. I look forward to seeing her on the running trails, as we heard about this morning, her incredible hobby of running.

So thank you very much. We look forward to

working with you and seeing these funds roll out. I think it's an incredibly important program.

CHAIRPERSON NICHOLS: Thank you.

MR. GONZALEZ: Good morning, Madam Chairman and Board members.

I'm Tony Gonzalez with the firm of Rose and Kindle here in Sacramento. And I'm speaking on behalf of the Association of Global Auto Makers.

I prepared remarks you received copies of.

Global Auto Makers supports the Clean Vehicle Rebate

Project. The CVRP is one of the important incentives that

California offers to zero emission vehicles in its support

of ZEV technology. Although a number of new ZEV models

are expected in the coming year, the ZEV market is still

in the early stages of market growth and PVs represent

just over two percent of California's new vehicles sales

today.

Under California's ZEV programs, significant increases in ZEV volumes are required starting in 2018. And according to ARB staff, ZEV sales must increase more than seven-fold to 15 percent of the new vehicle sales by the year 2025.

California's ongoing support of the ZEV market through programs such as the CVRP is critical for market growth to be realized. And we expect such incentives will

continue to be needed for the foreseeable future.

We support the ARB recommendations to maintain the current levels of rebates in the CVRP for battery electric and plug-in hybrid electric vehicles and to provide a rebate of \$5,000 for fuel cell vehicles. These changes are essential to maintaining a robust CVRP and providing incentives for the early market for ZEVs.

We also support ARB's plans to remove the contingency plan to reduce rebates. But instead include a mid-course check for a contingency plan which would be presented to the Board for decision making. Decisions on rebate availability and amounts have broad reaching impacts on the ZEV market that warrant public comment and consideration by the Board. And we support ARB's plan to include the Board decision.

Finally, as explained in our comments submitted jointly with the Alliance of Automobile Manufacturers on June 20th, we do not support ARB's proposal to impose a two per lifetime cap on rebates. The cap would unnecessarily limit the market and penalize the most enthusiastic ZEV adopters. We recommend eliminating the cap at this time.

And I would just like to add one editorial note.

I want to thank all of the staff who have been involved with this work product and also like to thank your

legislative staff. We enjoy the great relationship that's gone beyond cooperation and I would say comradery. Thank you very much.

CHAIRPERSON NICHOLS: Thank you.

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MS. TUTT: Thank you, Chairman Nichols and members of the Board. My name is Eileen Tutt. I'm with the California Electric Transportation Coalition. here today representing the larger group of coalition members that Jaime Hall mentioned. I'm going to ask them to stand up. There's only a few of them here today because of all of the staff's efforts, to be guite honest. But we are here, and I'm speaking for all of them. There's about 40 people that are part of this coalition. They're auto makers, utilities, new car dealers, non-profits, trade associations, all kinds of people that we're all on the ground trying to make this market work. And we're all here today in support of the staff's recommendation, particularly on the rebate amounts, the increased per vehicle for the HVIP and the pilot and demo program. So thank you so much.

CHAIRPERSON NICHOLS: Do you want to let them sit down?

MS. TUTT: The Chair said you can sit down.

So I first want to thank the staff for all the time they spent with us. You have to be sick of us. I'm

sorry we aren't going away.

But we feel like you should be given a lot of credit for designing and implementing the most successful incentive programs that I think have ever been implemented in this state. And I would extend that to the Energy Commission as well.

You were humble in some of your projections about how effective your programs were going to be. Some of those projections were a little off. You deserve praise and rose petals, is all I'm going to say.

Finally, I do want to take just a minute responding to this income cap thing because we did not comment on that in our comments because the staff isn't recommending it. But we are opposed to an income cap. There are essentially two goals to this program. One is to sell as many cars as fast as possible to whomever, wherever will buy them. That's what the incentive programs are about.

The other is to get these vehicles into disadvantaged communities. And that's what the pilot programs are about. And these are two programs or two goals that are essential to each other. And they complement each other, but they require different strategies.

The income cap doesn't further either of those

goals, and I would say that it actually undermines both of them. So I'm not sure why it's being recommended. There is a suggestion that it's easy to implement. It is not going to be easy to implement. It will be very contentious and take a lot of time. I would rather the staff spend their time working with us developing a long-term plan and basically saving the plan in general as they do so well. I do believe that this is a brilliant staff and they could solve this problem. I'd just rather they worked on other issues.

And then finally, I just want you all to know -- and I'm sorry to tell you this -- but we're going to stick around and work shoulder to shoulder with the Board members and the staff to continue to make sure that this program, both the heavy duty and the light duty, is fully funded.

Thank you to the Board.

By the way, the flowers I've been carrying around all day, those are for Charlyn. And they were freshly watered by the Coalition tears this morning. I'm sorry that I missed this morning. I didn't quite I was too busy -- chatting out there. But we'll get them to Charlyn somehow.

CHAIRPERSON NICHOLS: I'm sure you can make it upstairs with the flowers

MS. TUTT: They don't let me up there.

MR. DUNLAP: Good afternoon, Madam Chair and members. I'm John Dunlap representing Nissan today.

We're proud coalition members of CalETC. It's impossible to have more enthusiasm than Eileen. But we wanted to come today and voice our strong support for the staff recommendation and add our voices to others, saying how much we appreciated working with the staff. Richard Corey and Alberto Ayala and other team members they assigned were with us every step of the way. We appreciated that. We also appreciated them digging deep and hearing from a lot of folks and weighing it all.

We think it's a terrific program. It makes a difference in the roll out of these advanced clean vehicles. As you know, you heard a lot about that. You've seen some terrific statistics. And Nissan remains committed to making a success of the Leaf product. And you'll be hearing from us in an ongoing way as well. And we urge your support of the staff recommendation.

Thank you.

CHAIRPERSON NICHOLS: Thank you.

Mr. Douglas, welcome

MR. DOUGLAS: Thank you. I'm Steve Douglas with the Alliance of Automobile Manufacturers. And you have a written comment, so I'll be brief.

First, I would also like to thank the staff for all their hard work. We recognize that we're just one stakeholder and that you're trying to balance the competing and sometimes mutually exclusive demands of many other stakeholder groups. So throughout this at every level at every turn, you've been helpful, open, and just thoroughly professionals. So we've appreciated that. And we believe that the Board Resolution -- the draft Resolution strikes a perfect balance. We support that.

Second, I'd like to thank the Board for their support of the CVRP program. As you know, my members are all subject to the ZEV regulations and spend tens of billions of dollars to bring these vehicles and put them on the dealer lots. That's just part of it. Getting them on the lot is the first step. But the second step is getting them on the roads. That's what the CVRP is about.

The purpose of the CVRP is to get ZEVs on the road. And to that purpose, it's been an undeniable, unmatched success. It's simple. It's effective.

The CVRP, when combined with the generous incentives and manufacturers also provide for ZEVs, make these vehicles some of the most affordable vehicles today.

Today, the ZEVs can be leased for 99 to 199 per month. And that's what zero down or near zero down.

Again, these are some of the most affordable vehicles out

there.

Just to quickly summarize then we support what -we agree that reducing the rebate at this time is not a
well -- will have a negative impact on sales. Also, we
believe it's not necessary at the time, so we support the
staff's recommendation on that.

We also support the Executive Officer's authority to establish a wait list. That's important. And also midyear review is obviously appropriate.

And finally, for the fuel cell vehicle provisions, we support those. It's an exciting technology. It's just starting. It's an exciting day.

And then just last, I wanted to touch on this income cap. That would -- an income cap, it's an interesting to draw a line and see where the income is.

But it would dramatically increase the complexity of a program that succeeds because of its simplicity. I can't imagine how you implement it. I'm sure there are ways.

But I can't imagine bringing W2s, tax returns to the dealership and letting them decide whether you're eligible or not or trying to figure out -- having the dealer figure out whether you're eligible.

So we look forward to working with the staff.

And we look forward in the coming years to implement this.

Thank you a lot. And thank you for your support.

CHAIRPERSON NICHOLS: Thank you. We appreciate your bringing here. Obviously, this is an important program for the industry and for us as well.

So,

Mr. Sadredin, you get the last word.

MR. SADREDIN: Thank you, Madam Chair.

I just wanted to express our support for staff recommendation. But I really got up to say a statement of support on behalf of your decision to target this program at disadvantaged low-income communities and also offer a word of support for the CalEnviroScreen document. I know there are some regions that they feel left out for not being on the list. We take no pleasure in San Joaquin Valley for being highly featured on that list. And every day, we're working to get off of that list. But it has to come through actual work that improves quality of life for those people, not from some sort of creative methodology of changing the scoring system.

It's not a perfect tool. We are working with our colleagues, with other districts, with ARB, with Cal/EPA to make it even better. It's a living document as far as we're concerned. But at this time, we believe it's the best tool in terms of assessing relative cumulative impacts to those communities and trying to pick apart some factors from others and only focus on air quality or other

factors in our view that diminishes the value of that tool. Because as you know, they are inter-related dynamic factors, the fact you have a poor community, lack of access to health care, it makes air quality even more impactful, even though air quality may not be that high in those areas. So just wanted to make sure we don't lose that tool as a significant tool in terms of making some decisions.

We're all for getting more funding to Bay Area.

Any reductions in Bay Area reduces air pollution in San

Joaquin Valley as well, so we would be happy to work with
them to get funding to them through various programs. I
just want to go on record as supporting the focus on those
communities and also CalEnviroScreen as at this point
being a tool to use. Thank you.

CHAIRPERSON NICHOLS: Okay. That concludes the testimony, and we will close the record on this item at this time.

I, too, want to add a voice of support for the staff. It is a complicated and large program. It is not just about CVRP, although we seem to have spent most of the time talking about that. But there are a number of other highly important pieces of this program and the opportunity to present -- to spend a significant allocation of funds is really remarkable. Obviously, the

burden on us is great to do it well.

I think somebody used the term "data driven review." And I would just like to echo that I'm hoping that we can avoid again making adjustments to the program before we've had an opportunity to implement it and learn from it. It is possible, given that there is legislation moving, that we may be given direction in some regard as to how we spend the money. But I think for now we should leave the staff recommendations as they are in particular with respect to the CVRP not to start tinkering on one side or another with how the money gets spent.

So I think that the effort that's been made to target funds to disadvantaged communities and particularly the pilot programs are really exciting and innovative, something that's never been done before. And we will see how successful they are. But we have a lot of hope in them. But to start drawing lines over who can get rebates and who can't at this stage of the game I think would not be wise. So that's my advice.

But I also recognize that other Board members may wish to make comments and ask questions at this point.

I'll start down at this end. Anybody who wants to speak?

BOARD MEMBER BALMES: Thank you, Madam Chairman.

So I, too, very much like the focus on disadvantaged communities and the pilot programs. I'm

fully supportive of that.

I'm also cognizant of our Chairman's desire not to tinker now. But I don't want us to run out of money.

And so I like someone's suggestion that we perhaps consider giving the Executive Officer some discretion sort of a midyear to review what's going on.

CHAIRPERSON NICHOLS: May I just respond to that because I initially thought that was a good idea. I changed my mind when I realized the intense level of interest there is in any decision to draw any line, either to lower the amount, to put an income cap, a vehicle cap.

BOARD MEMBER BALMES: So now we have to go back to the Board --

CHAIRPERSON NICHOLS: It has to come back to the Board anyway.

BOARD MEMBER BALMES: I would like to see a midyear review, if necessary.

CHAIRPERSON NICHOLS: Well, it's an if necessary. I think, if necessary, the staff is on notice they are going to need to have to come back to the Board. So agreed.

BOARD MEMBER BALMES: I would agree actually after hearing the testimony today that needs to be a public process.

So one thought on the pilot program in response

to Mr. Pike's suggestion that a tire replacement program be considered. When I first heard about this program last week, I knew there was no way we were going to be able to include it in this year's programs. But it struck me as a good idea, especially given it was targeted towards disadvantaged communities.

So all I would say is I support looking at this further. I realize there are all sorts of issues that we -- would these tires be acceptable to the intended target population, et cetera. Maybe old cars don't drive very well with these tires.

But I think it's a good idea. And I would like to see it reviewed further by the staff, especially since the South Coast I think commissioned Mr. Pike's firm to come up with a plan, this would be another program where we could potentially collaborate well with South Coast. Always interested in us collaborating with our district partners.

I guess another comment I'd make is directed to Mr. Sadredin when he correctly spoke about the importance of disadvantaged communities in the San Joaquin Valley. I was quite disturbed when I recently saw a comment that he made about fine particulate no longer being linked with asthma based on some study commissioned by his district that I don't think is in the published literature. I'm

very disturbed by that comment. I don't think it's a healthy comment to be coming from a head of a air district that has such an important pollution problem and I don't think it helps disadvantaged communities. So I hope Mr. Sadredin is more careful in his comments about linking fine particulate and asthma in the future. Thank you.

CHAIRPERSON NICHOLS: Mr. De La Torre.

BOARD MEMBER DE LA TORRE: Thank you.

I guess to keep with that theme, this is something that I said in the meetings with the OEM and CalETC. We're going to move ahead today and we're going to fund this, and that's great. I'm very supportive of that. And as I said numerous times, I think when we make a commitment in this area on these vehicles, we need to follow through. We need to send a very clear signal to the market that this is what it's going to be in order to in incentivize this. That makes perfect sense to me.

Medium and long term, I have yet to see a plan for us to make a transition away from these incentives.

And I wanted to say here publicly -- I said it to them in our meetings -- that I want to see a plan. We have these meetings. Staff comes up with all kinds of ideas, and I have yet to see a whole lot on the manufacturer's side.

So I very much expect that in these six months with no pressure, with no hammer hanging over our heads,

that we'll see some ideas coming from the OEMs about this.

And the one that I specifically mentioned in our meeting is the graduation of vehicle name plate that graduates, that sells enough cars that it no longer needs the subsidy, no longer needs the rebate. And what is that? And let's justify that number, whatever that number is.

No car is anywhere near it right now. This is the time to come up with it and stick to it down the road. Not when it's impending or there's one car that's way ahead of the others. It's now, ahead of time, to establish what that marker is. And then whoever hits that marker, you graduated. Congratulations. You sold enough cars you're in the main stream that you no longer need the support that we are providing. That's something that I absolutely want to see in the next few months. And again I don't know what that level is. But I want to see it coming from the OEMs first. And then we can have a dialog about whether that's the right mark or not. Thank you.

CHAIRPERSON NICHOLS: Ms. Mitchell.

BOARD MEMBER MITCHELL: Thank you, Chair Nichols.

Just to follow up briefly with Mr. De La Torre's comments. SB 1275 actually requires this Board in collaboration with other agencies to do a plan on meeting the ZEV initiative goal. So I would suggest working with

the OEMs and our Board on that would be a good way to go forward.

I'm fully in support of the CVRP program that staff has set forward in maintaining the existing levels. I think we're not quite there yet. It was -- it's hard to know when we get there. I think that that's a difficult issue. There was a U.S. Supreme Court case many years ago when the U.S. Supreme Court justice says, "I don't know how to define pornography, but I know it when I see it." And I think about that when are we going to know it when we see it where we've gotten where we need to be in the market penetration for these very new, modern, clean vehicles.

The other thing I want to mention in connection with the entire program is how important the HVIP segment of this program is. And it is geared to help disadvantaged communities. Another goal, of course, of our agency and of all the air districts because our primary goal and what we do is to protect public health. And we recognize. And what we do that the disadvantaged communities are often the most highly impacted by the emissions and air pollution that is present today. I see this program, the HVIP, as a significant crossroads to move forward our sustainable freight strategy and to help disadvantaged communities as well.

So I think it is a very well crafted plan for us to accomplish multiple goals. So I look forward to continuing on this path. Thank you, staff, for all your hard work on this.

CHAIRPERSON NICHOLS: Mr. Roberts.

BOARD MEMBER ROBERTS: Thank you, Madam Chairwoman.

First of all, I think we have something that really is working and we want to keep it working. But I think Mr. De La Torre's point that we have to define how do we transition and start to think about that. I'm not sure that the graduation you suggest is the right thing. But I think we do have to come up with a transition to think that you might set a path where you penalize the successful firms and keep rewarding the unsuccessful firms who might be building an inferior product doesn't make sense to me. But we need to have some type of a metric and it should be defined. That would help to get certainty into the markets.

I think staying the course in terms of the incentives that were created here I think are very good. I'm concerned when I hear about putting a limit, a cap on the income. We really want people to buy these. And you know, I don't care what their income is. This is not a success yet. Companies that are producing these aren't

making tremendous dollars on these cars. And probably without these incentives, there still probably would not be any program going.

This is not the hottest profit thing around. And I think what we really want to do is we want to introduce these to all segments of the population so that they -- not only the people driving them, but their neighbors and everybody else will become more aware of the different options that are out there and start to use, whether they're fully electric or partially electric or whatever, that we not only do we clean out the environment, but we're developing a sustainable vehicle that people are going to go forward with the infrastructure to support it.

So I think we're on the right path. I think we need to give definition to know the transition period when we see it and have some kind of a measurement that's out there with an expectation we're going to try to continue to do what we're doing for some period of time that I think will really help. I think the certainty in the market for as long as we can hold it is good. I don't think we're going to go on indefinitely. It wouldn't make a lot of sense to me to go on indefinitely.

With that, my compliments to staff. You've done well.

CHAIRPERSON NICHOLS: It's not mandatory

everybody speaks, but many people wish to, so please do. I'm not going to cut anybody off.

BOARD MEMBER RIORDAN: I'm very supportive of the staff recommendation and appreciate very much their modifications that have occurred in the last month or so. Thank you.

CHAIRPERSON NICHOLS: Thank you.

Mr. Eisenhut.

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BOARD MEMBER EISENHUT: I'm prepared to offer a motion when you're ready.

CHAIRPERSON NICHOLS: Move on down the line. Dr. Sherriffs.

BOARD MEMBER SHERRIFFS: Thank you.

Thank you, staff, for your hard work on this and flexibility and adjustments that you've been able to make.

The stakeholders, obviously thanks for all your funding advocacy that makes this possible and your ongoing support for that and work in that funding advocacy, the advocacy for flexibility in the plan, and the advocacy to reach the environment justice communities with this.

I agree this is a good time to be thinking ahead in a couple of areas. And I don't think we want to penalize the successful, but we want to think about how we are going to transition and what the non-rebate incentives will be going forward to promote these technologies.

One question for staff and for Mr. McKinney, because I think infrastructure is so important and because infrastructure relates to SB 375 goals and the things that happen there, what thoughts again about next year, because infrastructure is so important for getting these technologies out. I know having bought a Leaf, you know, the big barrier to making the leap is how am I going to plug this thing in? What do I need to plug it in? Is the infrastructure here to support the technology.

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MR. MC KINNEY: Board Member Sherriffs, Jim McKinney here.

We really recognize the importance of infrastructure to continue pushing the market forward and making sure the new consumers are confident that they can charge their cars and get to where they need to be in their daily life. That's why with the past investment plan that we essentially doubled down. So traditionally, our funding level has been 7 to \$8 million a year. doubled that to 15. I haven't seen any indication from our Commissioners that we would modify that in the near We've heard a lot of testimony and in various future. forums it's important to continue matching infrastructure. And again, could be workplace. Could be in the public. Could be fast-charging corridors. So we're on that one. And we worked very closely with many parts of ARB staff to figure out where exactly is the best place to put them.

BOARD MEMBER GIOIA: I actually wanted to address a different issue on this just to acknowledge all the points that were made.

I think it's always a balance. I think we've acknowledged that we know that we could run out of money here. We're going to keep an eye one this. I think agreeing with some other comments, we do want to see data that shows the linkage and the causal effect between the incentive and the actual purchase. We know that in most cases there is a relationship and in some cases there isn't.

We realize that the higher income you make or the higher the cost of the car that the relationship may not be as great. There may be some. And so that's always hard to get one's a grasp on that. But we're going to keep an eye on that, as this program has limited funding. But we want to keep this going at this level. That's a good call.

On the pilot programs and on the advanced freight technologies, can you talk a little bit more about -- this is from slide 17 and 18. First of all, I strongly support the idea that we're focusing on disadvantaged communities. There has been some legitimate concern raised about the EnviroScreen tool. It's not a perfect tool. It has

issues. And given there is a large amount of money that is being focused on disadvantaged communities, we need to understand what criteria we're using.

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So can you talk a little bit more on how we are going to select the freight technology demonstrations and the truck and bus pilots? And obviously, you don't have that fully laid out. It's going to be still a lot of effort put into that. I think we should be kept informed about how you're developing the criteria as we look because we want to make sure these pilot projects are going to be meaningful, they're going to be in the right communities, and we want to make sure that's going to be geographically appropriate in terms of how it's spread out around the state. So can you talk a little bit about that for 17 and 18?

STATIONARY SOURCE DIVISION CHIEF MARVIN: Thank you, Supervisor Gioia.

Cynthia Marvin with the Stationary Source Division.

I'm starting out the response because ARB was recently given responsibility through the budget trailer bill to develop the guidance for implementing 535.

They're all very similar. So ARB staff will be developing recommendations as to what does it mean to benefit a disadvantaged community. And we certainly think that's

really critical for implementation of ARB's low carbon transportation funds. We've got mobile sources compared to fixed locations. And we know that vehicles are traveling in communities that are not necessarily where they are domiciled or housed. So we would fully expect that that guidance will recognize the benefits to downwind communities, whether those communities happen to be disadvantaged or not.

Let me give you an example. Port of Oakland, let's say that the Port of Oakland responds to our suggestion that they participate in this program for zero emission drayage trucks. If they do that perhaps with the assistance of the Bay Area Air Quality Management District, we would expect that that program would provide benefits to the disadvantaged communities which are just east of the port. So the port itself and perhaps the money would not go to a disadvantaged community census tract. But the benefits of those investments and the benefits of cleaner air would clearly go to downwind communities, both those in those in the census and not.

BOARD MEMBER GIOIA: There is the ten percent must be spent in the disadvantaged community and 25 percent to benefit. These are floors, not ceilings, right. So -- and you're talking about the communities that get a benefit, right, and how to define that.

STATIONARY SOURCE DIVISION CHIEF MARVIN: We definitely see much of the money that ARB is administering fitting into that benefit category. To the extent it also works because the fleets or the operations are housed in the disadvantaged communities, so much the better.

But I think there is a definite emphasis on benefiting the communities, which means that as those vehicles are traveling, we're talking about the census tracts that come up in the top tier in CalEnviroScreen and we're talking about the surrounding neighborhoods. As we look at some of the classic environmental justice communities from an air quality perspective, we believe that many of the low carbon transportation investments by their very nature will be benefiting both the disadvantaged communities and many of those adjacent communities in the Bay Area and elsewhere.

BOARD MEMBER GIOIA: So how long do you see it taking to develop this and how is that being timed with the roll out of funding for the pilot projects? Because we've obviously gotten this funding for this fiscal year. When do you anticipate starting to put to call out for projects and making decisions on pilot projects and how does that align with this time frame to develop the guidelines for what it means to benefit a disadvantaged community?

STATIONARY SOURCE DIVISION CHIEF MARVIN: Let me address the guidelines and the crew sitting to the left of me nodding their heads will talk about the pilot project time frame.

Because of the demand to move forward with these funds, not just ARB, but in other agencies, there's two key decisions when it comes to disadvantaged communities. So the first is Cal/EPA Secretary Rodriguez's determination about where to draw that line using CalEnviroScreen as a tool.

BOARD MEMBER GIOIA: That decision hasn't been made yet.

STATIONARY SOURCE DIVISION CHIEF MARVIN: That decision hasn't been made. We expect there will be a proposal in the next month to month and a half. That proposal will then go to a public workshop and then that decision will be made.

What we're looking at doing from an ARB staff guidance perspective is developing some initial or preliminary guidance this summer that agencies, including ARB, could use for the first round of funding, including the development of the pilot projects. And then do a full-blown guidance document in a public process, bring that guidance and other guidance documents that ARB is required to do for the cap and trade option proceeds to

the Board in spring to early summer of next year.

BOARD MEMBER GIOIA: I would like to see, given that you're developing here this summer and this is going to be a really important policy and it's going to effect sort of the roll-out, if we can get an update on the our next meeting because this. Because I think it's useful to have a presentation here to see and understand and provide any input. Because right, we're going to be spending a fair amount of money here over the next fiscal year. So rather than wait just to see something next spring, I would like us to get an update, if the Chair is fine with that, at our meeting to see how this is progressing.

CHAIRPERSON NICHOLS: I think this Board should hear what the staff is thinking in terms of the development of the guidance. I also think -- and we have not heard from the people who are actually going to be doing the project development, but there's not -- I shouldn't say -- we need to get people thinking and working on innovative project ideas because the fact is that there are varying pots of money out there. This is not the only money. And so we want people thinking about the projects and then bringing them to us. And we'll figure out how to get funding for them because there are other sources as well. But yes, it's still a good idea to hear from the staff as soon as they have any draft

thoughts at all about how this guidance is going to work.

BOARD MEMBER GIOIA: And you're going to briefly just comment on the project roll out.

MS. MACUMBER: Lisa Macumber with Air Quality Permit Program.

In parallel effort, once we develop -- once the funding plan is approved by the Board, we immediately begin our next process, our next phase, which brings our stakeholders back to the table in our project solicitation process. So we hold several work group meetings where we sit down with our stakeholders. We talk about the projects. We refine them. We look at what the parameters need to be to get the best products in the door. We build our solicitation. Solicitation is then put out and there is a window of time we'll give applicants opportunities to build their partnerships and come in and bring us the best projects for those categories. And then we close our solicitation and we convene funding our projects.

So we do have a process that takes place. It traditionally takes place over the next several months. And it's actually aligned very well with this process. By the time we get to that point of where we're really refining our solicitations, the guidance process should be done. So we should be able to get solicitations out early fall to get the projects going.

CHAIRPERSON NICHOLS: Mr. Serna, last but not least.

BOARD MEMBER SERNA: Thank you, Chairman Nichols.

First, I do want to express my thanks to staff

for a lot of hard work. And I think this is -- with

today's action, we can all be proud about the intended

investment in disadvantaged communities in particular.

I do want to also agree with Mr. De La Torre and others about the growing concern about the rebate program that today we don't have a light at the end of that tunnel. And I do think that the need to plan is imperative in terms of setting an expectation, not just for the Board, but certainly for the OEM representatives, auto manufacturers as well.

I did have a question I'm going to refer to slide twelve. And it has to do with the intention to issue the rebate for fuel cell electric vehicles. It states on slide 12 the increased rebates for fuel cell electric vehicles are consistent with the battery electric vehicles at introduction.

So my question is, those are two different types of technologies, with different infrastructure. So what thought goes into the amount of the rebate based on the fact that the infrastructure is so different. But here you're explaining that the rebate is basically going to be

equal to a different technology when it was first introduced.

MSCD CHIEF WHITE: As we did with the battery electric vehicles and electric fueling infrastructure, we worked very closely with the Energy Commission to ensure that the two are paired well together. So when we talk about looking at the rebate levels that were available and the battery electrics first rolled out, it was when CEC first started to make substantial investments as well in terms of electric infrastructure to support the roll out.

The \$5,000 was the amount or the value that I think we looked at it was effective. I think the results we have today in terms of the volumes of pure battery electric vehicles that we're seen in the marketplace certainly support that level. Certainly is sufficient on a new technology roll out.

As we look at fuel cells, we find ourselves really in a similar situation where we have substantial investments that the Energy Commission is making on hydrogen infrastructure. And now that we have the vehicles here, that the \$5,000 value certainly seemed like an appropriate place to start in terms of really trying to incentivize the roll out of those vehicles as we would expect. We'll be similarly successful as you saw on the battery electric side.

CHAIRPERSON NICHOLS: Okay. Before I invite Mr. Eisenhut to make a motion he's already volunteered to make, I just wanted to make one final comment.

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Sometime this summer, most likely, August, possibly as late as September, we will hit 100,000 electric vehicles in California, which is wonderful and places us at the head of the nation certainly. And just reminds us all of the importance of what it is we're doing here. At the same time, we have a goal of a million electric vehicles staring at us. So our work is hardly done.

I do agree that it's always frustrating, especially when we have to go back to the Legislature and beg for more money because we've done better than we predicted. And that's part of what set us on this path was to try to honorably live within our means and come up with a way of somehow fixing the program so that we could get all the goals that we had in mind and yet not spend any more money than we had.

That has proven to be illusive. I completely support the comments of the Board members who said we need to be thinking ahead to how we transition out of this rebate program.

My own view is that it shouldn't be a rebate program at all, that it should be a mix of incentives

which would probably include tax benefits, but would not have to be administered by ARB at all. And our job should be to tell people what the zero emission vehicles are and then let an institution whose role is primarily financial be the one to actually administer the program.

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And I'd ask the staff to work on this idea and the Governor's office has encouraged me to think they would support a change in the future as well.

Not to escape from the necessity of putting money on the line, but just to find a way of administering it that doesn't add to the other things that ARB is already doing because we have a lot to do here. But in the mean time, I do think that the overall proposal here makes sense. It's going to be an exciting time to get the money out into the communities and doing the visible work that we hope it will.

So I want to thank everybody also who participated in this effort. This has been extremely engaging of staff and stakeholders, and we certainly don't expect you to go away. We expect you to continue to be very actively involved as we implement this program.

So with that, may I have a motion to approve the resolution?

BOARD MEMBER EISENHUT: Of course. I move. CHAIRPERSON NICHOLS: So moved.

1 BOARD MEMBER BALMES: Second.

CHAIRPERSON NICHOLS: And the second here.

BOARD MEMBER BALMES: Over here. Second.

CHAIRPERSON NICHOLS: Thank you all. Now we will

take a vote. All in favor please say eye.

(Unanimous aye vote)

CHAIRPERSON NICHOLS: Any opposed?

Any abstentions?

All right. We did it. The Board is going to take a lunch break. And we have scheduled an executive session to hear a report from our counsel on litigation matters. So when we come back, we will report on any action that's been taken, if any, and also take up our very last item, which is a report on federal activities on climate change.

(Whereupon a recess was taken.)

CHAIRPERSON NICHOLS: We had a briefing by our counsel over lunch on a two cases that we're involved in and there was no action taken by the Board. So that was the executive session.

We're now ready to move onto the last agenda item of the day, which is a report on recent federal climate activities. I know most of the Board members have been following this quite actively, so I don't think we need a lengthy report. But it would be good to have an update on

what's going on. Who wants to take this one?

EXECUTIVE OFFICER COREY: I'll be brief and we'll get right to the presentation.

In June of 2013, President Obama announced his Climate Action Plan, which is intended to significantly reduce carbon emissions by regulating potent greenhouse gases such as methane, chloral floral carbons, as well as focusing on significant sources of CO2, such as coal-fired power plants and inefficient gas-fired plants.

And over the past several months, ARB staff has been working closely with staff from the California Energy Commission the PUC, and the Cal ISO to inform and help shape US EPA rule making efforts in addressing the power plant CO2 emissions. So part of today's presentation will summarize some of those activities as well as provide the Board with a sense of the work yet to be done by California and our partner states to meet the requirements of the rule.

With that, Tung Le of our Stationary Source Division will give the presentation.

(Thereupon an overhead presentation was presented as follows.)

REGULATORY ASSISTANCE SECTION MANAGER LE: Thank you, Mr. Corey.

Good afternoon, Madam Chairman and members of the

Board.

I will be providing an update on federal climate activities this morning, with a focus on US EPA's newly proposed rule for existing power plants.

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REGULATORY ASSISTANCE SECTION MANAGER LE: In 2007, in the court case Massachusetts versus EPA, the Supreme Court determined that greenhouse gases are considered air pollutants as defined by the Clean Air Act. This ruling obligated EPA to regulate both mobile and stationary sources of GHGs. Soon after, EPA made an endangerment finding, which was analysis study that determined manmade GHGs were, indeed, contributing to global warming and endangering public health and welfare.

In December 2009, at the United Nations Climate Change Conference in Copenhagen, two dozen countries responsible for over 80 percent of the world's man-made carbon emissions committed to GHG emissions reductions to slow the effects of global climate change. At this summit, President Obama committed to reducing the United States' emissions to 17 percent below 2005 levels by 2020.

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REGULATORY ASSISTANCE SECTION MANAGER LE: In 2010, EPA and the National Highway and Traffic Safety Administration or NHTSA, adopted a joint rule that set GHG

and fuel economy standards for model year 2013 through 2016 cars and light duty vehicles. These standards were based on California's Pavely standards, which were adopted by this Board in 2009. The standards are estimated to cut 6 billion metric tons of CO2 over the lifetime of these vehicles and save American families over 1.7 trillion dollars in fuel costs.

In 2012, EPA and NHTSA, with ARB support, adopted a more stringent rule to set greenhouse gas and fuel economy standards for model year 2017 through 2025 passenger vehicles. Over the lifetime of these additional standards, this program is projected to cut an additional two billion metric tons of CO2 emissions, with additional net benefits up to \$451 billion.

In 2012, EPA and NHTSA proposed a joint rule, again with support from ARB, to set GHG and fuel economy standards for medium- and heavy-duty vehicles. This heavy-duty GHG Phase I rule is estimated to cut 270 million metric tons of CO2 and save over \$42 billion in fuel costs to vehicle owners.

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REGULATORY ASSISTANCE SECTION MANAGER LE: In 2010, EPA adopted the tailoring rule to regulate GHGs from large stationary sources. This rule was to ensure the applicability of existing prevention of significant

deterioration or PSD permitting program was consistent with how major sources of criteria pollutants have traditionally been permitted. The PDS permitting program ensures that best available control technology is installed at new major source facilities as well as at existing facilities that significantly increase their emissions.

Soon after, EPA's authority to regulate these large stationary sources was challenged in court by industry groups. Just this week, the US Supreme Court upheld EPA's authority to regulate stationary sources of GHGs, but stated that EPA could only do so with when the PSD permit was also required for criteria pollutants. Since most facilities that would have been required to obtain a PSD permit for GHG would have also need a PSD permit for criteria pollutants, the practical impact of the Supreme Court ruling is that these large sources will continue to be regulated for both types of pollutants.

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REGULATORY ASSISTANCE SECTION MANAGER LE: In June 2013, President Obama unveiled his Climate Action Plan. The Climate Action Plan is the national blueprint to slow the effects of climate change. The plan focuses on both CO2 and short-lived climate pollutants, such as methane and hydrofluorocarbons. I will describe some of

the goals in the President's Climate Action Plan in the next few slides.

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REGULATORY ASSISTANCE SECTION MANAGER LE:
Building on the already adopted rules for light, medium, and heavy-duty vehicles, the plan commits to developing GHG and fuel economy standards for post-model year 2018 heavy-duty vehicles. This second phase of rulemaking jointly developed by EPA, NHTSA and ARB will result in a mutually agreed upon national program. A notice of proposed rulemaking is expected by March 2015 with standards expected to be finalized by March 2016. This will be followed by an ARB rulemaking shortly thereafter in 2016.

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REGULATORY ASSISTANCE SECTION MANAGER LE: The President's Climate Action Plan also recognizes what California has long known, that improved energy efficiency can significantly reduce GHG emissions and save money. The plan builds on existing energy efficiency requirements for federal buildings and for appliances such as dishwashers and refrigerators with new programs to reduce three billion metric tons of CO2 by 2030.

In addition to these new standards for appliances and federal buildings, the plan directs the Department of

Agriculture to propose up to \$250 million in loans for rural utilities to finance efficiency investments.

In addition, the Department of Housing and Urban Development will implement a \$23 million multi-family energy innovation fund to test new approaches to deliver cost-effective residential energy efficiency programs.

Finally, the existing Better Buildings Challenge Program partners public and private organizations with commercial and industrial building owners to become at least 20 percent more energy efficient by 2020. The Climate Action Plan expands the challenge to include multi-family housing.

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REGULATORY ASSISTANCE SECTION MANAGER LE: To address hydrofluorocarbons, or HFC emissions, EPA will use its authority through the Significant New Alternatives Policy Program, or SNAPP, to encourage private sector investment in low emissions technology by identifying and approving climate-friendly chemicals while prohibiting certain uses of the most harmful chemical alternatives.

Additionally, the President has directed his administration to purchase cleaner alternatives to HFCs whenever feasible and to transition over time to equipment that uses safer and more sustainable alternatives.

In May 2014, the United States, Canada, and

Mexico together proposed to phase down consumption and production of HFCs under the Montreal protocol on substances that deplete the ozone layer. Global benefits of the proposal may yield significant reductions of over 90 billion metric tons of carbon dioxide equivalent through 2050.

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REGULATORY ASSISTANCE SECTION MANAGER LE: Like the updated Scoping Plan that this Board adopted in May, the Federal Climate Action Plan recognizes the importance of addressing methane emissions.

In March of this year, the President unveiled a multi-sector strategy to reduce methane emissions. In this strategy, the President directed EPA to propose updated standards to reduce methane emissions from landfills in the summer 2014. To address methane emissions from agricultural operations, EPA, working with the United States Department of Agriculture, will soon release a biogas road map which will include voluntary measures to accelerate the adoption of digesters and other cost-effective technologies to reduce dairy methane emissions 25 percent by 2020.

To address methane from oil and gas operations, EPA is analyzing significant sources of methane and other emissions from the oil and gas sector. EPA has solicited

input through a series of technical white papers. And in the fall of 2014, EPA will determine how best to pursue further methane reduction from these sources.

If EPA decides to develop additional regulations, it will complete those regulations by the end of 2016.

ARB is considering regulations to further reduce methane emissions from oil and gas operations and will coordinate with EPA in these efforts.

The plan calls for voluntary action on coal mine related methane emissions. Coal mines account for almost 11 percent of annual man-made methane emissions in the U.S. As you know, California recently adopted a mine methane capture offset protocol to incentivize the voluntary capture and destruction of fugitive methane from mining operations. Staff expects this protocol to be approved by the Office of Administrative Law next month.

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REGULATORY ASSISTANCE SECTION MANAGER LE: The Action Plan explores approaches to protect and restore domestic forests. In addition, the US also supports international activities to reduce emissions from deforestation and forest degradation or RED and has provided more than one billion dollars in financing for RED. The first update to California's Scoping Plan notes that RED is a key topic within the United Nation's

framework convention on climate change and between national and subnational jurisdictions, including through collaboration between California and the US Department of State.

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REGULATORY ASSISTANCE SECTION MANAGER LE: The Federal Climate Action Plan accelerates permitting of renewable energy on federal lands and commits to expand and modernize the electrical grid to facilitate renewable energy projects.

The Climate Action Plan directs EPA to promulgate rules to address CO2 emissions from new and existing power plants, which nationally emitted over two billion metric tons of CO2 per year in 2012, the largest single source of greenhouse gas emissions in the country. These proposed rules will be the focus of the remainder of the presentation.

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REGULATORY ASSISTANCE SECTION MANAGER LE: I'll start with a brief overview of EPA's rule to limit CO2 emissions from new power plants under Section 111(b) of the Clean Air Act.

The proposed rule was released in September 2013. In it, EPA proposes two sets of standards: One for coal-fired electric generating units, or EGU, and the

second for natural gas-fired units.

For the natural-gas fired EGUs, EPA proposed a limit of 1,000 pounds of CO2 for large units as defined by the rule and 1,100 pounds for small units.

ARB staff has worked closely with staff at the CEC, CPUC, and CalISO on evaluating EPA's proposed power plant rules. Together, we developed comments on EPA's proposal that point out the unique way that California uses our power plants. The integration of large volumes of renewables like solar and wind means that base load power plants in California are being ramped up and down to support our variable renewable resources.

Power plants that are ramped up and down do not operate as efficiently as power plants operating at base load. We suggested that EPA should develop separate standards for power plants operating in different ways.

We are continuing to work with EPA to finalize a proposal that will meet California's needs and reduce GHG emissions nationwide.

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REGULATORY ASSISTANCE SECTION MANAGER LE:

Earlier this month, EPA released a proposal rule to regulate CO2 emissions from existing power plants under Section 111(d) of the Clean Air Act, also known as the Clean Power Plan. EPA estimates that the rule will reduce

CO2 emissions from the power sector 30 percent by 2030 from 2005 emissions.

Instead of regulating emissions from individual EGUs, the rule focuses heavily on energy efficiency and renewable energy programs as a whole, which are two mechanisms championed by states like California where much progress and success have already been achieved.

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REGULATORY ASSISTANCE SECTION MANAGER LE: EPA proposes an individual goal for each state in 2030 based on four building blocks. The first building block assumes that existing coal-fired EGU can be made more efficient. This is not a big factor in California, as we have very few coal plants.

The second building block looked at under-used natural gas units in each state and proposed that these units can be used to generate electricity before coal-fired units could be used.

The third building block, EPA projected the potential renewable energy for each state based on its neighboring state's renewable energy requirements. In the west, many states have aggressive renewable energy requirements, therefore, this block accounts for a significant portion of our target.

Finally, in the fourth building block, EPA looked

at existing energy efficiency programs nationally and averaged the potential increase in energy efficiency that could be realized. This average is an increase of 1.5 percent efficiency per year starting in 2020 and ending in 2030.

As with renewables, significant investments have been made in energy efficiency, therefore, this building block also represents a significant portion of our target.

These four building blocks are only used to set the goal in 2030. EPA's proposal provides significant flexibility to states in what measures can be used to achieve the goal and how to structure the commitments.

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REGULATORY ASSISTANCE SECTION MANAGER LE: Based on EPA's calculations, California's base line is 698 pounds of CO2 per megawatt hour in 2012. When we apply EPA's target-setting building blocks to California, our 2030 emissions target is 537 pounds of CO2 per megawatt hour, which is approximately a 25 percent reduction. This 2030 target is one of the lowest in the country because California relies on natural gas for power and already has aggressive energy efficiency and renewable energy programs in place.

Based on our preliminary analysis, staff expects that California will comply with the 2030 target largely

because of programs we already have underway such as cap and trade and the renewable portfolio standard. We are continuing to work with EPA to ensure that the investments that California industries, utilities, and consumers have made to reduce GHG emissions are credited towards compliance with the rule.

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REGULATORY ASSISTANCE SECTION MANAGER LE:
Because of the way Clean Air Act is structured, the 111(b) rule for new power plants must be finalized prior to or concurrent by with finalization of the 111(d) rule for existing power plants. Staff anticipate that both rules will be finalized in June 2016 to meet the President's direction in the Climate Action Plan.

Once the 111(d) rule is final, each state must write a plan detailing how it intends to comply with the rule. The plan must include a description of each measure that describes how it reduces CO2 emissions and must also include how these measures can be enforced to ensure CO2 emission reductions are realized.

These plans are due to EPA by June 2016.

However, should states decide to collaborate on a multi-state compliance strategy, the rule allows until June 2017 to submit a compliance plan.

Because of the regional nature of the electricity

grid working with other states has potential to help maximizes emissions reductions and minimize cost. We are working with Oregon and Washington and our Pacific Coast collaborative partners to better understand how the rule will effect western states and to explore the potential benefits of collaboration.

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REGULATORY ASSISTANCE SECTION MANAGER LE: In closing, I'd like to highlight some of our next steps.

Together, with our energy agency partners, we will be holding a public workshop to solicit input from stakeholders. During this workshop, we hope to understand stakeholder views and potential concerns with the proposed rule. We will also continue to delve into EPA's analysis to understand the targets for California to ensure the data and assumptions used are appropriate. This work will inform our comments to EPA on how the rule might be improved to gain additional emissions reductions.

Staff are also engaging in conversations with our neighboring states to discuss how a multi-state compliance strategy might work and explore the potential benefits of taking such an approach.

Since California imports a portion of its electricity from our western states, staff believe that collaboration were our neighbors will provide a most

cohesive compliance plan and likely generate the most reductions possible.

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Finally, staff continues to participate in national discussions through EPA listening sessions and through organizations such as National Association for Clean Air Agencies and the Georgetown Climate Center. California's participation in these national conversations have contributed greatly to the flexible structure built into this rule and continued participation will help ensure that a fair and effective rule is finalized.

This concludes my presentation. And I would be happy to answer any questions at this time.

CHAIRPERSON NICHOLS: Thanks.

You know, I think the main points here is just to indicate there is a lot going on. The Obama administration has decided to go all out using their authority under the Clean Air Act. They have some heavy rulemaking to do. We're very engaged in it. Edie in particular and our legal counsel Craig Segel has been making those trips to Washington and been very helpful in making sure other states and we are talking to each other and providing coordinated input into the rulemaking process.

So for those of you who have other associations that you're involved with or other organizations that may

possibly be involved in any of these efforts that you're hearing from neighboring cities, counties -- I don't know about any professional associations. I haven't heard of But you never know. We are trying to gather anything. California stakeholders. There is going to be a western states meeting in Colorado coming up in July, which Chairman Weisenmiller of the Energy Commission and I are going to attend. The plan is to take the predominantly conservative and republican states in the west in the WGA membership, most of whom dropped out quite some time ago on anything relating to climate change, but have now become engaged because of the APA proposal and have a conversation with them -- about not necessarily about how important it is to work on climate, but how important it could be for them and for us as all part of one energy grid to work together on some compliance options here.

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And the response to that invitation has been very good. So we're looking forward to trying to have a constructive dialogue an all of this. And something obviously I personally am interested in, and so is the Governor. He's very, very motivated to want to try to get other states to work with us on these efforts and has put a lot of time in on the Oregon/Washington connection. Those three Governors, of course, are much more aligned in their general views of the world. We pacific coast states

tend to think more alike about many of these issues. But he's also been really willing to put in time and effort talking to other Governor's on this stuff, too.

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So anyhow, this was just an opportunity to open the conversation and let you know that if you have any questions about what's going on or what you're reading in the papers or ideas about things you could or should be doing, you should let us know.

BOARD MEMBER SHERRIFFS: You mention -- well, collaboration, collaboration, collaboration. You mean other professional organizations. You know, health care. Health care is a huge consumer of energy. In my experience wandering through hospitals and clinics is there is huge opportunity for increased efficiency in the use of energy. And we really do need to think about how to engage really these very natural allies because it is fundamentally about health at the end of the day. And they should be easy to engage when you think about hospital systems, clinic systems.

CHAIRPERSON NICHOLS: I don't think we had any ongoing relationships with the professional association. But through the Department of Health, we probably could access that group without too much difficulty.

BOARD MEMBER RIORDAN: Those who are building these new hospitals, and there are some, those would be an

excellent opportunity.

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May I ask just one question of information? And it's just going back to the Climate Action Plans on methane. Could you just remind me -- I'm sure I've been told. But in the general generation of methane, those that we have enumerated here, what is their percentage of contribution? I mean, in real general terms between landfills, agriculture, oil and gas and cold mines. Where would that percent be for each of those?

DEPUTY EXECUTIVE OFFICER CHANG: I don't have the percentage in front of me. I can tell you in California the largest methane sources are agricultural related. So the largest sources are enteric fermentation from livestock as well as manure management. And then the largest source after that is oil and gas production.

BOARD MEMBER RIORDAN: Okay. But that isn't necessarily throughout the United States. That percentage would change. Do we know those changes nationwide?

DEPUTY EXECUTIVE OFFICER CHANG: I don't know

20 those.

BOARD MEMBER RIORDAN: If and when you ever see those, if you will communicate them to me. I'm just curious.

DEPUTY EXECUTIVE OFFICER CHANG: Definitely.

BOARD MEMBER BALMES: As a physician, I love to

hear Edie say enteric fermentation. So blunt.

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CHAIRPERSON NICHOLS: Thank you. That's great. Okay. And on that note, I think there was no action required. So before we close, we do a public comment period, and we have one person who signed up for public comment.

Before we hear from Mr. Tilton, I do want to just, however, say we don't normally adjourn in memory of anybody the way city councils or county boards often do. If we were to do that, the person we should be adjourning in memory of would be Dr. James Pitts. I think many of you have seen some of the press on his passing in the last two days. There was a wonderful obituary in the Los Angeles Times which quotes our former Board Member Loveridge and me and many other people, Alan Lloyd, all talking about the importance of his contribution. He was, indeed, one of the founding fathers of atmospheric science. When it comes to what we know and what we do about air pollution, it traces back to Jim Pitts and his roll as a founder of the State Air pollution Research Center at U.C. Riverside. He and his colleagues built the first smog chambers. They demonstrated the way in which smog actually is created. A lot of his work was controversial at the time because it pointed the finger at people who didn't necessarily want to be held responsible

for having to make changes in technology or practices to clean up the air. But he was a brave and also very charming man.

And so we've recognized his contributions at other times in the past. He lived to be 91. And for almost all of his year, he stayed active in the field of air pollution research and teaching. So it's good to be able to honor him.

BOARD MEMBER RIORDAN: Really an incredible man.

CHAIRPERSON NICHOLS: He really was. With that

Mr. Tilton, come and talk to us about Blue Castle

Holdings.

Mr. TILTON: Thank you. Appreciate that. We appreciate the opportunity, Chairman Nichols and members of the Board, to come by way of information. We're not commenting on previous discussion, although it may seem like we are on the climate change policy. It was I think very helpful and probably teed up the discussion for what we're about to comment on.

I've got limited time, but we just want to introduce Blue Castle Holdings and the Blue Castle project was a nuclear project in Utah. Speaking of collaborative opportunities for climate change, the project is the leading nuclear power plant site in the US. We are about 50 percent of the way through the application process for

the early site permit and have significant interactions with the NRC, regulatory approvals on water, on cooling water for the project, and other things I won't go into a lot of detail. You have a summary of information there.

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But we wanted to make sure that the Board was aware of our activities and what we're doing and how we view the possible interactions with the state of California. We're obviously well aware there is a significant portion of coal-fired power that comes from our state to your state. In fact, one of the members of our senior management was the former general manager of IPA and is now leading some of the business development activities for our company. So there is we think significant opportunity for collaboration. We would say the time frame for the operations of a plant that is being worked on there would be about 2025 would be an in-service date. And the figures on the available power generation from that site would be between 500 and 1,000 megawatts of carbon free nuclear power.

With that, I would answer any questions or take any comments.

CHAIRPERSON NICHOLS: Thank you for the update. Appreciate knowing about it.

MR. TILTON: Appreciate it. Thank you.

CHAIRPERSON NICHOLS: With that, I think we're

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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 8th day of July, 2014.

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