

MEETING
STATE OF CALIFORNIA
AIR RESOURCES BOARD

CAL/EPA HEADQUARTERS
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Mr. Joshua Cunningham, Branch Chief, Sustainable
Transportation Technology Branch, ECARS

Mr. Nesamani Kalandiyur, Manager, Transportation Analysis
Section, AQPS

A P P E A R A N C E S C O N T I N U E D

STAFF:

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Ms. Annette Hebert, Chief, ECARS

Ms. Christina Morkner Brown, Assistant Chief Counsel

Ms. Karen Magliano, Chief, Air Quality Planning and
Science Division

Terry Roberts, Manager, Sustainable Communities Policy &
Planning Section, AQPS

Mr. Webster Tasat, Manager, Central Valley Air Quality
Planning Branch, AQPS

Mr. Jon Taylor, Chief, Transportation Planning Branch,
AQPS

Ms. Sylvia Vanderspek, Chief, Air Quality Planning Branch,
AQPS

Ms. Patricia Velasco, Staff Air Pollution Specialist

Mr. Daniel Whitney, Staff Counsel

Mr. Mark Williams, Air Pollution Specialist, ECARS

ALSO PRESENT:

Mr. Clinton Blair, Jaguar Land Rover

Mr. John Caldwell, Cal Electric Trans Coalition

Mr. Andy Chesley, San Joaquin Council of Governments

Mr. Jamie Hall, CalStart

Mr. Henry Hogo, South Coast Air Quality Management
District

Carey Knecht, Climate Plan

A P P E A R A N C E S C O N T I N U E D

ALSO PRESENT:

Mr. Bill Magavern, Coalition for Clean Air

Mr. Ken Morgan, Tesla Motors

Mr. Simon Mui, Natural Resources Defense Council

Ms. Elaine O'Grady, NESCAUM

Ms. Kathryn Phillips, Sierra Club

Mr. David Reichmuth, Union of Concerned Scientists

Ms. Katelyn Roedner Sutter, Catholic Charities Diocese of Stockton

Mr. Daniel Ryan, Mazda

Ms. Phoebe Seaton, Leadership Counsel

Ms. Anne Smart, Charge Point

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

2 ACTING CHAIRPERSON BERG: I'd like to call to
3 order the May 21st public hearing of the Air Resources
4 Board. Would you please stand with me for the pledge of
5 allegiance

6 (Thereupon the Pledge of Allegiance was
7 recited in unison.)

8 ACTING CHAIRPERSON BERG: Wonderful to see
9 everybody here this morning. Chairman Nichols sends her
10 regards and her regrets in missing today's meeting. She
11 is meeting with the climate leaders in preparation for the
12 upcoming 2015 Paris Climate Conference.

13 So today, we have a light, but important, agenda.
14 We have four agenda items, and we -- as well as we will be
15 taking a closed session at the end of the meeting. So we
16 plan on finishing around 12:30, and we will plan for one
17 short break and we'll look at our timing, but that
18 probably will be around 11:00 o'clock.

19 So with that, I have a few housekeeping items.
20 Anyone wishing to testify should fill out a request to
21 speak card, which is available outside the lobby, and turn
22 it into the Board Assistant or the Clerk of the Board
23 prior to the commencement of the item, please.

24 Also, we will have a limit for speakers of three
25 minutes. We would like you to please pay attention. The

1 speaker list will be listed behind me on the screen. And
2 we have a new process that is kind of self-regulating. As
3 you see your name, please come up to the podium and make
4 sure that you state your first and last name. Please put
5 your testimony into your own words to make it easier for
6 the Board to follow. Any written submissions, we do have
7 that for the record.

8 For safety, please note that the emergency exits
9 are to the rear of the room. In the case that we do hear
10 a fire alarm, we're required to leave this room
11 immediately, go downstairs, and out of the building. When
12 the all-clear signal is given, we will return to the
13 hearing room and resume our hearing.

14 So before we get started, we need to have the
15 clerk take roll.

16 BOARD CLERK JENSEN: Dr. Balmes?

17 BOARD MEMBER BALMES: Here.

18 BOARD CLERK JENSEN: Ms. Berg?

19 ACTING CHAIRPERSON BERG: Here.

20 BOARD CLERK JENSEN: Mr. De La Torre?

21 Mr. Eisenhut?

22 BOARD MEMBER EISENHUT: Here.

23 BOARD CLERK JENSEN: Supervisor Gioia?

24 Ms. Mitchell?

25 BOARD MEMBER MITCHELL: Here.

1 BOARD CLERK JENSEN: Mrs. Riordan?

2 BOARD MEMBER RIORDAN: Here.

3 BOARD CLERK JENSEN: Supervisor Roberts?
4 Supervisor Serna?

5 BOARD MEMBER SERNA: Here.

6 BOARD CLERK JENSEN: Dr. Sherriffs?

7 BOARD MEMBER SHERRIFFS: Here.

8 BOARD CLERK JENSEN: Professor Sperling?

9 BOARD MEMBER SPERLING: Here.

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

12 ACTING CHAIRPERSON BERG: Thank you very much.

13 I am going to switch up the order on the agenda,
14 and we will be looking at the consent item later in the
15 agenda.

16 So we're going to jump right into Agenda Item
17 15-4-2; and this is regarding our second hearing on the
18 proposed modification to the ZEV regulation.

19 This modification will provide intermediate
20 volume manufacturers with additional compliance
21 flexibility without compromising Governor Brown's vision
22 of 1.5 million ZEVs on California roads in 2025.

23 This item was first heard in October 2014; and at
24 that time, the Board directed staff to return with a
25 proposal that did not result in a decrease in the number

1 of ZEVs required of the intermediate volume manufacturers,
2 yet considered appropriate flexibility for the IVMs to
3 successfully transition into LVMs.

4 Mr. Corey, would you please introduce this item?

5 EXECUTIVE OFFICER COREY: Yes, Ms. Berg.

6 So in 2012 during the rulemaking process for the
7 ZEV element of the Advanced Clean Cars Program,
8 intermediate volume manufacturers expressed concerns about
9 meeting ZEV Program requirements under the modified
10 regulation. The Board directed staff to review how the
11 modifications would affect these auto makers. In October
12 2014 staff presented the Board with proposed modifications
13 to address these concerns. At the hearing, Board directed
14 staff to revisit components of the proposal and bring a
15 modified proposal back to the Board for further
16 consideration. Staff revised the proposal to provide
17 appropriate flexibility to ensure all manufacturers may
18 successfully commercialize ZEV technologies without
19 compromising ZEV volume requirements.

20 I'll now ask Mark Williams of the ECARS division
21 begin the staff presentation.

22 Mark.

23 AIR POLLUTION SPECIALIST WILLIAMS: Thank you,
24 Mr. Corey.

25 Good morning, Ms. Berg and members of the Board.

1 Last October staff came before the Board with
2 proposed modifications to the Zero Emission Vehicle
3 Regulation. The goal of the modifications was more fair
4 treatment of intermediate volume manufacturers, or IVMs,
5 relative to the large volume manufacturers, or LVMs.
6 Based upon comments in your direction, staff has further
7 revised the proposed modifications. We are bringing you
8 back a balanced revision that deserves the integrity of
9 the regulation requirements, while extending the IVMs some
10 of the same valuable flexibilities granted by this Board
11 to the IVMs.

12 (Thereupon an overhead presentation was
13 Presented as follows.)

14 AIR POLLUTION SPECIALIST WILLIAMS: I will first
15 revisit the key differences between intermediate volume
16 and large volume manufacturers, followed by a look back at
17 our actions to date; and then highlight what we are
18 proposing today as presented in the Notice of Public
19 Availability of Modified Text, dated April 20th, 2015.

20 Finally, I will present the environmental and
21 cost analysis of the newly proposed amendments.

22 --o0o--

23 AIR POLLUTION SPECIALIST WILLIAMS: As you
24 recall, in October we discussed the significant difference
25 between IVMs and LVMs. This chart graphically displays

1 the differences in:

2 California sales, global sales, global revenue,
3 and research and development budgets. Beyond sales,
4 revenue and R&D budgets, IVMs additionally offer fewer car
5 models. So a greater percentage of their vehicle
6 offerings would have to be advanced technology models.

7 Finally, IVMs were not required to introduce ZEVs
8 in the early years of the program and, thus, have not
9 developed the extensive credit banks that LVMS enjoy. And
10 while LVMS' sales are exceeding expectations of ZEVs
11 currently, the IVMs are in the early stages of developing
12 their ZEV products.

13 --o0o--

14 AIR POLLUTION SPECIALIST WILLIAMS: In
15 recognition of the fundamental differences between IVMs
16 and LVMS, and in an attempt to provide IVMs more equitable
17 treatment under the ZEV regulation, staff proposed
18 amendments at the October 2014 Board hearing.

19 During the hearing, the Board directed staff to
20 bring back a proposal that recognized the important
21 differences between IVMs and LVMS while retaining ZEV
22 Program stringency. The Board further directed that this
23 stringency be evaluated as part of the mid-term review.

24 Staff has adjusted the proposal consistent with
25 the Board's direction to provide additional flexibility

1 without softening production obligations. We believe the
2 proposal will continue to promote market diversity by
3 allowing these smaller IVMs to introduce their ZEV
4 products through the use of the flexibilities.

5 I will now discuss the components of the new
6 proposal.

7 --o0o--

8 AIR POLLUTION SPECIALIST WILLIAMS: The first two
9 components of this proposal are the addition of a revenue
10 test to the IVM definition and the extension of the lead
11 time requirement.

12 The ZEV regulation provides that once an IVM's
13 annual average vehicle production, after factoring in lead
14 time provisions, exceeds the 20,000 vehicle threshold, the
15 IVM becomes subject to LVM requirements.

16 Staff is proposing that, in addition to the
17 vehicle production threshold, a revenue test based on
18 automotive-related global revenue also be met to determine
19 if that model year counted toward the lead time provided
20 before an IVM would transition to LVM status.

21 Staff is also proposing that the lead time be
22 extended from three years to five years, as it offers IVMs
23 additional needed flexibility in bringing pure ZEV
24 products to market prior to becoming subject to the LVM
25 requirements.

1 Per the Board's direction and public input, staff
2 is proposing to leave this requirement unchanged from what
3 was adopted in 2012.

4 Recall that the ZEV regulation establishes a
5 minimum ZEV credit percentage requirement for 2018 and
6 subsequent model years. Automakers must produce and
7 deliver for sale in California a sufficient number of ZEVs
8 to meet the credit requirement.

9 The Board provided clear direction at the October
10 hearing that the goal of the ZEV Program is to get
11 vehicles on the road. ARB needs to retain the stringency
12 of the program to avoid sending the wrong signals to the
13 market and weakening the regulation.

14 The Board also expressed that the other four
15 provisions discussed at the October hearing and proposed
16 today provide the IVMs flexibility similar to, and in some
17 cases, greater than, what is afforded to LVMS.

18 Staff recommends that the Board commit it to
19 revisit program stringency as part of the ZEV mid-term
20 review process in 2016.

21 --o0o--

22 AIR POLLUTION SPECIALIST WILLIAMS: As previously
23 mentioned, staff is proposing no change to the existing
24 percentage ZEV requirement. Thus, an IVM's ZEV credit
25 obligation remains as adopted in 2012.

1 If an IVM complies using the likely compliance
2 scenario employed in the 2012 rulemaking, both the number
3 of ZEVs and TZEVs delivered, and the compliance costs,
4 would remain unchanged.

5 To the extent that an IVM complies using a
6 scenario other than that employed in the 2012 rulemaking -
7 ranging from full compliance with fuel cell electric
8 vehicles, or FCEVs, at one end of the spectrum to full
9 compliance with TZEVs at the other - fewer or more cars
10 may be delivered. However, the emission benefits of the
11 Advanced Clean Cars Program remain intact since the
12 original 2012 ZEV credit obligation and the fleet average
13 requirements contained in the LEV III standards insure
14 that there is no reduction in California emission benefits
15 from the proposal.

16 Expected costs for a compliance path based on
17 FCEVs could result in savings relative to the 2012 likely
18 compliance scenario since fewer cars would be required.
19 But the tradeoff is that the IVMs would have to invest to
20 develop, bring to market, and ramp up deliveries of pure
21 ZEVs several years earlier than under the likely
22 compliance scenario.

23 Expected costs if IVMs choose to comply solely
24 with TZEVs could be higher than with the 2012 likely
25 compliance scenario. The tradeoff is that the IVMs could

1 take advantage of the lead time flexibility these
2 amendments provide and delay the investments that would
3 otherwise be necessary to develop and bring to market a
4 pure ZEV.

5 --o0o--

6 AIR POLLUTION SPECIALIST WILLIAMS: In summary,
7 staff's proposal today addresses the Board's direction to
8 provide more flexibility for IVMs to comply with the
9 regulation while retaining the integrity and goals of the
10 ZEV Program. That flexibility includes providing:

11 (1) additional lead time to develop advanced vehicle
12 technologies and deliver pure ZEV products prior to
13 transitioning to LVM status;

14 (2) appropriate credit deficit recovery periods;
15 and

16 (3) other additional flexibilities.

17 As stated in a recent National Academy of
18 Sciences' report, the ZEV mandate is one of the most
19 important vehicle policies in the world. A balanced
20 requirement for this smaller IVM-5 group will help ensure
21 continued success.

22 --o0o--

23 AIR POLLUTION SPECIALIST WILLIAMS: Therefore,
24 staff recommends that the Board adopt the proposed
25 amendments to the ZEV regulation and direct staff to

1 release a second 15-day Notice of Public Availability of
2 Modified Text to address reference and textual errors.

3 This concludes my presentation.

4 ACTING CHAIRPERSON BERG: Thank you very much,
5 Mark.

6 Richard do you have any closing comments?

7 EXECUTIVE OFFICER COREY: Only that, as you
8 heard, the proposal provides IVM the flexibility needed
9 for successful development and production of ZEV
10 technologies, and therefore asks the Board to adopt the
11 recommendations.

12 ACTING CHAIRPERSON BERG: Great.

13 Board members, we have 11 people that have signed
14 up to testify. If there's any questions of staff of the
15 proposal, then we could take those now from the Board.
16 But let's save our discussion until after we hear the
17 witnesses.

18 Does anybody have any questions of staff?

19 Okay. Then our witnesses are listed up front,
20 and we'll start out with Henry Hogo.

21 MR. HOGO: Good morning, Ms. Berg and members of
22 the Board. Henry Hogo, Assistant Deputy Executive Officer
23 at the South Coast Air Quality Management District.

24 First I want to thank Mr. Corey and staff for
25 considering our concerns raised at the October 2014

1 meeting. And we are in full support of staff's proposal
2 as it is today.

3 We really need to have more ZEV models out there.
4 And it's critically important for us to attain the air
5 quality standards. We look forward to working with you on
6 this and we urge you to adopt the staff's proposal. And
7 any revisions that are being proposed I think it should be
8 considered as part of the mid-term review.

9 Thank you.

10 ACTING CHAIRPERSON BERG: Thank you.

11 (Thereupon an overhead presentation was
12 Presented as follows.)

13 MR. MORGAN: Ken Morgan with Tesla Motors. Good
14 morning

15 Members of the Air Resources Board, thank you for
16 the opportunity to speak here today.

17 The current proposal provides an 11-year gap
18 between today and when the IVMs would be required to
19 deliver full zero emission vehicles in California. That's
20 nearly a 20-year gap between when Tesla first started
21 delivering EVs in California and when the first of the
22 IVMs would be required to do so.

23 We believe this gap is too significant,
24 particularly when you consider the financial capacity of
25 these companies versus a company like Tesla.

1 the IVMs could greatly reduce this percentage requirement
2 by delivering vehicles with simply more range. For
3 example, a plug-in hybrid with a UDDS range of 65 miles
4 would only require the IVMs to deliver 23 percent of
5 sales. And they could move that percentage even lower
6 with higher range cars.

7 --o0o--

8 MR. MORGAN: The last point I'd like to mention
9 is that more broadly, especially as we look towards the
10 mid-term review, there is a large and increasing
11 oversupply of California ZEV credits. Now, the problem
12 with this is that unless the standards are adjusted and
13 strengthened and this oversupply is reduced, it will only
14 guide the industry to 600,000 cumulative ZEV deliveries by
15 2025, which represents only 40 percent of Governor Brown's
16 goal.

17 We believe that the mid-term review provides an
18 excellent opportunity for ARB to consider changes that
19 could be made to the mandate to put the industry back on
20 track to achieve the Governor's goal of one and a half
21 million cumulative deliveries by 2025.

22 Thank you.

23 ACTING CHAIRPERSON BERG: Thank you.

24 MR. BLAIR: Good morning. I'm Clinton Blair,
25 Vice President of Government Affairs for Jaguar / Land

1 Rover North America. If it's okay with the Board, I'm
2 going to go first. And then Dan Ryan from Mazda is going
3 to go next. But we're honored to be here today.

4 As the staff presentation shows, the IVM
5 companies are unique. What we see in today's marketplace
6 is that some of the larger companies are sometimes ten
7 times larger than we are. We have unique vehicles, we
8 have unique customers, and we're really proud to serve
9 that part of the marketplace.

10 If you look at the collective research and
11 development budgets of our five companies, you'll see that
12 they are slightly less than the smallest large vehicle
13 manufacturer in the ZEV regulation.

14 So we're catching up. We're moving fast. We are
15 on the path to electrification. And we want to meet the
16 regulation with cars, not credits.

17 And some of the changes that you're proposing
18 here today will help us meet those goals. And that's why
19 we support them.

20 The process that we've been on over the last
21 couple of years is very, very important. When the staff
22 reached out to us a couple years ago, we began to work
23 together as a group. We had a really good technical
24 collaboration. We weren't always happy. You guys weren't
25 always happy. And I think the work product here today

1 shows that there's been a very good process in place.

2 Many of you have complimented us about working
3 together as five companies. It certainly wasn't easy for
4 us, but I think it's streamlined the process and delivered
5 a really good work product to you.

6 We're also very appreciative that there's been a
7 willingness to engage and listen by the Section 177 states
8 and the NGO community. That's been very helpful in
9 getting here today.

10 Without going into too much detail, we've heard
11 from staff about what the proposal before you does.
12 There's -- It's very important and we support it. But
13 there is a big missing piece that's not here today; and
14 that is a continuation to relook at the underlying
15 compliance requirement. We think that that merits further
16 review. And leading up to the mid-term review we really
17 want to keep working with the staff and the Board to
18 continue to reassess that question.

19 And my colleague Dan Ryan is going to talk to you
20 further about that.

21 Thank you.

22 MR. RYAN: Thanks, Clinton. As you said, I'm Dan
23 Ryan. I'm the Director of Government Affairs for Mazda
24 Motor Company. And I'm here speaking on behalf of all the
25 IVM-5 companies.

1 The proposal before you reflects acknowledgement
2 of our issues, and the four items before you today better
3 clarify who is an IVM. They give us a bit more
4 flexibility on lead time, a bit more flexibility as far as
5 credit recovery if a deficit occurs, and they allow us to
6 pool into 177 states as the LVMS are allowed to do.

7 It's important to note that the ZEV mandate is
8 not going to success or fail based on the IVMS. We are a
9 small part of the market. We're sort of the whipped cream
10 on the pie. We're committed to adding our unique twists
11 to the ZEV market. But we are a small part; we're about 7
12 percent of the market.

13 Our companies are unique and appeal to a subset
14 of the mass market, and we look forward to sort of
15 bringing our twists to that, to the ZEV marketplace.

16 All of our companies are already somewhere on the
17 path to electrification, either with models on sale in the
18 U.S. or somewhere in the world and under development.

19 The proposals here today are not an open
20 checkbook for us. They don't allow us to do whatever we
21 want for as long as we want. The global revenue threshold
22 sunsets in 2020. The lead time is for five years. And
23 all through this process we have had the expectation that
24 we will be fully merged with the program by 2026.

25 As Clinton said, it is important to review the

1 compliance requirements as part of the mid-term review.
2 It's important to note that as of today, our requirements
3 remain the same as the LVMS; and that is not changing in
4 the proposal before you today.

5 The four items in the staff proposal are very
6 important, and we urge your support for them. But work
7 needs to continue in the mid-term review, and we look
8 forward to working with all the stakeholders as this
9 process continues, and we look forward to doing our part
10 to help California achieve its air quality goals.

11 Thank you.

12 ACTING CHAIRPERSON BERG: Thank you.

13 Good morning, Elaine. We'll have to have you
14 move over here.

15 Thank you.

16 MS. O'GRADY: Good morning. My name's Elaine
17 O'Grady. I'm a senior policy advisor for the Northeast
18 States for Coordinated Air Use Management, or NESCAUM.
19 I'm here today on behalf of the states of Connecticut,
20 Maryland, Massachusetts, New York, Oregon, Rhode Island,
21 and Vermont to provide comments and support of the revised
22 regulatory proposal regarding the compliance obligations
23 for the intermediate volume manufacturers, or IVMS, under
24 the Zero Emission Vehicle Regulation.

25 I'll refer to the states that I'm representing

1 today as the ZEV MOU Section 177 states because all these
2 states have adopted California's ZEV Program under Section
3 177 of the Clean Air Act, and have also -- are also a
4 party to the Zero Emission Vehicle Memorandum of
5 Understanding along with the State of California, which is
6 intended to accelerate the adoption of zero emission
7 vehicles in these states.

8 NESCAUM serves as a facilitator and technical
9 advisor to the ZEV Task Force, which was established to
10 help accomplish the goals under the ZEV MOU.

11 In the ZEV MOU states, the transportation sector
12 is collectively the largest source of category of
13 greenhouse gas emissions and ozone-forming pollutants.
14 Electrification of the transportation sector is essential
15 to meeting our air quality goals, climate goals, and
16 renewable energy goals. It will not occur without a
17 robust ZEV Program. Therefore maintaining overall
18 stringency of the ZEV requirements is a high priority for
19 our states.

20 We believe the revised proposal being presented
21 today improves on the original proposal presented last
22 fall, as it addresses the equity concerns raised by the
23 IVMs without relaxing the ZEV percentage requirements.
24 The current staff proposal continues to recognize that
25 vehicle sales are not the sole indicator of a

1 manufacturer's ability to bring ZEVs to the market, and
2 accordingly retains the 40 Billion Global Revenue test.

3 The proposal also retains important flexibilities for
4 the IVMs, including extended lead time, original pooling
5 option in the Section 177 states, and a three-year credit
6 recovery subject to Board approval.

7 The ZEV MOU Section 177 states strongly support
8 retaining the ZEV percentage requirements for IVMs as
9 adopted in 2012, and we urge the Board to reject any
10 future requests that would weaken the ZEV regulation's
11 fundamental purpose.

12 Although the IVMs may represent a small part of
13 the market, they are a critical part, and it's very
14 important to have additional models brought for the ZEV
15 Program to be successful.

16 Regulatory certainty going forward is essential
17 to justify the level of investment needed to develop and
18 bring new technology to the market. Similarly, the ZEV
19 MOU Section 177 states require assurance that
20 manufacturers will increase their efforts to promote and
21 place ZEVs in our states in order to justify continued
22 spending on charging infrastructure, consumer incentives,
23 outreach, and other activities to accelerate the
24 widespread adoption of ZEVs in our states.

25 As climate leadership states, we value our

1 partnership with California and look forward to continued
2 collaboration in our joint effort to electrify the
3 transportation sector.

4 Thank you.

5 ACTING CHAIRPERSON BERG: Thank you.

6 Anne.

7 MS. SMART: Hi. My name is Anne Smart and I'm
8 the Director of Regulatory Affairs in Government Relations
9 at Charge Point. We're an electric vehicle charging
10 station company based in Campbell, California. We're a
11 U.S. company.

12 We're small, much smaller than the autos here in
13 the room; but we are an important part of this ecosystem
14 that's contributing to supporting electric vehicles that
15 you're talking about today. And we're here to oppose
16 changes to the regulation.

17 For us, we have invested our company to support
18 the Governor's goal of 1.5 million vehicles. The
19 regulatory certainty in this regulation is really
20 important to us. We have investors backing us. We're the
21 largest charging station company right now in the world.
22 And changes that you make here will have ramifications
23 beyond just the autos in the room. They will impact the
24 charging station investments. They'll impact our ability
25 to expand here and in other states.

1 And so we encourage you to remember that the
2 ecosystem is large, not make changes now or in the VIN
3 market review.

4 And in general, we think that it's important that
5 the EV infrastructure investments are also included in
6 this discussion. We are part of the infrastructure.
7 We're part of the ecosystem. We support any vehicles that
8 are on the road today, and so any changes you make here
9 with both the IVMs and the larger autos will have
10 implications for our investments moving forward.

11 Thanks.

12 ACTING CHAIRPERSON BERG: Thank you.

13 Morning, Kathryn.

14 MS. PHILLIPS: Kathryn Phillips with Sierra Club
15 California. Thank you for the opportunity to speak on
16 this.

17 Bill Magavern will be presenting for the whole
18 Coalition, but I do want to underscore our appreciation
19 for the staff work on this and the willingness to revisit
20 the issue.

21 I also want to just mention that this has been an
22 opportunity for us to think more about what we can expect
23 and what we need in 2016 when we go through the review;
24 and I think it suggests that that review will be an
25 opportunity to strengthen the ZEV compliance requirement

1 and provide some motivation for the IVMs and the LVMS to
2 be the best they can be and to improve their products and
3 especially improve their marketing.

4 We've had an opportunity to have a lot of
5 conversations over the last couple of months because of
6 the delay in this effort, and so it's actually given me a
7 lot of hope that we can come out of 2016 with a much
8 stronger ZEV Program.

9 And I just want to mention a few reasons - it's
10 already been mentioned - why we need a stronger ZEV
11 Program. I mean, the Governor has set some very important
12 goals. I think those goals are achievable. But it will
13 only be achievable if we all hang together and encourage
14 the autos to be the best they can be.

15 But air pollution is another obvious reason, and
16 climate change.

17 And then a fourth reason I want to bring to your
18 attention because it's been on the news so much. And I
19 talked to some members of Sierra Club in the Santa Barbara
20 area today, and I can't tell you how disturbing and
21 distressing it is to hear them tell about what it's like
22 on the ground to see the oil slick and the devastation
23 it's having to the beaches, to the wildlife, and
24 underscoring how important it is for us to reduce our
25 dependence on oil. And the ZEV mandate is one of the

1 strongest ways that we can do that.

2 So again, thank you for your efforts on this.

3 MR. MAGAVERN: Good morning, Board members. Bill
4 Magavern with the Coalition for Clean Air. In support of
5 the proposal, we think that it strikes an appropriate
6 balance. It keeps us on course to meeting our ZEV
7 targets. And as Kathryn said, we really need to speed up
8 on ZEVs in order to meet the Governor's goals for
9 greenhouse gas reduction for 2030 and 2050, as well as his
10 petroleum reduction target for 2030; and most importantly
11 from our perspective, in order to come into air quality
12 attainment as required by federal and state law.

13 So we think that we actually need to hit the
14 accelerator, the electric vehicle accelerator on ZEVs,
15 rather than hitting the brakes.

16 At the same time, your proposal does give the
17 intermediate volume manufacturers some of the flexibility
18 that they've asked for. And I want to compliment those
19 companies for supporting this proposal, because I know
20 they didn't get everything that they asked for.

21 We have sent you a letter, along with our
22 colleagues at the American Lung Association in California,
23 the Center for Energy Efficiency and Renewable
24 Technologies, the Natural Resources Defense Council,
25 Sierra Club California, and the Union of Concerned

1 Scientists. And I just want to give you the key points
2 from that letter.

3 We support the proposal on the definition of IVMs
4 as well as the pooling agreement with the 177 states.

5 We very much support the continuation -- the no
6 decrease in the stringency of the credits for the -- of
7 the credit requirements for the reasons that I mentioned.

8 And on the credit provisions, you've tightened
9 the language so that the flexibility is now restricted to
10 the IVMs; and we very much agree with that.

11 And we encourage you to have that process for
12 credit-make-up periods if that is invoked a transparent
13 process, that that all be done in public.

14 And finally, we urge you to continue to evaluate
15 ZEV requirements; because, as I said, going forward, we
16 think that we're going to need to look at the
17 possibilities for making sure that we get more ZEVs on the
18 road, that we're not just having a big overhang of credits
19 and that we're actually getting the cars out there, as I
20 know is your goal and also something that we're working
21 with the 177 states on.

22 Thank you very much.

23 ACTING CHAIRPERSON BERG: Thank you, Bill.

24 Good morning, David.

25 MR. REICHMUTH: Thank you, members of the Board.

1 My name is David Reichmuth and I'm representing the Union
2 of Concerned Scientists.

3 First I'd like to thank staff for working with
4 us, then listening to our concerns. Thank you very much.
5 It was a very constructive dialogue.

6 We support, as Bill mentioned, the proposed
7 changes in this item, and we urge the Board to adopt
8 staff's proposal.

9 One thing I'd like to bring up is during the
10 process of developing and refining these changes, there
11 was a lot of discussion and some disagreement around the
12 number of ZEV vehicles that would be lost or gained during
13 this change. It's critical to remember that any
14 calculation of number of vehicles is dependent on the
15 types and range of the electric vehicles being produced
16 and delivered.

17 So, for example, an IVM that produces 10,000
18 vehicles per year, over the 2018-2025 period could produce
19 less than 3,000 vehicles or have to produce more than
20 25,000 vehicles. There's a tenfold range there depending
21 on what types of vehicles they produce. And that's with
22 the same credit stringency. So I think a lot of the
23 discussion was around this issue of how many credits per
24 vehicle would actually be generated.

25 Now, UCS believes that the values used in

1 previous rulemakings probably underestimate the credits
2 per vehicle that are and will be generated by both LVMS
3 and IVMs. And this, combined with the credits already
4 banked in the current travel provision in the ZEV
5 regulation, means that the State may currently be on track
6 to miss this goal of 1.5 million ZEVs and 3.3 million ZEVs
7 in the multi-state IOU region.

8 Now, the goal of ZEV regulation is not to
9 generate ZEV credits. The goal is to make sure the
10 technology -- the ZEV technology is mature, that the
11 vehicles are available for sale in the State and reach a
12 self-sustaining market.

13 I mean, the overall goal is to make sure that we
14 are on a path to transform the market from petroleum-based
15 combustion engines to electric-drive vehicles with zero
16 emissions.

17 So as part of the mid-term review the ARB should
18 assess the likelihood of the State meeting ZEV deployment
19 goals given the current credit balances and the range of
20 vehicles for sale and announced. And the ZEV regulation
21 needs to make sure that we -- ensure that we have both the
22 number and types of vehicles that are needed to put us on
23 the path to meet air quality, climate, and
24 petroleum-reduction goals, both in 2025 and in the 2030
25 and 2050 time points.

1 Thank you.

2 ACTING CHAIRPERSON BERG: Thank you very much.

3 Good morning, John.

4 MR. CALDWELL: Good morning, Madam Chair and
5 members of the Board. My name is John Caldwell
6 representing the California Electric transportation
7 Coalition.

8 We have submitted written comments and support of
9 the staff proposal.

10 We would only add that, as others have commented,
11 we believe it is appropriate that the compliance
12 requirements for the intermediate volume manufacturers
13 receive further review during the upcoming mid-term
14 review.

15 Thank you.

16 ACTING CHAIRPERSON BERG: Thank you very much.

17 Jamie Hall.

18 MR. HALL: Good morning, everyone. I'm Jamie
19 Hall, Policy Director for CalStart. I'm here today in
20 support of the revised proposal. We believe it provides
21 really generous flexibility for the IVMS but without
22 reducing the compliance obligation. It's a good balance
23 to strike and it's really important to maintain a strong
24 signal.

25 As we look ahead to the mid-term review, it's

1 important to continue pushing to accelerate this market.
2 And this regulation obviously is a very key element of
3 that whole effort.

4 We do I think need to look at the credit
5 oversupply issue that a few people have mentioned today;
6 but I think that's better done as part of the mid-term
7 review.

8 I want to note that this regulation, as important
9 as it is, is just one piece of what needs to be a really
10 comprehensive suite of policies. We also need to maintain
11 strong signals through things like the CVRP and HOV lane
12 access that really help get people into these vehicles. I
13 know that's not what we're here to discuss today, but
14 these things are hard to look at in a vacuum.

15 So thank you, and we look forward to continuing
16 to work with you to meet the State ZEV goals.

17 ACTING CHAIRPERSON BERG: Thank you very much,
18 Jamie.

19 And, Simon, you're doing clean-up today.

20 MR. MUI: Better late than never.

21 (Laughter.)

22 MR. MUI: Good morning, Chairwoman Berg and
23 members of the Board. I'm Simon Mui with the Natural
24 Resources Defense Council.

25 First off, I do want to congratulate you all,

1 State of California, the Governor's Office, for hosting --
2 and the other partner states for hosting the ZEV summit
3 this month. I thought that brought a lot of energy.

4 In addition, just this week the signing of Under
5 2 MOU by California with 11 international and domestic
6 partners to reach our 2030-2050 targets was quite a --
7 quite an announcement. And I wanted to just emphasize the
8 focus on electric drive as a key strategy for
9 decarbonizing the transportation sector.

10 Today's staff proposal for 15-day amendments
11 really help us ensure that the ZEV Program continues in a
12 strong manner and will remain a key foundational element
13 to hitting those targets towards cleaner mobility. So I
14 think, like others have said, NRDC supports the overall
15 15-day change in package. And we do thank staff,
16 management, and the Board for their time and effort on
17 this.

18 But I do want to take time and a moment to say we
19 also appreciated the efforts and the discussions
20 subsequent last October with the intermediate volume
21 manufacturers. I think we have a better understanding
22 through those discussions of the issues and concerns going
23 forward. And I think that that is a helpful beginning.

24 Overall, we think a more balanced proposal has
25 been reached that maintains the program stringency but

1 allows flexibilities to utilize plug-in hybrids in lieu of
2 ZEVs. But going forward, all manufacturers will need to
3 transition the ZEV market and expand their vehicle
4 offerings. I think there's no questions about that.

5 There isn't a consensus on the best way to get there
6 or how quickly. But as I said last October, we should
7 consider any type of major amendments to the program in
8 the context of the mid-term review that they're better
9 housed there and looked at collectively rather than
10 piecemeal.

11 As part of that, I wanted to identify some of the
12 areas where I think the Board and ARB can work together
13 with all stakeholders around to improve our understanding
14 overall.

15 One is sales. Are the current compliance
16 scenarios for the ZEV Program and TZEV programs consistent
17 and sufficient to achieve our state's 2030 climate and
18 petroleum-reduction goals? Our initial technical analyses
19 are showing that all parties will need to work
20 collectively to literally and figuratively go further and
21 faster.

22 Uncertainty and variability in compliance. I
23 just want to flag that the variability has I think created
24 a lot of uncertainty for both parties on both sides.

25 So, for instance, the automakers may be worried

1 about the extreme side, which is 25 percent sales if you
2 do low-range BEVs and plug-in hybrids. If you do fuel
3 cells only on the flip side, it's 5 percent.

4 So I think having better certainty about the
5 actual vehicle numbers on the road will be important, in
6 addition to incorporating the ZEV credits.

7 ACTING CHAIRPERSON BERG: I need you to wrap up.

8 MR. MUI: Thank you very much.

9 ACTING CHAIRPERSON BERG: Thank you very much.

10 So before we go to Board discussion, I will now
11 close the record on this agenda item. However, the record
12 will be reopened when the 15-day notice of public
13 availability is issued.

14 Written or oral comments received after this
15 hearing date but before the 15-day notice is issued will
16 not be accepted as part of the official record on this
17 agenda item.

18 Once the record is reopened for a 15-day comment
19 period, the public may submit written comments on the
20 proposed changes, which will be considered and responded
21 to in the final statement of reason for the regulation.

22 So my fellow Board members, we have before us an
23 amendment. And I'd like to open it up for Board
24 discussion.

25 Dr. Balmes.

1 BOARD MEMBER BALMES: I'll talk the plunge.

2 (Laughter.)

3 BOARD MEMBER BALMES: So first off I want to
4 thank the staff and both the IVMs and actually the
5 environmental health advocacy groups who have been part of
6 this process. I do think -- well, first of all I want to
7 say that I missed the October fireworks because I was in
8 South Korea, but I watched them on video. And I think
9 though, while that provided a little bit of extra zest for
10 the meeting, I think it led to a good outcome. And I
11 think that what we've come up with here is a reasonable
12 compromise.

13 I still have some concerns however. And the
14 first concern is about the potential oversupply of credits
15 in the system. And I've just really become aware of how
16 much impact that will -- might have on our overall goal of
17 trying to get 1.5 million cars -- ZEV cars on the road.

18 So as part of the mid-term review, I think it's
19 very important for us to do a careful analysis of the
20 credit, I think, oversupply that we have.

21 And I guess the other thing that I'd like to
22 mention, and maybe other Board members may be in
23 agreement, is -- the mid-term review is really important.
24 And I realize a lot of information has to be reviewed
25 prior to the mid-term review. But I think it's currently

1 scheduled for December of 2016, and that seems like a long
2 way away. So I'm interested in seeing if we can move that
3 up a bit.

4 ACTING CHAIRPERSON BERG: Okay. Ms. Mitchell.

5 BOARD MEMBER MITCHELL: Thank you. Thank you,
6 Chairman.

7 Can you hear me on this microphone? There's been
8 some problems.

9 Thank you, staff, for all the work that's been
10 done on this. And I think what we heard this morning from
11 a lot of our people who came to testify was a focus on the
12 mid-term review. And I think that is extremely important
13 at this stage. I think we need at that point to do a
14 thorough analysis of where we are on this path to reach
15 the goals that have been set: The Governor's goals for
16 reduction of petroleum, the Governor's goals for one and a
17 half million ZEV cars on the road by 2025. And we need to
18 look at where we are at this point in time and how we get
19 to the final goals or a target goal that has been set for
20 us.

21 This is important, because we're doing several
22 things. We're addressing climate change. We're also
23 addressing air pollution. And those goals are extremely
24 important across the state and in our -- in my district.
25 So I want to emphasize that.

1 One of our speakers - I believe it was Bill
2 Magavern - mentioned that we need to have a very
3 transparent process in the credit recovery program, and I
4 believe that too. I think we really need to make sure
5 that what we do is transparent and that others in the
6 regulated community understand that.

7 And I share this concern about having a surplus
8 of credits in the market. We are really not in the
9 business of creating a robust credit market. What we want
10 to see are cars on the road. And I think that is really
11 important that we always keep that in mind. What we want
12 to see is ZEV cars on the road. And so we need to be very
13 careful about what is in the credit market, what makes up
14 our credits, what types of vehicles. That ought to be
15 reviewed as part of the mid-term review.

16 Where are we now in the sales? Are the sales
17 sufficient to reach the goals that have been set? And
18 kind of a -- I would say a -- through modeling or through
19 projections, where are we going to be on that timeline
20 through 2025 and 2026?

21 So thank you very much, staff, for the work
22 you've done. And we look forward to more work on this.

23 Thank you.

24 ACTING CHAIRPERSON BERG: Thank you very much,
25 Ms. Mitchell.

1 Dr. Sherriffs.

2 BOARD MEMBER SHERRIFFS: Yeah. And my comments
3 are very much along the same lines.

4 You know, flexibility is important in terms of
5 fairness, in terms of figuring out what's working and
6 building on that; but it's certainly not laxity. The
7 mid-term review, I agree, is really critical here. We
8 have some important work to do then. We need to look at
9 the credits. We need to think about how the credits
10 support infrastructure, because I think infrastructure is
11 key to making all of this work.

12 Obviously the mid-term review, thinking of what's
13 working to achieve our goals, mid-term review to better
14 understand the relationship of ZEV, PZEV. What our real
15 goal is is maximizing those zero emission miles, which are
16 so important in terms of the greenhouse gas emissions and
17 the criteria pollutants, which are so critical for South
18 Coast, for Central Valley, for all of us.

19 I would -- this is all very doable. You know,
20 when the Governor announced the 50 percent reduction in
21 petroleum for transportation fuels in 2030, I thought this
22 is just too aspirational, this is going nowhere. And then
23 I thought what my family had done. And three years ago,
24 we bought a zero emission vehicle. Three years ago,
25 28,000 pollution-free miles ago. And one year ago, we got

1 an internal combustion engine car, but it got 50 miles per
2 gallon. So today, we are using 20 to 30 percent of the
3 petroleum transportation miles that we were using three
4 years ago. I want some credits.

5 (Laughter.)

6 BOARD MEMBER SHERRIFFS: Now, my family solution
7 is not everybody's solution, and that's part of why we
8 need to look carefully at this. But it is absolutely
9 doable. It is absolutely doable. I mean we need to stay
10 the course.

11 ACTING CHAIRPERSON BERG: Thank you very much.

12 Okay. Yes, please, Mr. Riordan.

13 BOARD MEMBER RIORDAN: First let me just express
14 my support for the discussion that has gone on between all
15 the affected parties. I think this is a marvelous
16 opportunity to have everyone hear all sides and become
17 part of the process, and certainly those who have spoken
18 today are key players in that process beyond our staff and
19 of course the Board itself.

20 I would agree with what has been said about the
21 importance of the mid-term review, and the timing of the
22 mid-term reviews is also important. We do need to
23 understand this supply of the credits, how the market
24 might be functioning in the future. And also, as my
25 colleague has just said, I really would want to see how

1 our infrastructure process is being accomplished. My
2 concern is, to have a robust sale, you've got to have the
3 infrastructure there for many of the people who are going
4 to hopefully buy these products that are going to be
5 manufactured. So I think infrastructure is critically
6 important.

7 May I suggest also my wish that the mid-term
8 review be held earlier than perhaps staff was thinking. I
9 think you thought very late in 2016. I would hope we'd be
10 early fall of 2016. I think that would help everybody to
11 understand what's happening, what needs to be adjusted,
12 and how successful we are. I think the whole range of
13 issues need to be before us. And knowing this Board,
14 we're going to want to discuss it, perhaps send it back to
15 staff for further review; but at least we'll have started
16 in early fall.

17 So if that could be accomplished, I would be very
18 appreciative.

19 Thank you.

20 ACTING CHAIRPERSON BERG: Thank you, Ms. Riordan.
21 Professor Sperling.

22 BOARD MEMBER SPERLING: So I support most of
23 what's being said here on the Board.

24 I do want to give a little context; and, that is,
25 I want to highlight that there has been a lot of attention

1 to this IVM issue since 2012. The reason there's been so
2 much attention is because we gave it so little attention
3 in 2012. And that's -- you know, that was, in a sense, an
4 oversight by both the Board and the staff and not
5 understanding and appreciating what we were doing with
6 respect to the IVMs. So it is appropriate, you know, that
7 we're coming back and fixing it.

8 And I would note also that the IVMs, you know,
9 these companies, have been more engaged with more
10 integrity than just about any group we've dealt with.
11 They've gotten together, which did take quite a bit of
12 effort for them to actually do that. Companies are not
13 naturally inclined to work together so closely on these
14 kinds of issues and talk to each other; and they have and
15 they worked with us. And so that should be appreciated.

16 And it should also be appreciated, as one of the
17 company's said, that these are companies that do have in
18 many cases specialized products, market niches. You know,
19 you just think of Subaru, you know, their market is, you
20 know, more the outdoors-type, adventurer-type people; and
21 these are not vehicles so aligned with being a pure
22 battery EV. And so I think there should be some
23 appreciation of that, which I support.

24 Now, having said that, we've learned a lot about
25 technol -- ZEV technologies and markets in the last few

1 years, and just in a very brief sense. One, we've come to
2 see the costs of the batteries coming down faster than
3 most of us expected it to happen, which is great news.
4 But we've also come to see that the market seems to be
5 much easier to expand with PHEVs than with the pure
6 battery EVs. And we're seeing the car companies coming
7 out with a lot more PHEV models than battery EV models.
8 We're starting to see fuel cell vehicles just starting to
9 appear. And so we've really learned a lot, we're learning
10 a lot, and I think we need to be more flexible and
11 incorporating that knowledge going forward, you know, in
12 making possible modifications to the ZEV Program.

13 And so this next review -- this -- you know, the
14 mid-term review really is important event. It really will
15 be the first time we look at it closely since 2012, which
16 is quite awhile. And so as we do that though, I want to
17 support what a few of the other Board members, Dr. Balmes
18 and others, have said here that the goal should be to
19 strengthen the ZEV Program. That I also agree that we can
20 get more vehicles out there, but they might not be the
21 vehicles we thought they were going to be a few years ago.
22 But the goal should be expanding the program, I believe.
23 You know, we'll look at the data more carefully and, you
24 know, we'll study it; but that's my sense of the future
25 going forward.

1 And so two things that I want to -- first, I want
2 to support the idea of making the mid-term review a little
3 sooner. Because what I did not realize, and therefore
4 expect most others didn't, is that when we talk about the
5 mid-term review, it really is just a review. Any
6 regulatory actions will take place as an outcome from
7 that. In other words, we will then designate the staff to
8 follow up on certain items. So when we're talking about
9 actual regulatory action, we're actually talking about at
10 least probably a year later than that, which is really far
11 in the future. So for that reason I do support the
12 proposal to make it sooner.

13 And the last thought is that I'd like to suggest
14 a small change in the resolutions, that there be a firm
15 commitment that we are going to look at some of these
16 issues. And I guess in this case we're only looking at
17 IVM. So in this case it would be a firm commitment that
18 we are going to look at the obligations of the companies
19 and the credits in the mid-term review. And the
20 resolutions is kind of fuzzy about it. So I just wanted
21 to make that more explicit, but with the understanding
22 that that is the time when we're also explicitly going to
23 be looking at the 177 states, we're going to explicitly be
24 looking at PHEVs and battery EVs and the mix and how we
25 handle that, we'll explicitly be looking at the idea of

1 eVMTs, and we'll explicitly be looking at the issue of
2 credits.

3 So I guess for this resolution, you know, just
4 really IVMs; but that's the larger context about it. And,
5 you know, I would like to hear affirmation from the staff
6 that, you know, that is the plan or not.

7 (Laughter.)

8 BOARD MEMBER SPERLING: I don't want to hear the
9 "or not," but I appreciate that that's one possible
10 response.

11 ACTING CHAIRPERSON BERG: But I would like to
12 turn it over to staff to address, before I get the last
13 two comments, on the idea of what the intention of for the
14 mid-term review and the need to specifically call out IVM
15 stringency in the resolution.

16 BOARD MEMBER SHERRIFFS: Can I then also clarify.
17 I agree wholeheartedly early, not late. I'd love to do
18 this -- we're talking early fall. I'd love to do this in
19 September.

20 ACTING CHAIRPERSON BERG: Okay. So before we
21 start pinning staff down to a specific day, let's --

22 BOARD MEMBER SHERRIFFS: Let's bring in the
23 oxygen --

24 ACTING CHAIRPERSON BERG: -- let's stick with one
25 thing at a time if it'd be all right.

1 EXECUTIVE OFFICER COREY: I -- the response to
2 Professor Sperling in terms of scope - and I think it's a
3 really important question because several of you, in fact,
4 all, are noting the importance of the mid-term review - so
5 I want to be clear in terms of what it is and what we're
6 capturing in terms of scope. So it is a collaborative
7 document. It's a technical assessment document worked on
8 in collaboration with EPA and NHTSA for the Clean Vehicle
9 Program. The ZEV component is comprehensive; it does
10 cover the elements Dr. Sperling talked about, including
11 technology and costs, consumer behavior and uptake of the
12 range of technologies, infrastructure status and projected
13 needs from an infrastructure standpoint, and also the
14 collaboration with 177 states, the uptake and behavior
15 with respect to the secondary market, and the credit
16 position point that you've made to me.

17 All those elements are a key aspect that needs to
18 be reflected in the mid-term review and are a range of
19 studies that are underway, as well as real experience that
20 we're seeing in terms of the rollout of the program. In
21 fact, next month we'll be reporting to you in terms under
22 the AQIP Program that we'll be looking at the CVRP Program
23 for the next fiscal year and talking about what we've
24 seen. So there will be periodic reports as terms of what
25 do we see from an uptake standpoint.

1 But to my point, mid-term review: Comprehensive
2 from the ZEV standpoint to really inform the very point
3 that Dr. Sperling and others have raised to really inform
4 a touchpoint, how is the program unfolding, are there any
5 issues, and seeking Board direction moving forward.

6 ACTING CHAIRPERSON BERG: Mr. Corey, did you have
7 an addition?

8 DEPUTY EXECUTIVE OFFICER AYALA: I was just going
9 to provide a couple extra comments, because one of the
10 points that keeps coming up is the issue of oversupply of
11 credits. And just to try to put things in a little bit of
12 context for you, let us remember that the reason that
13 there is credits in the market is because the OEMs are
14 actually bringing cars to the market. And if you consider
15 that we are at this point fast approaching 150,000 cars on
16 the roads in California, that's about 10 percent of what
17 we need to be in 2025 to meet our target. So the credits
18 are an important indicator of the fact that there is
19 market demand, the people want the cars, and the OEMs are
20 responding bringing those products to the market. So I
21 just want to put that in context.

22 The other thing is again the point about are we
23 going to be where we need to be in 2025? As Mr. Corey
24 pointed out, next month we're going to come back to you
25 with our investment plan and we're going to include a

1 report on CVRP. And I often like to use a very simplified
2 approach in terms of trying to help understand where we're
3 going to be in 2025. And obviously the most difficult
4 thing about forecasting is that it's about the future.
5 But if you do a very simple exercise and you look at the
6 CVRP demand, the rate of increase, and you just
7 extrapolate that to 2025, that tells you we're going to
8 get there. So again, that's just one indicator. But I
9 want to mention that to you, because I do want to give you
10 some context for that.

11 Obviously, everything you said, and as Mr. Corey
12 alluded to, we need to track this very closely. We have
13 remaining barriers like infrastructure. But at the same
14 time, let us acknowledge that the market is growing, we
15 see very healthy signs that the cars are getting better,
16 there's more models coming to the market, the introduction
17 of fuel cells is a great development. So things are
18 happening and moving the needle in the right direction.

19 ACTING CHAIRPERSON BERG: And thank you for that.

20 So getting back to Mr. Corey, Professor
21 Sperling's specific request. On slide 8 of the staff
22 report, it says commit to revisit program stringency in
23 late 2016 as part of the mid-term review. Do you feel
24 that the resolution supports this commitment as it's
25 written?

1 EXECUTIVE OFFICER COREY: Chair Berg, I do. But
2 I wanted to add in terms of scope of factors that are
3 considered as part of the assessment. But I want to get
4 to the timing question that is reflected here as well,
5 just to provide a little more clarity.

6 ACTING CHAIRPERSON BERG: Before you do that,
7 could we just hear from the last two Board members --

8 EXECUTIVE OFFICER COREY: Absolutely.

9 ACTING CHAIRPERSON BERG: -- so we could address
10 in case there's another aspect of that that comes up.

11 EXECUTIVE OFFICER COREY: You bet.

12 ACTING CHAIRPERSON BERG: Thank you.

13 Supervisor Serna, do you have a comment for me?

14 BOARD MEMBER SERNA: Only briefly, Madam Chair.
15 I would certainly agree with all of what's been said
16 already by my colleagues on the Board. And I'll just note
17 that in the last week or so I think many of us have heard
18 from the IVMS leading up to the hearing. But it's kind of
19 a pleasant surprise to hear a slight change of a position
20 in terms of what I thought was a remaining or was an
21 outstanding concern that they have. So I was pleased to
22 hear from the representatives of the IVMS today that
23 they're really focused on the mid-term review. I think
24 it's clear that this Board is very focused on the import
25 of that, and I would agree that moving it up in terms of

1 scheduling is something prudent.

2 ACTING CHAIRPERSON BERG: Thank you.

3 Mr. De La Tore?

4 BOARD MEMBER DE LA TORRE: (Shakes head.)

5 ACTING CHAIRPERSON BERG: Okay. So, Mr. Corey,
6 you were going to address the timing issue as well as wrap
7 up the giving certainly Professor Sperling some comfort as
8 to being able to be assured that we're going to address
9 the IVM stringency program within the mid-term review.
10 Otherwise I'll ask fellow Board members how they feel.

11 EXECUTIVE OFFICER COREY: Correct. So in terms
12 of stringency, that clearly is an element that the range
13 of studies and analysis needs to inform. And our plan is,
14 as part of returning to the Board having completely the
15 mid-term review, is to really characterize the scope of
16 findings as part of that review, staff recommendations,
17 and to seek Board input in terms of the next steps. So
18 then the question is one of timing.

19 The mid-term review, which I characterize as a
20 very comprehensive assessment - I think it's understood
21 the scope of work that will inform it - is to be completed
22 in the June time frame, June 2016.

23 And your correct, Dr. Balmes, in terms of timing,
24 after the completion of that draft report, the plan was to
25 release it for public review. And it is -- clearly it's a

1 very comprehensive document. We're going to have to
2 provide some time to get input, synthesize that input, and
3 really return to the Board with the scope of
4 recommendations, findings, assessment that stakeholders
5 have provided as well. We want to make sure there's time
6 to do that.

7 But I'm hearing loud and clear the interest in
8 returning to the Board prior to December. And what my
9 plan is is to start with the team here and see if there's
10 some opportunity to, one, do everything I just described:
11 Get that draft report out, provide sufficient time for
12 public comment, synthesize that input, and return back to
13 the Board for a, you know, a very substan -- what will be
14 a very substantive conversation and Board hearing. And I
15 will look to see if we can move that forward somewhat.

16 ACTING CHAIRPERSON BERG: And maybe another
17 aspect of this that you might be able to comment on is
18 that whatever direction that the Board might give during
19 the mid-term review, what's it look like for 2016, in a
20 high level way of timing for coming back for any changes.

21 EXECUTIVE OFFICER COREY: Right. What we would
22 lay out is -- if the direction from the Board on the
23 discussion of the mid-term review was one of regulatory
24 amendments, we'd lay out here's the overall time frame
25 that would take to go through that process for any

1 amendments, for instance, to strengthen or adjust, either
2 way, the regulation.

3 But Professor Sperling's characterization is
4 approximately correct. If we initiated a rulemaking upon
5 direction of the Board when we had the mid-term review
6 discussion, it would be about a year process, which would
7 mean we would return to the Board the latter part of 2017
8 with proposed amendments to the regulation. That's about
9 correct.

10 ACTING CHAIRPERSON BERG: And there's no
11 question. I'm hearing very strongly for a strong --
12 continually strong ZEV mandate, and so I appreciate that
13 comment.

14 Does that -- are you comfortable with that --

15 BOARD MEMBER BALMES: Chair Berg, may I just make
16 one comment?

17 ACTING CHAIRPERSON BERG: Yeah, just one second.

18 BOARD MEMBER SPERLING: Yes, I'm happy.

19 (Laughter.)

20 ACTING CHAIRPERSON BERG: Thank you.

21 Dr. Balmes.

22 BOARD MEMBER BALMES: I just want to say that I
23 appreciate that we're asking the staff to work harder and
24 faster and they're already working hard and fast. But I
25 think this is really important and I think you've heard

1 from the Board how important we feel about that. But I
2 just want to say that it's -- we appreciate the work
3 you've done and what you're going to have to do to bring
4 this a little sooner.

5 EXECUTIVE OFFICER COREY: Thank you, Doctor. In
6 fact, the message came through very clearly from the
7 Board.

8 (Laughter.)

9 ACTING CHAIRPERSON BERG: Well, we have before us
10 resolution 15-7. Can I get a motion?

11 BOARD MEMBER SPERLING: So moved

12 BOARD MEMBER BALMES: I second.

13 ACTING CHAIRPERSON BERG: All in favor?

14 (Unanimous aye vote.)

15 ACTING CHAIRPERSON BERG: Any opposed?

16 Any abstentions?

17 The motion passes.

18 BOARD MEMBER SPERLING: Chairman Berg, could I
19 take the opportunity for a minor teaching moment?

20 (Laughter.)

21 ACTING CHAIRPERSON BERG: As long as it's minor
22 and short.

23 (Laughter.)

24 BOARD MEMBER SPERLING: I want to just clarify a
25 little bit this PHEV and BEV issue, because I know it's

1 very contentious, and it's at the base of a lot of the
2 conflict and discussion. And just very quickly I want to
3 say that what we've been learning is that with battery
4 costs coming down, the car companies are more comfortable
5 building, what we'll call, big battery PHEVs, PHEV 30s,
6 40s, PHEV 50s. And what that means is that these are
7 cars, once there's even a moderate infrastructure out
8 there -- charging infrastructure. What this means is
9 these are cars that would operate essentially pure as true
10 zero emission vehicles in urban areas, and only in some
11 long trips, inner-city would there be the use of a
12 combustion fuel.

13 And so what we're talking about is, even though
14 we talk about PHEVs, and people say, well, it's not the
15 gold standard, it's not what we really set out to do, with
16 these vehicles, we can think about getting 80 to 90
17 percent of the miles being electric miles and being zero
18 pollution in the urban areas where we're concerned about
19 the exposure.

20 And if -- and this is the big if, but if we can
21 get a lot more people willing to buy a PHEV than are
22 willing to buy a battery EV, then I think we're way ahead,
23 and we don't know the answer yet. There's research going
24 on. Car companies themselves are trying to figure out,
25 but all signs seem to be pointing in that direction. And

1 so that really is an underlying issue in all of our
2 discussions about the ZEV mandate going forward, that we
3 will be addressing and thinking about.

4 ACTING CHAIRPERSON BERG: Thank you.

5 BOARD MEMBER SPERLING: Was that short enough?

6 ACTING CHAIRPERSON BERG: Yes.

7 (Laughter.)

8 ACTING CHAIRPERSON BERG: Thank you very much.

9 I'd like to go ahead and return the Board to the
10 consent item. We do have a consent item on our agenda.
11 And I'd like to ask Board Clerk if anybody has asked to
12 testify?

13 BOARD CLERK JENSEN: (Shakes head.)

14 ACTING CHAIRPERSON BERG: Is there anybody on the
15 Board that would like to bring one or more items of the
16 research proposal off of the consent item?

17 BOARD MEMBER RIORDAN: Madam Chair, then seeing
18 none, then I would like to move all of those items, that
19 the staff has recommended on the consent calendar in the
20 affirmative.

21 BOARD MEMBER SHERRIFFS: Second.

22 ACTING CHAIRPERSON BERG: All in favor?

23 (Unanimous aye vote.)

24 (Board Members Berg and Sperling abstained.)

25 ACTING CHAIRPERSON BERG: We have two

1 abstentions. I am abstaining.

2 BOARD MEMBER SPERLING: And I'm also abstaining
3 because some of my colleagues are involved with some of
4 the research proposals.

5 ACTING CHAIRPERSON BERG: So the motion does pass
6 on quorum. Thank you very much.

7 Moving on to our next item. It's a presentation
8 on staff's evaluation of the greenhouse gas determination
9 from the San Joaquin Council of Governments Sustainable
10 Communities Strategy, or SCS. The San Joaquin Council of
11 Governments is a metropolitan planning organization for
12 the San Joaquin County, and our neighbor just to the
13 south. Today, we will see the results of staff's
14 technical evaluation of the modeling and the performance
15 indicators that underling the COG's greenhouse gas
16 quantification.

17 I'm pleased to see that we have representatives
18 from the San Joaquin Valley -- San Joaquin Council of
19 Governments here today, and we want to welcome you and
20 thank you for attending.

21 Mr. Corey, would you please introduce this item?

22 EXECUTIVE OFFICER COREY: Yes, Berg chair.

23 So the -- in 2010, the Board adopted per capita
24 Greenhouse Gas emission reduction targets for the 18
25 metropolitan planning organizations, or MPOs, in

1 California pursuant to Senate Bill 375.

2 For the eight MPOs in the San Joaquin Valley,
3 those targets are five percent per capita reduction by
4 2020, and 10 percent per capita reduction by 2035. In
5 addition to setting greenhouse gas reduction targets,
6 ARB's role in implementing SB 375 includes evaluating the
7 greenhouse gas determinations prepared by the MPOs, and
8 either accepting or rejecting each MPO's determination
9 that its Sustainable Communities Strategy, or SCS, would
10 meet the targets.

11 Staff's evaluations are based on a general
12 technical methodology that was developed in 2011 and that
13 has been used to evaluate nine other SCSs. The first
14 round of regional transportation plans, or SCSs for the
15 San Joaquin Valley were completed last summer. In January
16 of this year, you considered the SCSs from the Fresno
17 region.

18 Today, you'll consider another SCS from the
19 valley, that of the San Joaquin Council of Governments,
20 also known as San Joaquin COG.

21 ARB staff has been working with the San Joaquin
22 COG staff over the past several months to obtain and
23 analyze the necessary information to complete our
24 evaluation. And the COG has provided us with a copy of
25 its travel model, which covers the three northernmost

1 counties in the valley, San Joaquin, Stanislaus, and
2 Merced. Our evaluation of the greenhouse gas
3 quantification has been facilitated by our ability to run
4 this model.

5 Staff has prepared a staff report describing its
6 technical evaluation, and today's presentation will review
7 the results of that evaluation, which concludes that the
8 SCS, if implemented, would achieve the targets of five and
9 10 percent.

10 And as Ms. Berg mentioned, we have
11 representatives of the San Joaquin COG here today,
12 including Andy Chesley, the executive director.

13 I'll now ask Terry Roberts from our Sustainable
14 Communities Policy and Planning Section to begin this
15 staff presentation.

16 Terry.

17 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION
18 MANAGER ROBERTS: Thank you, Mr. Corey, Ms. Berg, members
19 of the Board.

20 (Thereupon an overhead presentation was
21 presented as follows.)

22 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION
23 MANAGER ROBERTS: In this presentation, I will briefly
24 describe the current land use and transit characteristics
25 of San Joaquin County, highlight the key elements of San

1 Joaquin Council of Governments, or SJ COG's, Sustainable
2 Communities Strategy, and summarize the results of staff's
3 technical evaluation of SJ COG's greenhouse gas
4 quantification.

5 --o0o--

6 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION
7 MANAGER ROBERTS: Under SB 375, the Air Resources Board
8 has the responsibility to set regional greenhouse gas
9 reduction targets for the 18 metropolitan planning
10 organizations in California.

11 In September 2010, the Board set targets for each
12 of the eight counties in the San Joaquin Valley, including
13 San Joaquin County, at five percent per capita reduction
14 by 2020, and 10 percent per capita reduction by 2035.

15 SJ COG's 2014 regional transportation plan, or
16 RTP, and Sustainable Communities Strategy, or SCS,
17 represents a shift away from the county's historic growth
18 pattern of development on the fringes of the region's
19 cities, and instead encourages compact growth in existing
20 urban areas, especially in downtown areas near transit.

21 The SCS pairs an increase in density, more mixed
22 use and infill development with increased investments in
23 alternative modes of transportation, such as public
24 transit and active transportation. The land-use
25 strategies in the 2014 RTP SCS would enable the region to

1 reduce its development footprint by 2035, compared to the
2 previous RTP adopted in 2011.

3 The SCS reflects sustainable development policies
4 included in the recently updated general plans, climate
5 action plans, and sustainability plans of several cities
6 in the region, including Tracy, Lodi, Manteca, and
7 Stockton. Adoption of these local plans and policies
8 demonstrate a willingness to implement the types of
9 sustainable development and transportation strategies
10 found in the 2014 RTP SCS.

11 --o0o--

12 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION

13 MANAGER ROBERTS: San Joaquin County is the valley's
14 northernmost county, sharing borders with both the
15 Sacramento and the San Francisco Bay area regions. About
16 three-fourths of the land in San Joaquin County is
17 agriculture, with well over half of the region's total
18 acreage under Williamson Act protection.

19 The region is largely rural, except along
20 Interstate 5 and Highway 99, which are major routes for
21 freight transportation and for commuters. With relatively
22 affordable housing prices in the valley, many who work in
23 the Bay Area, and to a lesser extent in Sacramento, choose
24 to live in San Joaquin County. This contributes to a
25 significant amount of commute traffic to these neighboring

1 regions. Nearly half of San Joaquin County's employed
2 residents commute outside the region for work.

3 --o0o--

4 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION

5 MANAGER ROBERTS: The growth pattern of the past 30 years
6 has resulted in primarily single-family homes, many on
7 large lots, along with suburban style commercial
8 development and dispersed job centers.

9 The population of San Joaquin County is a little
10 over 700,000, and the count is expected to grow to over a
11 million people by 2040. In this map, the population of
12 the seven incorporated cities is represented by the size
13 of the gray circles. The largest city, Stockton, has
14 almost 300,000 residents, or about 40 percent of the
15 region's total. The other cities range from nearly 85,000
16 in Tracy to a little more than 7,000 in Escalon. About 20
17 percent of the population lives in the more rural
18 unincorporated areas of the county.

19 --o0o--

20 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION

21 MANAGER ROBERTS: With implementation of the SCS, the
22 region would see more mixed-use development in infill
23 areas focused especially in downtown areas, and along
24 transit corridors within existing cities. A much greater
25 share of new housing would be multi-family and small lot

1 single-family units than would be expected with the
2 historical growth pattern.

3 One focus of the 2014 RTP SCS is to coordinate
4 land-use development policies with supported improvements
5 in transit and active transportation. This would be
6 accomplished with the region's transit oriented
7 development policy that encourages siting of new
8 development along transit corridors.

9 Six new bus rapid transit routes are planned for
10 Stockton through the 2040 horizon year of the plan, adding
11 to the three existing BRT lines. In addition to
12 connecting land use with transit, the 2014 SCS also
13 increases funding for active transportation, leading to
14 more transportation options for residents.

15 For example, implementation of the plan would add
16 over 800 miles of bikeways, as well as amenities to
17 increase walkability in the region, such as new sidewalks,
18 lighting, and street beautification projects. This will
19 increase options for people to use active transportation
20 as an alternative to driving.

21 Another strategy is the use of transportation
22 demand measures, such as carpooling and vanpooling to
23 reduce the amount of travel, especially by commuters. SJ
24 COG's budget includes funding for a commute connection
25 program that provides subsidies for vanpools and other

1 incentives for residents to carpool and use transit and
2 active transportation.

3 --o0o--

4 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION

5 MANAGER ROBERTS: These two maps illustrate a market
6 difference in the location and density of development
7 under a business-as-usual scenario on the left, compared
8 to the SCS on the right by 2035. The yellow on the
9 business-as-usual map indicates mostly low density
10 residential development on the outer edges of cities and
11 in several unincorporated areas.

12 In contrast, the map on the right shows that the
13 plan, if implemented, would result in a significant
14 increase in higher density development, indicated by more
15 orange and red, and more mixed-use development, indicated
16 in dark pink, closer to existing city centers.

17 Overall, the development pattern is more compact
18 and less land is occupied by urban development.

19 --o0o--

20 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION

21 MANAGER ROBERTS: Local support for more compact
22 sustainable development has led to the construction of
23 projects, such as the ones depicted here. These projects
24 offer examples of the type of infill, mixed-use,
25 transit-oriented development projects we can expect in the

1 future given the strategies included in the SCS.

2 Grandview Village is a 100-unit affordable
3 housing and retail mixed-use project in downtown Stockton
4 about four blocks away from the downtown transit center,
5 and about two blocks from a future BRT corridor.

6 Anchor Village is an infill project with 51
7 affordable apartments for veterans and people living with
8 mental illness, along with community and social services
9 on the ground floor. This project, located near
10 Stockton's downtown transit center, a future BRT line, and
11 several other amenities will be designed to LEED silver
12 standards.

13 CalWeber 40 is a mixed-use renovation project of
14 two buildings in downtown Stockton less than a block away
15 from the transit center. The ground floor of these
16 buildings will retain their current commercial uses. And
17 the upper floors, which are currently vacant, will be
18 converted to 40 affordable energy-efficient apartments for
19 families.

20 --o0o--

21 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION
22 MANAGER ROBERTS: Bus rapid transit systems are a lower
23 cost alternative to street cars or light rail systems.
24 And Stockton's experience with BRT has been very positive.
25 Stockton's three existing BRT lines, shown in red on the

1 map, provide access to important destinations including
2 the University of the Pacific and Delta College, medical
3 offices, shopping centers, and the Stockton airport. The
4 buses run every 10 minutes during peak periods with a
5 limited number of stops, and receive priority at traffic
6 lights, making it a popular system for Stockton's
7 residents.

8 In its first six months of service in 2007, the
9 system's first route had over 200,000 boardings, and
10 ridership grew to nearly two million trips in 2013, as the
11 system expanded to three routes.

12 The success of this system and its cost
13 effectiveness are behind the COG's decision to add six
14 more BRT lines in Stockton by 2040, as shown in the
15 blue-gray lines on the map.

16 --o0o--

17 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION
18 MANAGER ROBERTS: The next half of this presentation
19 addresses ARB staff's technical evaluation of SJ COG's
20 greenhouse gas quantification. The performance
21 indicators, on the next five slides, show how the region
22 would change as a result of implementing the SCS. These
23 indicators represent forecasted change in land use and
24 travel activity.

25 --o0o--

1 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION

2 MANAGER ROBERTS: In this graph, the two bars on the left
3 represent single-family housing, and the on right
4 multi-family house units. The blue bars are what would be
5 expected under the business-as-usual scenario by 2035 and
6 the green bars show what theSCS would yield.

7 The percentage of multi-family housing would
8 increase from about 11 percent to about 40 percent of the
9 total new housing units under the plan, while
10 single-family housing would decrease from nearly 90
11 percent to about 60 percent of all new housing units.
12 This is a notable departure from the trend of
13 single-family home construction.

14 --o0o--

15 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION

16 MANAGER ROBERTS: With its focus on transit-oriented
17 development, the SCS also encourages more growth in
18 housing, depicted on the left in this slide and jobs,
19 depicted on the right, near existing and future transit
20 services.

21 Increasing residents' and employees'
22 accessibility to transit by 2035, the SCS would result in
23 significant increases in housing and jobs within a half
24 mile of a transit station or stop as compared to the
25 business-as-usual scenario.

1 --o0o--

2 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION

3 MANAGER ROBERTS: With a smaller development footprint
4 from future growth, fewer acres of farmland would be
5 consumed by 2035. This graph shows the amount of farmland
6 acres outside of city spheres of influence that would be
7 converted by development under the business-as-usual
8 scenario on the left, and the SCS on the right. The SCS
9 would reduce farmland conversion by about two-thirds.

10 --o0o--

11 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION

12 MANAGER ROBERTS: The 2014 RTP budget of approximately \$11
13 billion through 2040 shows a shift in the region's funding
14 priorities. Compared to the 2011 RTP, the 2014 plan
15 allocates more funding for transit, bike and pedestrian
16 infrastructure, and roadway operations and maintenance.
17 There is less focus on funding for roadway capacity
18 expansion.

19 In addition to the proposed bike lane and
20 sidewalk improvement projects in the RTP, the budget for
21 roadway expansion includes funding for bicycle and
22 pedestrian amenities that would be constructed as roadways
23 are rehabilitated into complete streets.

24 --o0o--

25 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION

1 MANAGER ROBERTS: As a result of the strategies in the
2 SCS, this graph shows what the decrease in the daily
3 vehicle miles traveled, or VMT, per capita in 2020 and
4 2035 would look like based on the COG's data.

5 Although the recession contributes to the sharp
6 decrease between 2005 and 2020, the trend is what we would
7 expect with a continued decline of per capita VMT after
8 2020. However, the magnitude of the per capita VMT is
9 sensitive to assumptions about interregional travel, which
10 I'll discuss in a few minutes.

11 --o0o--

12 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION

13 MANAGER ROBERTS: In its technical review of the SCS,
14 staff followed the evaluation process described in our
15 July 2011 technical methodology paper, which we used in
16 reviews of nine other SCSs so far. Staff looked at four
17 key components of an MPO's travel demand modeling system.
18 These components include the modeling tools, data inputs
19 and assumptions, the model's sensitivity to the strategies
20 in the SCS, and the performance indicators, which I just
21 discussed.

22 Each component is critical to understanding how
23 the MPO quantified greenhouse gas reductions in their.

24 SCS

25 --o0o--

1 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION

2 MANAGER ROBERTS: San Joaquin COG worked with the MPOs in
3 Stanislaus and Merced counties to develop a single travel
4 demand model known as the Three-County Model, for these
5 three regions.

6 The model, completed in 2012 with funding from
7 the Strategic Growth Council, is similar in structure and
8 function to the travel models of the other valley MPOs.

9 In addition to its travel model, SJ COG used
10 Envision Tomorrow, a land-use scenario planning tool
11 commonly used by other small MPOs to evaluate alternative
12 land-use assumptions.

13 As part of its technical evaluation, staff
14 reviewed key inputs and assumptions in the travel demand
15 model and the land-use tool. We reviewed assumptions
16 about demographics and growth forecasts, the region's
17 current and future land use and transportation network,
18 and auto operating costs. We found these assumptions to
19 be reasonable and similar to those of other MPOs.

20 Staff's technical analysis was enhanced by being
21 able to run SJ COG's travel model, which was provided by
22 the MPOs. As I'll describe in a moment, ARB staff used
23 that three-county model to run a sensitivity test for
24 interregional travel.

25 --o0o--

1 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION

2 MANAGER ROBERTS: To determine if the model was adequately
3 sensitive to SCS strategies, staff collaborated with SJ
4 COG staff to design and run five sensitivity tests, auto
5 operating costs, transit frequency, residential density,
6 proximity to transit, and household and income.

7 In all of these sensitivity tests, the modeled
8 changes moved in the right direction that we expected.
9 Although, in some cases, the change in magnitude was
10 subtle compared to that reported in the empirical
11 literature.

12 Now, the literature focuses on more urban areas
13 and we would not expect a rural county's response to land
14 uses and transportation changes to be identical to those
15 of large metro areas. ARB staff considers SJ COG's travel
16 models response to land-use and transportation changes to
17 be comparable to the empirical data.

18 --o0o--

19 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION

20 MANAGER ROBERTS: Both SJ COG and ARB staff recognize that
21 SJ COG's estimated per capita greenhouse gas emission
22 reductions of 24 percent in 2020 and 2035 are large,
23 compared to the results of other MPOs. This large
24 forecasted reduction is influenced by the amount of
25 interregional travel in the region and how it is accounted

1 for in the model.

2 San Joaquin County has the largest amount of
3 interregional travel of all the valley counties.
4 Interstate 5 and Highway 99 carry large volumes of traffic
5 from outside San Joaquin County to other regions without
6 stopping in the counties.

7 These pass-through trips are not included in the
8 SB 375 target methodology, in recognition of the fact that
9 MPOs do not have the ability to influence those trips
10 through regional land use and transportation strategies.
11 Commute trips to the Bay Area and Sacramento regions that
12 begin in San Joaquin County are included in the
13 quantification methodology. SJ COG includes the portion
14 of the VMT from these trips that occurs within the county
15 in its SB 375 quantification.

16 Appropriately accounting for each type of
17 interregional travel is important for GHG quantification.
18 Travel demand models forecast how much travel is occurring
19 within a region, but these models have limited capability
20 to characterize the full trip distance, once a trip leaves
21 the region.

22 Many of the SCSs that ARB staff has reviewed so
23 far have been for multi-county regions, in which
24 interregional travel was a relatively small portion of the
25 region's total travel.

1 estimated reductions from other MPOs, including Fresno
2 COG's.

3 We have included a recommendations in our staff
4 report that SJ COG should work with neighboring regions to
5 develop and use more current data for interregional travel
6 in their next round of model improvements. Our staff
7 report includes a number of recommendations to improve the
8 data used in their model and their modeling approach to
9 better estimate trips and VMT in the region.

10 Based on this analysis, staff has concluded that
11 SJ COG's greenhouse gas emission reduction estimates are
12 indeed high. However, based on the weight of evidence,
13 including the mix of land use and transportation
14 strategies, performance indicators, and model sensitivity
15 tests, ARB staff have also concluded that the SCS would
16 achieve the targets of five and 10 percent, if
17 implemented.

18 --o0o--

19 SUSTAINABLE COMMUNITIES POLICY & PLANNING SECTION
20 MANAGER ROBERTS: So based on staff's technical
21 evaluation, staff recommends that the Board accept San
22 Joaquin COG's determination that its 2014 RTP SCS, if
23 implemented, would meet the region's per capita greenhouse
24 gas emission reduction targets for 2020 and 2035.

25 And that concludes staff's presentation.

1 Now, I would like to -- I would like to invite
2 Andy Chelsey the executive director of the San Joaquin
3 Council of Governments to address the Board, as he is here
4 with us today.

5 Hello, Andy.

6 MR. CHESLEY: Thank you very much. Thank you,
7 Chair, members of the Commission. Appreciate it.

8 We come here in support of your staff's
9 recommendation regarding our regional transportation plan
10 and our ability to meet the targets set by ARB for
11 greenhouse gas emissions.

12 I would like to state a couple things just to add
13 to what Terry has said. We have moved forward with the
14 Metropolitan Transportation Commission and the Association
15 of Bay Area Governments in order to try and develop a
16 better consensus about what the interregional trip numbers
17 will be between our two regions.

18 You might wonder how come we didn't have a better
19 set of numbers that coordinated with each other, and
20 that's a good question. And I think Steve and I both
21 agree that we need to do a better job in the course of
22 this region transportation plan, so we're looking forward
23 to doing that.

24 Also, we have joined with MTC and with SACOG in
25 terms of working on a regional planning initiative on a

1 policy level among our three regions. As a matter of
2 fact, Supervisor Serna was actually an integral part of
3 that very first initial meeting to put this together, and
4 we will be continuing this effort over the course of the
5 next year. That will also work into our regional
6 transportation plan.

7 We are working on better data with Stanislaus and
8 Merced county to produce a more sophisticated and more
9 robust modeling exercise here, and I do appreciate the
10 work that ARB staff -- it's always a pleasure to work with
11 ARB staff, and the work that they did in terms of our
12 modeling. I like to look at the modeling work that they
13 did and what we did previously as a good sensitivity
14 analysis on this.

15 There still appears to be an issue with
16 interregional trips. For instance, how can it be that
17 when you increase the number of trips that are the longest
18 distance, you somehow get a larger greenhouse gas emission
19 reduction. It seems counterintuitive. And I think we
20 need to continue working on that.

21 And to that extent, we are working with Merced
22 and Stanislaus to try and come forward to you with a
23 proposal where you would set a target on the combined
24 three counties, as opposed to three individual counties.
25 We have a modeling tool that measures the trip making and

1 the greenhouse gas emission reductions, VMT reductions
2 that occur over the course of the three counties. And
3 that tool is very robust if we use it correctly.

4 So if we set a target that combines all three,
5 and then allow the three regions to determine what the
6 responsibility is, in terms of greenhouse gas emission
7 reductions to meet those targets in our SCS, I think
8 that's a better approach. Because if you look at the Bay
9 Area, for instance, -- the nine county Bay Area has a
10 transportation model that covers the entire nine-county
11 Bay Area, you don't bother to look to see what the
12 interregional trips are between Alameda and Santa Clara,
13 or between San Mateo and San Francisco. If you looked at
14 that, there would be wide variation across the Bay Area.

15 But when you look at it as a nine-county region,
16 it starts to make more intuitive sense. And I think
17 that's the same thing that would occur if we were able to
18 combine the target setting for Merced, Stanislaus, and San
19 Joaquin. It would make a more rational target and a more
20 rational process than forward coming to you with a
21 regional transportation plan.

22 We want to thank your staff again, and yourselves
23 as well. The process has been very interesting. It's
24 been actually very invigorating for all of us, in terms of
25 transportation planning, and we -- I'm happy to answer any

1 questions you might have. Thank you very much for the
2 recommendation from your staff and for your action on
3 this.

4 ACTING CHAIRPERSON BERG: Thank you very much.
5 We only have three people testifying. Shall we go to
6 testimony and then Board discussion.

7 So we'll start -- it's listed above.

8 Katelyn.

9 MS. ROEDNER-SUTTER: Good morning. My name is
10 Katelyn Roedner-Sutter. I'm the environmental justice
11 program director for Catholic Charities in the Diocese of
12 Stockton. I'd like to thank you for the opportunity to
13 address you today. And we've appreciated the work that's
14 been done by the ARB staff on this plan.

15 When the Sustainable Communities Strategy process
16 began in San Joaquin and Stanislaus counties, Catholic
17 Charities environmental justice program convened community
18 coalitions in these regions to advocate for equitable,
19 helpful, and sustainable plans.

20 Our partners have included San Joaquin Public
21 Health Services, local asthma coalitions, the American
22 Farmland Trust, Climate Plan, small business incubators,
23 local infill developers, our Stockton NAACP chapter, the
24 Lao Family Community Empowerment, urban farmers, bike
25 coalitions and environmental groups. Today, I also bring

1 special support for my comments from the American Lung
2 Association in California, and Valley LEAP.

3 We would like to congratulate the San Joaquin
4 Council of Governments for meeting the greenhouse gas
5 reduction targets and for crafting and adopting an SCS
6 that will truly be beneficial to our community, including
7 the most vulnerable members of our community.

8 The investments in transit, active transportation
9 and the dramatic preservation of our farmland are
10 achievements to be commended. This is, of course, in
11 addition to what we expect will be necessary improvements
12 in our air quality.

13 Additionally, I have to thank the SJ COG staff
14 for being a true pleasure to work with. They have taken
15 our interests in affordable housing, public health,
16 community equity, and more truly and seriously to heart.

17 Moving forward, we are encouraged that the SJ COG
18 has already taken real and concrete steps toward
19 implementing the SCS. They have convened a
20 multi-disciplinary implementation working group that is
21 already begun discussing how to attract jobs, better
22 measure public health outcomes, and how we can support
23 affordable housing projects.

24 There is a lot of momentum in San Joaquin County
25 right now, and especially in Stockton, with our BRT lines

1 and several transformative downtown projects. The staff
2 has played a significant role in this progress.

3 As we continue with implementing this SCS and
4 even begin to consider the next round, we'd like to see an
5 even greater emphasis on measuring and forecasting the
6 potential health benefits for our community. Our
7 coalition and San Joaquin Public Health Services would
8 welcome input on how to create robust health measures that
9 would best fit our county. And perhaps, ARB can provide
10 the support in the next round.

11 We would also like to see a greater exploration
12 of the environmental justice impacts of this plan.
13 Perhaps as a side effect of TOD or people living closer to
14 where they work, both of which we appreciate, is that more
15 people are predicted to live close to major transportation
16 corridors. These populations are often low income,
17 communities of color, or non-English speaking communities,
18 and we want to ensure that they do not bear an undue
19 portion of our ongoing air quality and environmental
20 challenges.

21 So again, thank you to the ARB staff. Thank you
22 to this Board, and especially thank you to SJ COG staff.

23 ACTING CHAIRPERSON BERG: Thank you.

24 Good morning, Carey.

25 MS. KNECHT: Good morning, everyone. My name is

1 Carey Knecht with Climate Plan. And like Katelyn, I
2 wanted to start off by thanking and congratulating San
3 Joaquin COG staff for all of their great efforts to put
4 forward a Sustainable Communities Strategy that today has
5 been found to meet the targets. I also wanted to thank
6 ARB staff for the very in-depth review that provided lots
7 of interesting information in this report.

8 The Sustainable Communities Strategy takes a
9 great step forward, as you've heard today, by developing
10 with more compact and walkable growth approximately
11 doubling housing density if implemented. It would cut the
12 loss of farmland by two-thirds outside of city limits. It
13 would also shift significant funds away from roadway
14 expansion and towards more sustainable and healthy modes
15 of transportation, including transit, bus rapid transit,
16 road maintenance, walking, and biking. And as a result of
17 these active policy improvements, it achieves an
18 impressive reduction in vehicle miles traveled and
19 greenhouse gas reductions. This work is already paying
20 off with significant new construction already breaking
21 ground in Stockton with other projects under development.

22 I wanted to make two points that are relevant to
23 the discussions that have been happening at this Board
24 related to the implementation of SB 375. First, the
25 importance of continuing to improve the estimates around

1 interregional travel. The staff's analysis showed that
2 this made a difference not, you know, around the margins,
3 but a difference of almost 50 percent in the estimated
4 reduction of vehicle miles traveled.

5 So it's at a very significant level. So I look
6 forward to the continued work underway through the
7 roundtable here and also thank San Joaquin COG for the
8 efforts that they've already undertaken to begin to
9 address this critical issue.

10 Second, I believe that this analysis shows that
11 the placeholder targets that were set for the San Joaquin
12 Valley were conservative. They were set before we had a
13 great deal of information about the strategies and the
14 results that they could achieve in the valley. And here,
15 we found that they are on par with that of other regions,
16 which I think can inform efforts as this Board moves
17 forward with setting targets for the Round 2 SCSs in the
18 valley.

19 Thank you again for all of your work. Have a
20 good day.

21 ACTING CHAIRPERSON BERG: Thank you.
22 Phoebe Seaton.

23 MS. SEATON: Hi. Phoebe Seaton, Leadership
24 Counsel for Justice and Accountability. Again, echoing my
25 colleagues. I also really wanted to take the opportunity

1 that I, as some of you know, work more in the south --
2 southern portion of San Joaquin Valley from Merced points
3 south, and would -- just had the pleasure of working with
4 Catholic Charities and their coalition in watching their
5 really strong collaboration with the COG, and look to them
6 as an example. And I just want to make sure that the
7 Board appreciates the efforts that Catholic Charities and
8 other stakeholders played in this process.

9 And the only other point I want to make is I want
10 to reiterate the point that Carey Knecht just made with
11 Climate Plan that I think that this analysis demonstrates
12 that the placeholders were placeholders for a reason, and
13 that we can do better in the next round.

14 Thanks so much.

15 ACTING CHAIRPERSON BERG: Thank you very much.
16 Well, we have before us Resolution 15-10. And could we
17 have Board comments before we move to the resolution?

18 Any comments?

19 Dr. Balmes.

20 BOARD MEMBER BALMES: I guess I'll lead off
21 again. So the last time we were dealing with Sustainable
22 Communities Strategies from the Central Valley. I'm not
23 talk about Fresno. But the previous time, I think I, and
24 along with Professor Sperling, gave a hard time to the
25 proposed plans, but I really appreciate the collaboration

1 between the COGs and the CARB staff, and the review of the
2 models, which because I was concerned that they were kind
3 of black boxy. And the fact that basically it showed that
4 they were -- the benefits gained by the recession were,
5 you know, mainly what we were going forward with.

6 So I think the high density approach to housing
7 along transportation corridors with the bus rapid transit
8 lines is -- you know, it's a good move. I like the bike
9 lanes. I think -- or the bike pathways. We've got to
10 make sure people use those bike pathways, including people
11 with less economic advantage who might actually really
12 benefit economically by using the bikes, as opposed to
13 just recreational use, which I'm not against, but we want
14 more than recreational use. We want active commuter use.

15 But overall, I think this is a real -- it's a
16 positive step forward. I appreciate the concerns of the
17 last couple speakers about impacts on populations living
18 near high transportation corridors, but, you know, there
19 are ways to deal with that, like putting in HEPA filters
20 in those snazzy new multi-unit housing projects that we
21 saw photos of to protect the health of the occupants with
22 regard to particulate pollution.

23 So anyway. Overall, I applaud this effort, and I
24 appreciate the staff's careful review and the COG's
25 willingness to share their models for that review.

1 And I guess I only end with saying that slide 14,
2 which shows great improvement in vehicle miles traveled
3 through 2020, and then levels off, we clearly have to
4 figure out a way, so that doesn't level off.

5 Thanks

6 ACTING CHAIRPERSON BERG: Thank you.

7 Dr. Sherriffs.

8 BOARD MEMBER SHERRIFFS: Since you're looking
9 this way, economy of motion.

10 (Laughter.)

11 BOARD MEMBER SHERRIFFS: Echo, echo, echo the
12 comments a couple of other -- it's great to see coming
13 from within, if it will, the regional planning looking and
14 recognizing that that's so important, because this is an
15 area where that interregional transit is key. And it
16 needs to be looked at from an interregional perspective.
17 And so it's great that there is recognition of that and
18 coming from within to figure out how to deal with that.

19 And I also would echo the, I think recognizing
20 the health measures, although that may not be what is
21 driving this, it is very helpful to recognize the health
22 benefits, and, in fact, to be able to measure them,
23 because it is important to develop the sustainability to
24 carry this forward, which we need to do. So those health
25 measures are important.

1 Good planning and, you know, inviting the people
2 involved, how can we help that planning become reality,
3 because there are obviously going to be a lot of bumps on
4 the way to making it a -- continue to go forward. But
5 thank you all for your work in working together on this.

6 ACTING CHAIRPERSON BERG: Thank you.

7 And, Dr. Sperling.

8 BOARD MEMBER SPERLING: Yes. I'd like to add,
9 you know, my appreciation and support of the efforts to
10 address this question about the sustainability of the
11 Stockton area, of the county and the MPO.

12 Of course, you can heat the but coming.

13 (Laughter.)

14 BOARD MEMBER SPERLING: You know, I'm -- you
15 know, the numbers are -- it's hard to believe them in
16 terms of the VMT reduction. I mean, Stockton -- or
17 Stockton and the region would be anointed. If they really
18 had 25 percent reduction, they would be anointed as
19 the -- you know, the world leaders models for that.

20 So clearly, there's issues. And everyone has
21 acknowledged that there's challenges here, and -- but, you
22 though, my concern is that, you know, we don't want them
23 to be spending a lot of money on models. I mean, that's
24 not going the point of this exercise, and I'm speaking as
25 an academic that likes models.

1 But that's not the point here. The point here is
2 to make improvements, make improvements in livability,
3 reducing costs, of travel, costs of infrastructure. And
4 so the question becomes what does that mean and how can
5 that happen better? And I look at the these -- you know,
6 promoting mixed use and infill development. That's great.
7 Although, you know, it would be good to see some, you
8 know, what actions are really being taken to support it.

9 But more crucially, you know, I look at things
10 like adding BRT lines. I have to say, I'm really
11 skeptical about adding BRT lines. You know, there's now
12 about, just looking at numbers, about sixty or seventy
13 thousand total transit riders per day in the whole region.
14 You know, a BRT -- a good BRT line should, by itself,
15 should be getting 25,000 passengers. So, you know, maybe
16 we're not talking about, you know, BRT kind of premium
17 scale BRT, but another -- so another way of looking at
18 it -- and I wouldn't have said this long ago when we
19 didn't have any option other than buses for transit, but
20 nowadays we do. There's a lot of new kinds of services
21 and opportunities. And the reality is that buses are not
22 very good at reducing greenhouse gases. On average,
23 nationally and in California, they're a little --
24 they're -- they look to be a little worse than cars on a
25 passenger mile basis.

1 And if you look at a place like Stockton, where
2 it's really low density, and there's already some bus
3 lines in there, it's really hard to believe this is going
4 to reduce greenhouse gases. Now, I say that with some
5 trepidation, because I know that create -- can create
6 havoc. But I say it, because there's lots of
7 opportunities to come up with more innovative ways to
8 reduce the VMT, and to do it in a low-cost way.

9 When I hear half the commuters are taking long
10 trips from -- you know, to the Bay Area and Sacramento,
11 that's just prime for using some kind of collective
12 transport options. And it doesn't have to be formal. It
13 can -- I mean, vanpools could be an idea, but it can be
14 done more informally, you know, because people do have
15 irregular schedules and so on, and have -- use some of
16 these new types of companies and software that allow
17 people to carpool -- organize carpooling in a real-time
18 basis more easily. There are -- and that can be done
19 essentially at no cost. There's kinds of micro transit
20 companies that are coming in to existence now that use
21 information based apps and smartphones. And I know, you
22 know, we'd have to look at how widely available
23 smartphones are.

24 But there's lots and lots of -- I mean it might
25 be worth it to give them smartphone, you know, when it

1 comes right down to it. You know, when you're spending
2 \$20, \$30 a passenger for some of these bus services,
3 there's got to be a lot better ways to do it. I know no
4 one has said that. But my understanding is just knowing
5 how these kind of services operate, those are the costs
6 for these low density services.

7 So what I'd like -- so I know there were
8 discussions between my university colleagues and all of
9 the San Joaquin COGs and MPOs. And I -- and out of that
10 came a project where they are looking at some of these
11 ideas. And so what I'm actually saying is let's really,
12 really accelerate -- those efforts, try to help the MPOs,
13 not just San Joaquin -- you know, the whole set of MPOs in
14 the San Joaquin region, and have our staff thinking about
15 it, less in a kind of monitoring compliance way and more
16 in a how do we help make this work?

17 And that's -- you know, we can't -- ARB can't do
18 this by itself. This is really a partnership with lots of
19 others, including NGOs. But if we can shift the
20 conversation a little bit and the partnership a little
21 bit, I think that would be a good thing to do. And with
22 my university hat on, I'm committed to helping even more
23 try to help -- try to figure out how to do this in a way
24 that's better. You've got a lot of low income people
25 taking a lot of long trips in a low density area. This is

1 tough. It's tough, but there's lots of -- but there are
2 more and more opportunities to do it -- to do it better.

3 So that doesn't -- so I have no comment on the
4 resolution, but just as -- you know, comments in terms of
5 how we move forward.

6 ACTING CHAIRPERSON BERG: Great. Thank you very
7 much. Well, congratulations, Andy and your team. It has
8 been a yeoman's effort, and I really appreciate your
9 transparency, and from what we heard from the witnesses,
10 how engaged your communities seemed to be. And I think my
11 only question for staff was really your request to bring
12 the three regions together as a combined one. Is that
13 something we can think about what would be the process of
14 that.

15 DEPUTY EXECUTIVE OFFICER KARPEROS: Under SB 375,
16 the MPOs have the choice -- it's their choice if they want
17 to develop a combined SCS. If they indicate to staff that
18 that's what they're looking for in the future, then we can
19 work with them to develop a single target that would apply
20 to, in this case, the three regions.

21 So hearing Mr. Chesley's testimony today, we'll
22 certainly reach out to him and the other three -- other
23 two MPOs and start a conversation about how we can -- how
24 we can go about doing that.

25 ACTING CHAIRPERSON BERG: I think it does sound

1 worth a hearty discussion, and we would encourage that,
2 and again congratulations.

3 Before us is Resolution 15-10. Can I have motion
4 to move it forward?

5 BOARD MEMBER SHERRIFFS: Motion to approve.

6 ACTING CHAIRPERSON BERG: Can I have a second?

7 BOARD MEMBER BALMES: Second.

8 ACTING CHAIRPERSON BERG: All in favor?

9 (Unanimous aye vote.)

10 ACTING CHAIRPERSON BERG: Any opposed?

11 Any abstentions?

12 Motion passes.

13 We have just one more item. Shall we work
14 through it or would we like to take a break?

15 From our court reporter, we can work through it?

16 THE COURT REPORTER: Yes.

17 ACTING CHAIRPERSON BERG: Okay. Why don't we
18 tackle our last item.

19 That's me. I've got to get on the right page.
20 Sorry.

21 Our last item is 15-4-4. And it's consideration
22 of the San Joaquin Valley PM2.5 State Implementation Plan.
23 Attaining federal quality standards in this San Joaquin
24 Valley is a significant challenge, and absolutely has been
25 exacerbated by the impact of the California drought.

1 The plan being presented today identifies the
2 actions necessary to keep the valley on the path towards
3 attainment, even if these adverse weather conditions
4 continue.

5 Mr. Corey, would you please introduce this Board
6 item.

7 EXECUTIVE OFFICER COREY: Yes. Thank you, Chair
8 Berg.

9 In 2008, the Board approved the San Joaquin
10 Valley's PM2.5 State Implementation Plan for the PM2.5
11 standards that the U.S. EPA established in 1997. Through
12 implementation of control strategies specified in the
13 plan, the valley obtained the daily standard and was
14 nearing attainment of the annual standard.

15 However, weather conditions associated with the
16 drought increased PM2.5 levels to an extent that the
17 valley can no longer meet these standards by the 2015
18 attainment date.

19 Today, staff will present the San Joaquin
20 Valley's 2015 State Implementation Plan revision, which
21 was developed in response to the impact of the drought to
22 demonstrate attainment of both standards over the next
23 five years.

24 Ongoing implementation of ARB's mobile source
25 strategy, coupled with the district's recently

1 strengthened residential wood burning rule, and increased
2 efforts to address commercial cooking provide the
3 reductions needed to meet the standard by 2020.

4 In light of the request for an attainment date
5 extension, the plan also identifies a number of efforts to
6 achieve further near-term reductions. These include
7 district incentives targeting the replacement of older
8 trucks and wood stoves and ARB actions focusing on cleaner
9 technologies for trucks.

10 These efforts to achieve further near-term
11 reductions, also provide a foundation for the development
12 of upcoming attainment plans for the more stringent PM 2.5
13 standard that are due to EPA next year.

14 Patricia Velasco will now provide an overview of
15 the plan.

16 Patricia.

17 (Thereupon an overhead presentation was
18 presented as follows.)

19 AIR POLLUTION SPECIALIST VELASCO: Thank you, Mr.
20 Corey. Good morning Ms. Berg and members of the Board.

21 Today's presentation will provide an overview of
22 the San Joaquin Valley's 2015 PM2.5 State Implementation
23 Plan.

24 --o0o--

25 AIR POLLUTION SPECIALIST VELASCO: Because there

1 is not just one standard, and for that matter, not just
2 one PM2.5 plan, let me put this plan in context. Based on
3 assessment of the adverse health effects associated with
4 exposure to PM2.5, U.S. EPA has set a series of
5 increasingly health protective air quality standards.

6 Based -- Federal PM2.5 standards were first
7 established in 1997 with a 24-hour standard of 65
8 micrograms per cubic meter and an annual standard of 15
9 micrograms per cubic meter. The 24-hour standard was
10 first -- further strengthened to 35 micrograms per cubic
11 meter in 2006, and the annual standard to 2012 in -- to 12
12 micrograms per cubic meter in 2012.

13 To meet Clean Air Act requirements, the San
14 Joaquin Valley adopted a SIP addressing the original 1997
15 standards in 2008. Today's SIP revision updates the plan
16 to account for the effects of California's drought. At
17 the same time, planning efforts are underway to address
18 the revised 24-hour and annual standards as part of the
19 SIPs that will be due in 2016.

20 --o0o--

21 AIR POLLUTION SPECIALIST VELASCO: The SIP
22 adopted in 2008 set forth a control strategy to meet both
23 the 24-hour and annual standards by 2015. U.S. EPA
24 approved this SIP in 2011. The strategy focused on
25 reducing directly emitted PM2.5 nitrogen oxides, or NOx,

1 and sulfur oxides, or SOx.

2 Ongoing implementation of ARB's mobile source
3 control program provided significant NOx reductions,
4 especially from the truck and bus and off-road equipment
5 regulations. Key district measures included rules
6 reducing PM2.5 from residential wood returning and
7 agricultural burning, along with SOx reductions from glass
8 manufacturing.

9 --o0o--

10 AIR POLLUTION SPECIALIST VELASCO: Through
11 implementation of this control strategy, PM2.5 air quality
12 in the valley had been improving with annual PM2.5 levels
13 decreasing over 30 percent between 2001 and 2012. The
14 valley met the 24-hour standard in 2010, and by 2012, only
15 a few locations remained above the annual standard.
16 However, the weather conditions associated with the
17 drought substantially increased PM2.5 levels in 2013
18 affecting both 24-hour and annual average concentrations.
19 These drought conditions have increased the challenge of
20 meeting PM2.5 in the valley, compounding the valley's
21 geography and inversion prone meteorology that provide
22 conditions that favor the formation and accumulation of
23 PM2.5, especially during the winter.

24 --o0o--

25 AIR POLLUTION SPECIALIST VELASCO: Both the

1 drought and the valley's high PM2.5 levels are related to
2 common weather conditions. Extended periods without storm
3 systems prevent the dispersion and removal of PM2.5 that
4 would typically occur with more frequent rainfall. The
5 stagnant conditions associated with persistent dry periods
6 also allow PM2.5 buildup over multiple weeks.

7 During December 2013 and January 2014, nearly two
8 months without rain, more than doubled the number of
9 exceedance days compared to the prior winter. This
10 episode results in increased levels of the major
11 constituents of PM2.5, including ammonium nitrate and
12 organic carbon. In addition, the drier conditions have
13 increased PM2.5 dust concentrations.

14 --o0o--

15 AIR POLLUTION SPECIALIST VELASCO: The high PM2.5
16 levels associated with these weather conditions increased
17 2013 annual design values up to 2 micrograms in 2012.
18 While designed values at locations in the northern valley
19 remained below the standard, design values at most
20 locations in the central and southern valley rose above
21 the standard, increasing the severity and scope of
22 nonattainment.

23 The graph on the right illustrates the impact
24 with 2012 annual design values in green and 2013 design
25 values in orange at three monitoring sites representing

1 the northern, central, and southern valley regions.

2 24-hour design values were also affected with
3 concentrations increasing to at or near the level of the
4 standard. As a result, the valley can no longer attain
5 the 2015 attainment deadline.

6 --o0o--

7 AIR POLLUTION SPECIALIST VELASCO: To address
8 these impacts, the district has prepared an updated plan
9 and attainment demonstration that accounts for the
10 potential that drought conditions may continue to occur in
11 the future.

12 --o0o--

13 AIR POLLUTION SPECIALIST VELASCO: The attainment
14 demonstration uses modeling approved as part of the 2008
15 SIP, coupled with air quality reflecting 2013 drought
16 impacts. Following provisions in the Clean Air Act, the
17 SIP contains a request for an attainment date extension to
18 2018 for the 24-hour standard and 2020 for the annual
19 standard.

20 The attainment demonstration includes the
21 benefits of ARB and district control programs that provide
22 further emission reductions. In addition, in light of the
23 attainment date extension request, the SIP identifies
24 further ARB and district actions to achieve additional
25 near-term emission reductions.

1 --o0o--

2 AIR POLLUTION SPECIALIST VELASCO: Continued
3 implementation of ARB and district control programs
4 provide ongoing emission reductions each year. By 2020,
5 implementation of new standards for passenger cars and
6 heavy-duty vehicles as well as regulations accelerating
7 turnover of diesel fleets results in 120 tons of
8 NOx -- tons per day of NOx reductions. Implementation of
9 the district's recently strengthened wood-burning rule,
10 along with enhancements to the commercial charbroiling
11 rule slated for adoption in 2016 provides a further two
12 tons per day reduction in PM2.5 emissions.

13 --o0o--

14 AIR POLLUTION SPECIALIST VELASCO: The 2015 SIP
15 also identifies a number of district actions to achieve
16 further near-term emission reductions, beyond those from
17 existing programs. These efforts include a district
18 commitment to provide targeted incentive funding for the
19 purchase of clean air heavy-duty trucks and replacement of
20 residential wood-burning devices with cleaner burning
21 technologies. District funding of \$10 million for cleaner
22 heavy-duty trucks and \$7.5 million for clean wood burning
23 devices will provide reductions in both NOx and PM2.5

24 In addition, the district has committed to
25 evaluate the potential for further emission reductions

1 from rules that address flares and conservation management
2 practices, as well as promoting the use of warm mix
3 asphalt.

4 Actions identified as part of this process and
5 corresponding implementation schedules will be included in
6 the SIPs for the revised PM2.5 standards due next year
7 that I mentioned at the beginning of the presentation.

8 --o0o--

9 AIR POLLUTION SPECIALIST VELASCO: Heavy-duty
10 trucks represent the largest source of both NOx and diesel
11 PM emissions in the valley. Recognizing the need to
12 continue to clean up the heavy-duty diesel fleet, ARB has
13 identified a number of additional actions to further
14 reduce emissions.

15 These near-term efforts outlined in the recently
16 released sustainable freight report include development of
17 strategies to ensure truck durability and in-use
18 performance. These include a focus on enhanced truck
19 inspection and maintenance programs, in new certification
20 and warranty requirements.

21 Strategies will also be developed to increase the
22 flexibility for manufacturers to certify advanced systems
23 to provide for accelerated introduction of cleaner
24 technologies into the market.

25 Incentive funding will also continue to play an

1 important role in promoting the transition to cleaner
2 combustion technologies, and to support the development
3 and commercialization of advanced technologies.

4 --o0o--

5 AIR POLLUTION SPECIALIST VELASCO: In addition to
6 the attainment demonstration and control strategy, the
7 2015 SIP also addresses the necessary Clean Air Act
8 requirements. As part of the attainment date extension
9 request, the SIP demonstrates that ARB and the District
10 have adopted the most stringent measures that have been
11 include in other SIPs that can be feasibly implemented in
12 the valley. The SIP also documents that ARB and the
13 District have met all of the other requirements and
14 commitments contained in the original 2008 SIP.

15 In addition to the elements, the plan addresses
16 PM2.5 precursor requirements, as well as those for
17 emission inventories, progress milestones, and contingency
18 measures. Finally, transportation conformity budgets
19 ensure that transportation plans and projects are
20 consistent with SIP emission levels.

21 --o0o--

22 AIR POLLUTION SPECIALIST VELASCO: In closing,
23 the 2015 PM2.5 SIP establishes the pathway to attainment
24 for the 24-hour PM2.5 standard by 2018, and the annual
25 standard by 2020 in light of the impacts of the ongoing

1 drought. The additional actions identified as part of the
2 2015 plan will also serve as a foundation for development
3 of the PM2.5 SIPs for more stringent standards due next
4 year.

5 ARB staff has determined that the SIP meets the
6 air quality -- the requirements of the Act and recommends
7 that the Board approve the plan, along with ARB's staff
8 report as a revision to the California State
9 Implementation Plan. As part of our standard practice,
10 ARB will work closely with U.S. EPA staff in their review
11 of the plan and will provide any additional information or
12 transmit any rules necessary to facilitate U.S. EPA's
13 approval process.

14 This concludes staff presentation, and we would
15 be happy to answer any questions you might have.

16 ACTING CHAIRPERSON BERG: Thank you very much,
17 Patricia. We do not have anybody who has signed up for --
18 to testify, so I'm going to go ahead and close the record
19 on this agenda item, and open up comments from the Board.

20 Dr. Balmes.

21 BOARD MEMBER BALMES: Once again, I'll start off.

22 (Laughter.)

23 BOARD MEMBER BALMES: Thank you.

24 BOARD MEMBER SHERRIFFS: I'm taking your coffee
25 away from you.

1 (Laughter.)

2 BOARD MEMBER BALMES: Thanks, Dr. Sherriffs for
3 worrying about my health.

4 You know, again, I appreciate that it's tough for
5 the valley to have to deal with the new more stringent
6 PM2.5 air quality standards that federal EPA is mandating.
7 And, you know, I applaud the efforts of the district to
8 come up with ways to meet that.

9 I guess I would just point out on slide 9, the
10 additional district actions, when we're talking about
11 getting down to the level of flares and warm mix asphalt,
12 I don't have expertise in either one of those, in terms of
13 it. But above, heavy-duty truck replacement seems like
14 where we should be putting our money and our efforts. And
15 I'm sure that the district is doing that.

16 But I just feel like when we look at evaluate
17 potential for further emission reductions from these other
18 things, it's really heavy-duty trucks and high polluting
19 wood burning devices. I just want to -- I know everybody
20 knows that, but I think -- it just strikes me when you see
21 flares that, you know, there are higher value --

22 BOARD MEMBER SHERRIFFS: Oil and gas flare.

23 BOARD MEMBER BALMES: Oh, it's oil and gas flare.
24 Now, I get it. Thank you, Dr. Sherriffs. All right.
25 Warm mix asphalt --

1 (Laughter.)

2 BOARD MEMBER BALMES: -- I don't know how
3 important that is.

4 ACTING CHAIRPERSON BERG: Dr. Sherriffs, do you
5 have a comment for us?

6 BOARD MEMBER SHERRIFFS: Sure. Thank you.

7 As a resident of the Central Valley, as we are so
8 challenged by this, I've fallen into the language of --
9 that we live in this beaker. And -- although actually we
10 don't create very much pollution relative to many other
11 parts of the State, we get to keep it.

12 (Laughter.)

13 BOARD MEMBER SHERRIFFS: But I'd like to reframe
14 that thinking, because actually we don't live in a beaker,
15 we live in a cradle. And we wouldn't live there unless it
16 was a cradle. People who live in the valley, love the
17 valley. They love the mountains. They love the
18 agriculture. And it's our activities that convert that
19 cradle to a beaker.

20 But indeed, we live in a cradle. It is a
21 fabulous place, but we are so challenged because of that
22 geography and meteorology. And the valley was so thrilled
23 to believe that it achieved standard, and then the new
24 normal arrived, which people could see coming, but yes, it
25 actually came, and having to rethink.

1 And yes, how important it is the big stuff and
2 the role that we play in the big stuff, particularly
3 transportation and freight, and how important it is the
4 work that we do on that for the health of people in the
5 valley, ten percent of our State.

6 But the little things do count. They do make a
7 big difference. We do have to focus on them. I just want
8 to mention in terms of the wood burning stoves, sort of a
9 reminder. On the face of it, it seems small, but actually
10 direct PM2.5, it's a big number. It's a very important
11 number. And a lot of important work on the part of the
12 district to develop collaboration, as we've seen with
13 stakeholders with industry to move this forward, to
14 develop public acceptance, and to craft a plan that had
15 some flexibility, so that people had some choice.

16 And I think the district was very pleasantly -- I
17 know we were very pleasantly surprised in the wood stove
18 change out, where you could take your fireplace, your
19 non-certified stove, put in a cleaner burning device, get
20 incentive funding from the air district.

21 In fact, most -- 80 percent of people are
22 choosing not to put a cleaner wood burning device in, but
23 a natural gas device, which, from a greenhouse gas
24 perspective, may not be what we want, but from a air
25 quality standpoint is huge. The benefits of that are

1 huge, much, much bigger than the district expected to get.

2 But again, we have to be flexible. We don't
3 necessarily know how the public is going to respond to
4 things. And then needing to think and adapt and how do we
5 take advantage of what we learn with that.

6 Anyway, thank you for your work. And I hope we
7 will approve.

8 ACTING CHAIRPERSON BERG: Thank you very much.

9 Mr. Eisenhut.

10 BOARD MEMBER EISENHUT: Yeah. I want to in my
11 comments acknowledge Dr. Sherriffs and the district. This
12 has been -- they've worked on behalf of the valley. This
13 has been hard work and we need to support it. The comment
14 that I would add that reflects our activity, and I'm
15 heartened by the inclusion of additional funding for truck
16 replacement, I recall back to our last meeting, and
17 reflect on what we can do to support that in addition to
18 adopting this. And we sat in, I think, uniformly last
19 month, and I'll say it again, enforcement. So that would
20 be my addition as well as the word of support for the
21 motion.

22 ACTING CHAIRPERSON BERG: Thank you.

23 Mrs. Riordan.

24 BOARD MEMBER RIORDAN: Yes. A compliment for the
25 district. Of course, staff has done a wonderful job. But

1 just so staff knows this, and I had forgotten to share it
2 with others, the Mojave Air Quality District happened to
3 have some additional Carl Moyer money that we could not
4 use. We didn't have a project ready to go to use that
5 last little increment, so we were able to send that to the
6 San Joaquin Valley because their staff and Board had
7 projects ready to go. And, you know, all we had to do was
8 provide the funding.

9 And I'm so pleased that obviously your staff is
10 doing such a good job to have a project ready to take
11 that, albeit not a lot of money, but it will help. Every
12 little bit helps, I know, the San Joaquin Valley.

13 BOARD MEMBER SHERRIFFS: Thank you again for that
14 money.

15 (Laughter.)

16 BOARD MEMBER SHERRIFFS: And I will let the staff
17 know your appreciation again.

18 ACTING CHAIRPERSON BERG: Thank you very much.

19 We have before us Resolution 15-9. Can I have a
20 motion to move it forward.

21 BOARD MEMBER BALMES: So moved.

22 BOARD MEMBER EISENHUT: Second.

23 ACTING CHAIRPERSON BERG: With a first and a
24 second.

25 All in favor?

1 (Unanimous aye vote.)

2 (Supervisor Serna not present for vote.)

3 ACTING CHAIRPERSON BERG: Any opposed?

4 Any abstain?

5 Motion passes.

6 BOARD MEMBER SHERRIFFS: And may I also suggest,
7 don't expect to get a charbroiled burger in the valley in
8 a year or two.

9 (Laughter.)

10 ACTING CHAIRPERSON BERG: You can go on health
11 conscious.

12 (Laughter.)

13 BOARD MEMBER SPERLING: Should we change our
14 vote?

15 (Laughter.)

16 ACTING CHAIRPERSON BERG: We do not have anybody
17 signed up for the public comment. So at this point, we
18 will go ahead and break for closed session. The Board
19 will be done. I will come back and close the meeting
20 after Ellen Peter's report on the closed session.

21 So we're taking a break, closing, and going into
22 closed session.

23 Thanks for waiting.

24 (Off record: 11:30 AM)

25 (Thereupon the meeting recessed)

1 into closed session.)

2 (On record: 12:04 PM)

3 ACTING CHAIRPERSON BERG: We'll please come back
4 to order. The meeting the California Air Resources Board
5 is now back into session. I'd like to ask our Chief
6 Counsel, Ellen Peter, to summarize the closed session.

7 CHIEF COUNSEL PETER: Yes, Ms. Berg. Today, we
8 had a closed session on possible litigation. No action
9 was taken, and there's nothing else to report in this
10 public session.

11 ACTING CHAIRPERSON BERG: Thank you.

12 Having no other issues before us, I close the
13 meeting and look forward to seeing you next month.

14 (Thereupon the meeting adjourned at 12:04 PM)

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1 C E R T I F I C A T E O F R E P O R T E R

2 I, JAMES F. PETERS, a Certified Shorthand
3 Reporter of the State of California, do hereby certify:

4 That I am a disinterested person herein; that the
5 foregoing California Air Resources Board meeting was
6 reported in shorthand by me, James F. Peters, a Certified
7 Shorthand Reporter of the State of California, and was
8 thereafter transcribed, under my direction, by
9 computer-assisted transcription;

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

13 IN WITNESS WHEREOF, I have hereunto set my hand
14 this 4th day of June, 2015.

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23 Certified Shorthand Reporter
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