

MEETING  
STATE OF CALIFORNIA  
AIR RESOURCES BOARD

JOE SERNA JR., CalEPA BUILDING  
1001 I STREET  
BYRON SHER AUDITORIUM

FRIDAY, JANUARY 23, 2009

8:40 A.M.

JAMES F. PETERS, CSR, RPR  
CERTIFIED SHORTHAND REPORTER  
LICENSE NUMBER 10063

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

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BOARD MEMBERS

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Ms. Dorene D'Adamo

Dr. Daniel Sperling

Dr. John G. Telles

Supervisor Ken Yeager

STAFF

Mr. James Goldstene, Executive Officer

Mr. Tom Cackette, Chief Deputy Executive Officer

Ms. Ellen M. Peter, Chief Counsel

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Ms. Lynn Terry, Deputy Executive Officer

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Mr. Bob Cross, Chief, Mobile Source Control Division

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Mr. Douglas Ito, Local Government Strategies Section

Ms. Diane Johnston, Senior Staff Counsel

Mr. Kurt Karperos, Chief, Air Quality and Transportation  
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Ms. Elise Keddie, Zero-Emission Vehicle Implementation  
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Mr. Aron Livingston, Senior Staff Counsel

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Ms. Kathleen Quetin, Ombudsman

Mr. Jeff Weir, Planning and Technical Support Division

ALSO PRESENT

Mr. Gregg Albright, California Business, Housing & Transportation Agency

Mr. Mathew Baker, Environmental Council of Sacramento

Mr. Andrew Burnette, InfoWedge

Mr. Tommy Chang, Honda

Mr. Sanjeev Choudary, A123 Systems

Mr. Steven Douglas, Alliance of Automobile Manufacturers

Ms. Anibal Guerrero, San Fernando Valley, Mexican American Political Association

Mr. Paul Guzyk, 3 Prong Power

Mr. Richard Hatfield, KillaCycle

Mr. Patrick Huberty, Plug-In Conversions Corporation

Mr. Ben Jones, Plug-In Supply

Mr. Ed Kulik, Ford Motor Company

Mr. Paul Kydd, Partnerships 1 Incorporated

Mr. Max Ordonez, California Spanish Chambers of Commerce

Mr. Robert Phipps, Kern Council of Governments

Mr. Charles Protheroe, Plug-In Supply Incorporated

Mr. Robb Protheroe, Plug-In Supply Incorporated

Mr. Spencer Quong, Union of Concerned Scientists

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APPEARANCES CONTINUED

ALSO PRESENT

Mr. Randy Reisinger, CalCars

Mr. Marston Schultz, Individual AL

Mr. Daniel Sherwood, 3 Prong Power Incorporated

Ms. Moira Topp, Sloat Higgins Jensen & Associates

Ms. Jeanne Trombly, Plug-In America

Mr. John Williams, Valley Citizens

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1 PROCEEDINGS

2 CHAIRPERSON NICHOLS: We're ready to get started.

3 This is a continuation of the Air Resources Board, the

4 January Public Meeting.

5 And we will begin with a roll call.

6 BOARD CLERK VEJAR: Dr. Balmes?

7 Ms. Berg?

8 BOARD MEMBER BERG: Here.

9 BOARD CLERK VEJAR: Ms. D'Adamo?

10 BOARD MEMBER D'ADAMO: Here.

11 BOARD CLERK VEJAR: Ms. Kennard?

12 Mayor Loveridge?

13 Mrs. Riordan?

14 Supervisor Roberts?

15 Professor Sperling?

16 BOARD MEMBER SPERLING: Here.

17 BOARD CLERK VEJAR: Dr. Telles?

18 BOARD MEMBER TELLES: Present.

19 BOARD CLERK VEJAR: Supervisor Yeager?

20 BOARD MEMBER YEAGER: Here.

21 BOARD CLERK VEJAR: Chairman Nichols?

22 CHAIRPERSON NICHOLS: Here.

23 BOARD CLERK VEJAR: Madam Chairman, we have a

24 quorum.

25 CHAIRPERSON NICHOLS: Thank you.

1           Dr. Telles, there was always one person in every  
2 class I was ever in who said "present" and everybody else  
3 said "here." I hadn't pegged you for that one. But okay.  
4 Now we know who that person is.

5           Thanks, everybody. Welcome.

6           We got through a pretty extensive rule-making  
7 calendar yesterday. And we've got a couple of big items  
8 here today as well.

9           A few logistical comments. If there's anybody  
10 here who is not familiar with our proceedings, if you're  
11 planning on testifying or if you decide to testify, we  
12 need you to sign up with the clerk of the Board, so we  
13 have your information and can call you in order. We will  
14 impose a three-minute limit on speakers. If you have  
15 written testimony, we probably already have it. But if  
16 you just brought it with you, we'll read it. You don't  
17 need to read your written testimony since it will be  
18 entered into the record.

19           I'm also required to announce that there are  
20 exits at the rear of the auditorium. In the event of a  
21 fire alarm, which has happened, we're required to evacuate  
22 this room immediately and go downstairs and out of the  
23 building. We are not allowed to return into the building  
24 until there's an "all clear" signal given, and then we can  
25 come back.

1           So with that, we will begin this morning with our  
2 first item, which is a presentation by our Executive  
3 Officer, James Goldstene -- whoops! Where are we?

4           No. Sorry. I was about to start us with  
5 yesterday. Here we are on Day 2.

6           (Laughter.)

7           CHAIRPERSON NICHOLS: Consideration of the test  
8 procedure amendments and aftermarket parts certification  
9 requirements for plug-in hybrid vehicles, which we expect  
10 to be seeing a lot.

11          Okay. Thanks.

12          Mr. Goldstene.

13          EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman  
14 Nichols. Good morning.

15          The staff proposal today includes a number of  
16 technical amendments to existing exhaust, evaporative and  
17 refueling procedures, and is intended to accurately  
18 characterize plug-in hybrid vehicle emissions.

19          The proposed certification and installation  
20 requirements for plug-in hybrid conversion systems ensure  
21 that the converted vehicle continues to meet the original  
22 emission standards under the warranty provided to the  
23 consumer.

24          The proposed fuel cell vehicle range test greatly  
25 reduces the testing time required for new, longer-range

1 vehicles.

2 Lesley Crowell of the Mobile Source Control  
3 Division will begin the staff presentation.

4 Lesley.

5 (Thereupon an overhead presentation was  
6 Presented as follows.)

7 AIR RESOURCES ENGINEER CROWELL: Good morning,  
8 Chairman Nichols, members of the Board, ladies and  
9 gentlemen.

10 We are here today to discuss the staff's proposed  
11 changes to several regulations to incorporate plug-in  
12 hybrid electric vehicles. The changes needed to  
13 successfully incorporate plug-in hybrid electric vehicles  
14 into ARB's existing programs fall into two separate  
15 processes: Test procedures and aftermarket certification.

16 These amendments are necessary to allow  
17 manufacturers to certify plug-in hybrid electric vehicles  
18 and align with the zero emission vehicle regulation. As  
19 you may remember, from our March 2008 Zero Emission  
20 Vehicle, or ZEV, rule-making, the Board adopted a new  
21 category that automakers may produce as an option to  
22 making pure ZEVs. This enhanced advanced technology  
23 partial zero emission vehicle category was created with  
24 the intent of spurring rapid growth in plug-in hybrid  
25 electric vehicles, which are envisioned as an important









1 the vehicle's all-electric range, or AER, the combustion  
2 engine is not needed and no tailpipe emissions occur.  
3 However, absence of engine operation can result in  
4 increased evaporative emissions because the evaporative  
5 canister is not purged.

6 --o0o--

7 AIR RESOURCES ENGINEER CROWELL: This graph shows  
8 a PHEV with blended operation and all-electric range. An  
9 example of this type of vehicle is the Toyota Plug-In  
10 Prius. A blended PHEV uses the energy from the wall  
11 socket to increase the amount of electric drive compared  
12 to a conventional HEV, but essentially operates the same  
13 way. The user experiences all-electric driving or  
14 electrically assisted driving, depending on the driving  
15 conditions and the state of charge of the battery.

16 A blended plug-in HEV may drive all electrically  
17 until the car exceeds 50 miles per hour or until the  
18 acceleration requirements are increased - for passing on  
19 the freeway, for example. Vehicles without an AER have  
20 the internal combustion engine start at mile zero. In  
21 either case blended plug-in HEVs can have multiple engine  
22 starts, which cannot be tested accurately under the  
23 existing test procedure.

24 In this graph, the type of operation is shown in  
25 yellow. The charge-depleting operation ends when the



1 exhaust test procedure. The first is to align the  
2 proposed test procedures with the Society of Automotive  
3 Engineers J1711 process to the maximum extent possible.  
4 J1711 is a recommended practice for measuring exhaust  
5 emissions and fuel economy of hybrid electric vehicles,  
6 including plug-in hybrid electric vehicles. ARB, U.S.  
7 EPA, the automotive community, and the environmentalists  
8 are all represented on the SAE J1711 committee. While  
9 this process is still under development, the focus of the  
10 remaining issues for J1711 address fuel economy. The  
11 exhaust emissions part of J1711 is relatively set and  
12 staff believes that it is complete enough to include at  
13 this time.

14 Another goal is to maintain the ability to  
15 compare these vehicles with other hybrids. Thus staff  
16 started with the existing hybrid test procedure and  
17 modified it for plug-ins. The hybrid -- the existing  
18 hybrid test procedure will continue to be used for  
19 non-plug-in hybrids.

20 As mentioned before, PHEVs can have multiple  
21 engine starts. The majority of a vehicle's emissions are  
22 from engine starts. Therefore, emissions need to be  
23 evaluated under both charge-depleting and  
24 charge-sustaining operations. The existing procedure  
25 assumes no emissions occur during charge-depleting



1 amendments align the procedures with those for PHEVs and  
2 provide clarification. Most of the changes occur in the  
3 charge-sustaining emission test or relate to battery  
4 charging operations.

5 --o0o--

6 AIR RESOURCES ENGINEER CROWELL: To receive ZEV  
7 credit, a PHEV must first meet SULEV emission standards  
8 and must meet the zero evaporative emission requirement,  
9 earn a zero emission vehicle miles traveled allowance and  
10 an advanced componentry allowance. The proposed test  
11 procedure will determine the emissions from PHEVs to  
12 determine if the SULEV standard and zero evaporative  
13 standard are met. Additional test procedures are required  
14 to determine if PHEVs qualify for the zero emission  
15 vehicle miles traveled allowance and the advanced  
16 componentry allowance.

17 The zero emission vehicle miles traveled  
18 allowance is defined in the March 2008 zero emission  
19 vehicle rule-making. This concept is based on the  
20 electric energy contribution from off-vehicle sources and  
21 an estimation of the driving in charge-depleting mode  
22 provided by a utility factor.

23 In this PHEV rule-making, staff proposes a  
24 procedure to determine the equivalent all-electric range,  
25 which is consistent with SAE's draft 1711 procedure.



1 Therefore, staff is proposing modifications to the test  
2 procedure to simulate the worst case emissions.

3 --o0o--

4 AIR RESOURCES ENGINEER CROWELL: The  
5 modifications to the evaporative emission and onboard  
6 refueling and vapor recovery test procedure can be broken  
7 out into three main areas: Definitions needed to address  
8 PHEVs, preconditioning revisions to represent the  
9 worst-case emission scenarios and test procedure revisions  
10 needed for PHEVs.

11 New definitions are needed to address PHEVs. The  
12 existing test procedure allows for an exemption for  
13 vehicles with sealed fuel systems, such as diesel,  
14 compressed natural gas, and could include HEVs. However,  
15 a sealed fuel system is not defined. Based on the  
16 potential of vehicles only operating on the electric  
17 motor, staff is proposing to add a definition for sealed  
18 fuel systems.

19 The proposed definition is a system that uses  
20 non-liquid fuels that are under very high pressures and  
21 has no evaporative emissions by virtue of its design  
22 specifications. Therefore, gasoline vehicles will no  
23 longer be able to qualify under this exemption.

24 Staff is also proposing a definition for  
25 non-integrated refueling canister-only system.

1 Manufacturers are exploring various system designs for  
2 controlling evaporative emissions, and staff believes that  
3 they may ultimately select designs that use a  
4 non-integrated refueling canister-only system. This  
5 system separates the refueling emissions from other  
6 non-refueling emissions. These non-refueling emissions  
7 are stored in the fuel tank instead of the vapor storage  
8 units.

9 PHEVs must comply with the zero emission -- zero  
10 evaporative emission requirements to earn ZEV credits.  
11 Test procedures are designed to represent the worst-case  
12 operating scenario. For evaporative emissions, this  
13 occurs when the internal combustion engine on a PHEV does  
14 not operate. The user must have a regular driving route  
15 that can meet -- be met with the use of only the electric  
16 motor, and must recharge the battery on a regular basis  
17 such that the state of charge is high enough to meet the  
18 user's demand.

19 A PHEV presents a challenge for accurately  
20 simulating the worst-case real-world in-use testing  
21 conditions using the current evaporative test procedures.

22 Staff proposes that preconditioning for all  
23 evaporative emission and onboard refueling vapor recovery  
24 test procedures be performed in the charge-sustaining  
25 mode. Additionally, staff proposes that the battery state

1 of charge be set for the worst-case scenario of always  
2 being plugged in.

3           Staff also proposes that a new fuel tank refill  
4 canister loading preconditioning method for the  
5 non-integrated refueling canister-only systems be added to  
6 both the evaporative emission and onboard refueling vapor  
7 recovery test procedures. This method is necessary  
8 because the preconditioning methods are not appropriate  
9 for the non-integrated systems that use a canister for  
10 controlling only refueling vapors.

11           To address the capability for a PHEV evaporative  
12 emission control system to sufficiently purge the  
13 canister, staff proposed amendments to the supplemental  
14 two-day diurnal plus hot soak test sequence.  
15 Specifically, this test sequence would require a low state  
16 of charge to force the internal combustion engine to come  
17 on and thus test the purge capability. To reduce the  
18 burden of performing this demonstration, manufacturers  
19 will also have the option to conduct an alternative  
20 engineering evaporation demonstrating the evaporative  
21 emission control system's capability.

22           Staff is proposing one main 15-day modification  
23 for evaporative test procedures. As currently proposed,  
24 the running loss fuel tank temperature profile  
25 determination is not consistent with the running loss

1 test. To ensure the battery state of charge is consistent  
2 with the expected state of charge at the beginning of the  
3 running loss test, this revision is necessary. In  
4 addition, some references were updated. The proposed  
5 modifications are available outside of the hearing room,  
6 as previously stated.

7 --o0o--

8 AIR RESOURCES ENGINEER CROWELL: We will now move  
9 on to the fuel cell zero emission vehicle range  
10 determination. This test sequence is contained within the  
11 exhaust test procedures for hybrids and zero emission  
12 vehicles.

13 --o0o--

14 AIR RESOURCES ENGINEER CROWELL: The range  
15 determination for zero emission vehicles, such as fuel  
16 cell electric vehicles and battery electric vehicles, is  
17 used to determine the amount of credit given under the  
18 zero emission vehicle regulation. The current method was  
19 developed in the nineties and was developed for battery  
20 electric vehicles. This method assumes that the vehicle  
21 is fully charged, or filled prior to the start of the test  
22 sequence. The test sequence ends when the vehicle can no  
23 longer maintain the speed or time requirements of the  
24 drive cycle. The larger the range, the longer the time  
25 sequence for the test.

1           Battery electric vehicles and fuel cell electric  
2 vehicles, at the time this procedure was developed, had  
3 ranges of a hundred miles or less. Today, a fuel cell  
4 electric vehicle may have a range of 300 miles. A vehicle  
5 with a 300-mile range could take over 20 hours to complete  
6 the current test sequence.

7           In addition, extended testing duration increases  
8 the possibility that the operator fails to meet the speed  
9 trace in a test cycle. If an error is made in a test  
10 cycle near the end of the vehicle's range, a great deal of  
11 time is required to refill, stabilize and retest the  
12 vehicle.

13   --o0o--

14           AIR RESOURCES ENGINEER CROWELL: Staff proposes  
15 to supplement the current zero emission vehicle range  
16 determination by incorporating the new SAE recommended  
17 practice, J2572, a test sequence for range determination  
18 of fuel cell vehicles.

19           This procedure addresses the impractical duration  
20 of the current ZEV range determination test sequence and  
21 the hydrogen measurement challenges. In this new test,  
22 the range is based on fuel consumption over two urban  
23 dynamometer driving cycles and the usable hydrogen  
24 capacity. This proposal reduces the test sequence time to  
25 just under an hour.

1           As originally proposed, this procedure was  
2 required for fuel cell vehicles. Staff now proposes this  
3 test sequence be optional - the existing test sequence may  
4 also be used to provide flexibility to manufacturers.

5                               --o0o--

6           AIR RESOURCES ENGINEER CROWELL: I will now move  
7 on to a related PHEV topic, certification of hybrid  
8 conversion systems which add off-vehicle charge  
9 capability. Conversions are considered aftermarket parts  
10 and require an exemption from the anti-tampering  
11 requirements of Vehicle Code 27156. An exemption from the  
12 anti-tampering requirements can be granted for vehicles  
13 with similar model years, provided that the vehicle can  
14 meet the original emission certification standards, can  
15 demonstrate durability standards, and can meet the onboard  
16 diagnostic system requirements.

17           These exemption requirements do not include  
18 warranty provisions and do not apply to vehicles still  
19 under an original equipment manufacturer warranty.

20           Currently, a conversion system manufacturer  
21 modifying a vehicle still under the original equipment  
22 manufacturer's warranty must certify the converted vehicle  
23 as a new vehicle under the small volume manufacturer  
24 requirements. Our proposed aftermarket procedure provides  
25 a streamlined process for conversion system manufacturers

1 to certify their conversion systems.

2           The proposed procedure is less onerous than what  
3 would be required under the small volume manufacturer  
4 requirements, and ensures that the conversion does not  
5 increase the original vehicle's emissions.

6                               --o0o--

7           AIR RESOURCES ENGINEER CROWELL: Staff is  
8 proposing a certification procedure specific to plug-in  
9 conversion systems that are added to hybrid electric  
10 vehicles. Although staff recognizes that plug-in  
11 conversion systems are also being developed for non-hybrid  
12 vehicles, these conversion systems are more extensive and  
13 must be looked at on a case-by-case basis. A streamlined  
14 procedure is not appropriate for conventional vehicle  
15 conversions at this time.

16           In general, staff envisions two types of  
17 conversion systems: Adding an additional battery for  
18 supplemental energy storage and a controller; or a  
19 complete replacement of the original equipment automobile  
20 manufacturer's battery with a larger capacity battery.

21           In either case, the increased storage will impact  
22 the original operation of the vehicle. More electric  
23 energy means less internal combustion engine operation,  
24 which might lead one to think that the emissions would be  
25 reduced. However, the potential exists for higher

1 cold-start emissions, reduced emission canister purges  
2 causing higher evaporative emissions, and higher loading  
3 on existing electrical components, such as the electric  
4 motor, possibly leading to faster component wear and tear.  
5 In most instances, the conversion systems are designed for  
6 extremely clean vehicles. Many of these vehicles are  
7 designed to meet the most stringent PZEV standards.

8 PHEV conversion systems are subject to the  
9 aftermarket parts requirements, since the system is not  
10 included in the OEM's certification and is added after the  
11 initial sale of the vehicle. As with all aftermarket  
12 parts, manufacturers of components that are added onto a  
13 vehicle must demonstrate that the addition of these parts  
14 will not increase the vehicle's emissions.

15 --o0o--

16 AIR RESOURCES ENGINEER CROWELL: The proposed  
17 procedures are written to provide flexibility depending on  
18 the extent of the conversion system modification to the  
19 original vehicle, and are similar to other aftermarket  
20 parts certification procedures, where there is the  
21 potential for increased emissions from the conversion  
22 system.

23 These proposed procedures apply to installations  
24 on model year 2000 and subsequent hybrid electric  
25 vehicles. Conversions for non-hybrid vehicles are not





1 the vehicle owner and subsequent vehicle owners that the  
2 conversion system will not fail to meet certification  
3 procedure requirements due to incorrect installation, and  
4 that no part of the vehicle will be damaged due to  
5 incorrect installation. Installers shall install only  
6 those systems of a certified configuration, agree to cover  
7 the cost of repair of any vehicle upon which a  
8 noncertified configuration was installed, and be  
9 responsible for tampering fines imposed as a result of  
10 improper installation.

11           These warranties and agreements shall begin on  
12 the date of the installation and be effective for three  
13 years or 50,000 miles, whichever comes first.

14           Conversion system manufacturers warranty  
15 requirements are based on the additional OEM requirements  
16 for PZEVs. These vehicles, prior to conversion, meet  
17 extremely stringent exhaust and evaporative emission  
18 standards and have extended OEM warranty requirements.  
19 Converting these vehicles may void the vehicle's warranty  
20 and have a significant emissions impact.

21           To address this issue, staff proposes to have a  
22 warranty period that is equivalent to the OEM's warranty  
23 of ten years or 150,000 miles for zero emission energy  
24 storage devices, and 15 years or 150,000 miles for all  
25 other parts. This is to protect emission reductions

1 achieved prior to the conversion. The conversion warranty  
2 is reduced to five years or 75,000 miles for all parts on  
3 conversion systems installed on vehicles modified more  
4 than six years after the initial purchase.

5 Staff is aware that in some cases the conversion  
6 system warranty may exceed the OEM warranty requirements.

7 --o0o--

8 AIR RESOURCES ENGINEER CROWELL: The same  
9 installation warranty requirements described in the last  
10 slide also apply to non-PZEV installation.

11 For vehicles that are not certified to meet the  
12 partial zero allowance -- partial allowance zero emission  
13 vehicle requirements, the conversion system manufacturer  
14 warranty requirements are similar to those required for  
15 alternative fuel conversion systems. The length of the  
16 warranty is determined by the age of the vehicle, the  
17 emission category, and the cost to replace or repair the  
18 damaged parts.

19 Vehicles converted within four years of initial  
20 purchase have higher mileage warranties than vehicles  
21 converted after four years. The cost of parts impacts the  
22 warranty level as well. High cost parts have longer  
23 warranties. However, if installed on a vehicle after four  
24 years from initial purchase, the warranty period is half  
25 of what is proposed on the conversion of newer vehicles.

1                                   --o0o--

2                   AIR RESOURCES ENGINEER CROWELL: I will now move  
3 on to summarize the proposal and provide staff's  
4 recommendation.

5                                   --o0o--

6                   AIR RESOURCES ENGINEER CROWELL: The proposed  
7 test procedure amendments provide an accurate assessment  
8 of the emissions and ZEV credit determination for plug-in  
9 hybrid electric vehicles. The optional ZEV range  
10 determination for fuel cell electric vehicles provides  
11 manufacturers with the flexibility to reduce the testing  
12 time for long-range vehicles.

13                   The aftermarket certification and installation  
14 requirements are necessary to ensure that aftermarket  
15 conversions that incorporate off-vehicle charge  
16 capabilities do not increase emissions.

17                   Staff recommends the Board adopt the proposal  
18 with the 15-day modifications identified in the handout  
19 provided.

20                   That concludes my presentation.

21                   CHAIRPERSON NICHOLS: Thank you.

22                   Do you have any concluding remarks, Mr.

23 Goldstene, before we go to testimony?

24                   EXECUTIVE OFFICER GOLDSTENE: No.

25                   CHAIRPERSON NICHOLS: Okay. We did receive a

1 pretty extensive volume of comments in writing in advance,  
2 large numbers of them generated from people who either are  
3 doing their own conversions, have done their conversions,  
4 or want to protect small businesses doing conversions.

5           So before we go to the audience, I'd be  
6 interested in hearing your responses, sort of general  
7 theme that by moving so decisively in the area of control,  
8 that we are, you know, stifling a process which is going  
9 to actually increase the amount of electric or partially  
10 electric vehicles that are out there.

11           BOARD MEMBER SPERLING: Chairman Nichols?

12           CHAIRPERSON NICHOLS: Yes.

13           BOARD MEMBER SPERLING: Could I add to your  
14 request?

15           CHAIRPERSON NICHOLS: Sure.

16           BOARD MEMBER SPERLING: I think it would be  
17 useful to articulate in a little broader way kind of the  
18 philosophy on dealing with retrofits and conversions. You  
19 know, as we've been getting more and more into this  
20 business and a lot of different rules, you know, to  
21 what -- you know, is there some kind of overarching  
22 thinking in terms of handling that? You know, there's  
23 ideas about supporting market development, you know, in  
24 dealing with -- you know, to what extent OEM rules should  
25 be the same for conversion rules, whether -- dealing with,

1 you know, the magnitude of the sales. So --

2 CHAIRPERSON NICHOLS: Good addition.

3 BOARD MEMBER SPERLING: Yeah, kind of --

4 CHAIRPERSON NICHOLS: Expanding on the question.

5 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Let me  
6 try that. Let me start off by what the law requires.

7 You know, the OEMs or the Fords, GMs, Toyotas for  
8 the world have to meet a specific emissions standard for  
9 every new vehicle that they sell. And the law says that  
10 once that vehicle is sold, you can't do anything to it  
11 that would be considered tampering. So you can't modify  
12 in any way the emission control systems, which in today's  
13 situation is virtually everything on the engine and parts  
14 of the transmission. You can't do anything different to  
15 that vehicle, or it's called tampering. And so there's a  
16 provision under the law that says we can exempt from the  
17 anti-tampering provisions, or in a more positive reactor,  
18 that we can approve modifications to vehicles if they go  
19 through some kind of process to show that they don't make  
20 emissions worse.

21 So we have that for when you want to replace some  
22 part on a car that's not identical to what it was  
23 originally designed for. And that's historically been  
24 dealt with for people that want to kind of hot rod cars or  
25 hop them up, get more power out of them, do things like

1 that. That's been the traditional use of this.

2           And then, you know, maybe a decade or so ago  
3 there was a growing interest in alternative fuels. And so  
4 we saw things like CNG and propane conversion kits to  
5 change a vehicle from gasoline to those alternative fuels.  
6 And so we developed a procedure that dealt with these more  
7 broader modification types of -- well, it's modifications  
8 of the vehicle.

9           So we have those on the books as well. And all  
10 the propane and CNG people have gone through those. But  
11 there wasn't one for these electric conversions. So  
12 that's what got us into the business here of having to add  
13 a specific one for plug hybrid electric conversions.

14           Now, I guess automatically the question becomes  
15 is this just a procedural necessity of the law or is there  
16 some real concern behind this? And I think the general  
17 public view of some of these modifications is that, well,  
18 if you're, you know, making a CNG vehicle off a gasoline  
19 vehicle, that's got to be good, right? That's got to be  
20 good for the environment. Well, it turned out that it  
21 wasn't if you didn't do it right, because as we learned on  
22 CNG and propane, you could make changes which, you know,  
23 it didn't affect hydrocarbon emissions but they made NOx  
24 go up.

25           So these procedures had a purpose, which was to

1 make sure that people, who do not have the engineering  
2 resources and the financial resources to do the kind of  
3 job that a Ford, GM, or Chrysler or Toyota would do in  
4 designing a car, have to go through at least some level of  
5 testing to assure that they haven't messed up the emission  
6 performance of the original vehicle.

7           And with plug hybrid vehicles, as the staff  
8 explained, we have the same kind of a situation. We have  
9 data from people that have modified vehicles - and they're  
10 allowed to do this on a very limited basis without going  
11 through this procedure - but, in fact, they do all the  
12 modifications, say this is really great. And you run an  
13 emission test and - guess what? - the emissions are  
14 higher.

15           So, you know --

16           CHAIRPERSON NICHOLS: It's so counterintuitive  
17 that people would believe it.

18           CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Yeah,  
19 it is. And as we said, you know, if you have a car  
20 that -- a hybrid vehicle like the Prius, whose engine  
21 comes on and off, you know, probably every minute or so  
22 that you're driving, what that means is the emission  
23 control for the engine is warmed up and is in a position  
24 where essentially it's putting out no emissions. And if  
25 you let that engine only come on maybe every five minutes

1 or ten minutes, because you've added more battery  
2 capacity, now that engine tends to migrate into a cold  
3 start. And when it's cold, it does have emissions,  
4 because the catalyst isn't working and things.

5           So now all of a sudden you've taken a car with  
6 one cold start and essentially no emissions after that and  
7 turned it into a car that can have multiple kind of cold  
8 starts that have emissions with them. And then the other  
9 piece is that on all cars we have this canister or the  
10 sponge that soaks up fuel vapors. And when it's-- it's  
11 like any sponge, it can only hold so much before it starts  
12 leaking out. And so we use the engine of the car running  
13 fairly frequently to empty that canister, pull those  
14 vapors back into the car and burn them. And if you don't  
15 use the engine very much, then it doesn't, quote, purge  
16 the canister and the canister overflows, then creates  
17 hydrocarbon emissions. And that's a non-linear event.  
18 When it gets to that position, you can just get huge  
19 amounts of hydrocarbons coming out of the vehicle.

20           So that's another concern for criteria emissions.  
21 And then there were the details about how do we give ZEV  
22 credits to these things which require certain, you know,  
23 other procedural changes. But that's kind of the context  
24 here.

25           And the philosophy behind these conversion

1 procedures is that if you're going to do a conversion,  
2 which is generally done fairly young in the life, these  
3 kind of conversions -- life of the car, then we ought to  
4 have the same kinds of assurances that we have for the  
5 original equipment car, and Ford, GM-made car. But we  
6 need to do it in a way that's not as burdensome, because  
7 obviously it costs GM and Ford and Toyota hundreds of  
8 thousands of dollars just to do the testing and evaluation  
9 for a new car. And we don't want to put that much burden  
10 on a converter.

11           But at the same time, we don't want to take  
12 wholesale pieces of this sort of lattice that we have to  
13 assure low emissions and say, "Well, you don't have to do  
14 this one and you don't have to do that one and worry about  
15 this one." So we think consumers should get warranties,  
16 not just because we're concerned about protecting  
17 consumers, but because when there's no warranty on your  
18 car, if something goes wrong, you're less likely to fix it  
19 than if there is a warranty on the car.

20           And we think they have to go through and prove  
21 that they haven't made the emissions higher, because, in  
22 fact, our data shows that some of the early designs did  
23 that.

24           So we've ended up with a procedure that is fairly  
25 elaborate. Certainly simplified compared to what GM, Ford

1 and Toyota have to do. But, you know, we think it's  
2 caused a balance here. And on the one hand you've got  
3 vehicle manufacturers who are saying that with what's  
4 going on right now in the marketplace, a lot of it  
5 illegal, that it voids the warranty. And we don't want to  
6 do that on the car, because that helps protect emissions.

7           On the other hand, we don't want to be so -- you  
8 know, so seeking perfection that we kill the opportunity  
9 for people to develop here.

10           The other concept that affects our thinking is  
11 that there's a role for conversions, but we don't think  
12 it's a very big role. In the name of plug hybrid electric  
13 vehicles we see a large number of OEMs bringing these  
14 vehicles to market. And that's where you're going to get  
15 the -- you know, the hundreds of thousands and hopefully  
16 maybe millions of vehicles on the road.

17           The conversions by their nature are expensive.  
18 They're largely niche oriented. And so we don't, you  
19 know, quite put the value on them that I think the people  
20 who are promoting them do who feel that this is the only  
21 way to get this technology in the marketplace within a  
22 year or two if we're going to have commercial vehicles  
23 being sold that are plug hybrid vehicles.

24           CHAIRPERSON NICHOLS: Well, clearly there are  
25 consumers who want these kinds of conversions.

1 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Sure.

2 CHAIRPERSON NICHOLS: But I think there is a  
3 question of how many. Do you have any -- I guess we'll  
4 probably hear from some of the manufacturers as we go  
5 along.

6 I'm prepared to hear from the witnesses. And if  
7 anybody else is looking -- just want to follow up.

8 BOARD MEMBER SPERLING: Just one follow-up.

9 So you mentioned this idea of CNG conversions.  
10 That seems like a very analogous situation in which the  
11 CNG conversions do tend to have higher emissions than the  
12 OEM versions, you know, partly because they're not done as  
13 well and so on.

14 How will the CNG conversion -- is there a  
15 comparability here in how we're dealing with the PHEV  
16 conversions with CNG conversions?

17 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Yeah,  
18 it's very parallel. Other than the technical details of  
19 how the vehicle works that have to be incorporated in the  
20 test procedures, the basic provisions that a CNG  
21 conversion has to go through and demonstrate are very  
22 similar to what you have to do here.

23 CHAIRPERSON NICHOLS: Well, thank you for that  
24 background.

25 I think I also need to, before we begin the

1 public hearing, ask the ombudsman to report.

2 OMBUDSMAN QUETIN: Chairman Nichols and members  
3 of the Board.

4 This proposed regulation has been developed with  
5 input from the Society of Automotive Engineers, automotive  
6 companies, conversion system companies, environmentalists,  
7 and the Alliance of Automotive Manufacturers. Staff began  
8 their efforts to develop this rule in late 2005. They  
9 held three public workshops in El Monte on April 8th, July  
10 16th and September 24th of 2008. On average, about 50  
11 attendees attended or called into the public workshops.  
12 They also held two original equipment automotive  
13 manufacturer meetings and 15 individual meetings with the  
14 auto manufacturers.

15 The staff report was released for public comment  
16 on December 5th, 2008, and noticed via the ARB website and  
17 the five list serves.

18 Thank you.

19 CHAIRPERSON NICHOLS: Thank you.

20 My first three witnesses on the list are Steven  
21 Douglas, Ed Kulik, and Tommy Chang, if you want to come  
22 forward.

23 Good morning.

24 MR. DOUGLAS: Thank you, Madam Chair, members of  
25 the Board. I had a presentation as well...

1           Is that better?

2           All right. Good morning, Madam Chair, members of  
3 the Board. Steve Douglas with the Alliance of Automobile  
4 Manufacturers. And I had a presentation, if you could put  
5 that up.

6           And while I'm waiting on that, I'd just like to  
7 thank the staff for their work on this regulation. This  
8 is one of the more complex regulations we've seen. And  
9 throughout the process, they've been cooperative,  
10 resourceful and very responsive to our needs. It's still  
11 a very complex regulation, but we think it balances the  
12 testing burden on manufacturers with the requirement to  
13 ensure vehicles meet emission standards.

14           (Thereupon an overhead presentation was  
15 Presented as follows.)

16           MR. DOUGLAS: Those are our member companies.

17           And I'd just like to back up and say plug-in  
18 hybrids are part of a 30-year march towards zero.

19           If you go to the next slide.

20                               --o0o--

21           MR. DOUGLAS: This shows the last 40 years and  
22 how far we've come. Emissions from current new vehicles,  
23 all those new vehicles, are so low that a few years ago we  
24 couldn't even measure those in a laboratory. In fact,  
25 today's cars after the first 30 to 60 seconds are

1 essentially pollution free.

2 And so that's not all though, if you go next to  
3 the next slide.

4 --o0o--

5 MR. DOUGLAS: That's not everything that involves  
6 emission control. Manufacturers have extended durability,  
7 they've developed onboard diagnostic systems that monitor  
8 every single element of the emission control system,  
9 produced evaporative systems that virtually eliminate evap  
10 emissions. Manufacturers certify and ARB conducts in-use  
11 testing. And, of course, we provide a warranty for the  
12 products and the entire emission control system, including  
13 the battery.

14 So what's the impact of all these controls and  
15 all those emission controls?

16 If you go to the next slide.

17 --o0o--

18 MR. DOUGLAS: This chart shows the emissions from  
19 cars, trucks, SUVs, minivans. And that's the PC-LDT.  
20 That's everything. And you can see that in 2015 we're 12  
21 percent of the emissions, in 2020 we're ten percent.

22 You can go to the next slide.

23 --o0o--

24 MR. DOUGLAS: 2025 we're eight percent. And in  
25 2030 under the existing emission control standards that

1 are on the books now, cars, trucks, minivans, SUVs, the  
2 whole vehicle fleet will be about seven percent of the  
3 total criteria emissions in California. And I think  
4 that's a pretty remarkable story. And it tells you the  
5 level of control we're getting from vehicles.

6 The next slide.

7 --o0o--

8 MR. DOUGLAS: And this brings us to the plug-in  
9 hybrid electric vehicle test procedures. We've requested  
10 eight changes to the standards. We've provided more  
11 details in the written comments that I think you have now.  
12 And we've also discussed each one of these with your  
13 staff, and I think they've included some of them already.

14 What we would ask is that you'd simply allow us  
15 to work with the staff in the 15-day notice process to  
16 implement these where they're appropriate.

17 That's all I have. And we also support the  
18 conversion regulations, the ethanol conversion  
19 regulations. I'll let my colleague, Ed Kulik, discuss  
20 that since my time is up.

21 CHAIRPERSON NICHOLS: Very good. Thank you very  
22 much.

23 Mr. Kulik.

24 MR. KULIK: Thank you, Madam Chair and the  
25 members of the Board. My name's Ed Kulik from Ford Motor

1 Company.

2           Echoing Steve's comments, I'd like to thank staff  
3 for their work on this set of regulations, the adoption of  
4 new procedures. Again, they are very complex, and we  
5 worked, I think through SAE and the staff, over the last  
6 year and a half at least to come up with, what we think,  
7 is a good balance. There's a few things that we'd like to  
8 address in a little more detail, and hopefully through the  
9 15-day notice we can get through that.

10           If we could, could we go back to Steve's slide  
11 where he laid out the outline of the requirements for  
12 emission certification. I believe they started  
13 with -- yeah, thank you.

14           The data measurement and recording portion, what  
15 we'd like to focus on in the 15-day is that we stick to a  
16 high overarching principle that the procedures need to  
17 reflect things that are absolutely necessary. All of us  
18 are faced with limited resources and trying to do things  
19 as efficiently as possible. We understand as the plug-ins  
20 evolve over time, the test procedures are likely to change  
21 and there'll be opportunity to adjust for new  
22 requirements. And we're simply reinforcing the idea that  
23 let's keep the procedure as simple as reasonable.

24           With respect to the four-phase exhaust test  
25 during evap, there's an opportunity to leverage evap

1 testing for exhaust emissions data. We're trying to work  
2 with staff to create a balance between what is typically  
3 known as a three-phase exhaust test for the evap process.  
4 We'd like to extend that to four phase. That's typical  
5 during hybrid testing. We understand there's a concern  
6 with that. And we are proposing that there's a design  
7 backstop for always having designs capable of three-day  
8 phase testing. And there's opportunity and mechanisms  
9 within the regs to test for that, if needed.

10           In terms of the urban and highway test, simply,  
11 the test procedure can get extremely long as the battery  
12 life of these plug-ins grow, that for blended hybrids we  
13 can test for over six, seven test cycles lasting hours,  
14 which over time can extend similar to the case we saw with  
15 the fuel cell vehicles. And we're asking that we use good  
16 engineering judgment to determine a worst-case emissions  
17 mode, whether that's charge depleting or charge  
18 sustaining, and then certify and provide data in that mode  
19 and then a backstop of an engineering attestation for the  
20 other mode.

21           State a charge limit for these vehicles.  
22 Essentially, we're held to control the battery system to a  
23 one percent of fuel energy target. As these vehicles  
24 evolve, the battery systems become larger, the fuel  
25 consumption becomes smaller. And that limit that we're

1 controlling our battery systems to shrinks, practically  
2 speaking. And we need to reinvestigate the practicality  
3 of that limit and whether there's opportunities to provide  
4 additional changes on that.

5 In terms of the equivalent all-electric range  
6 test, again this is an extensive test to run the vehicle  
7 until essentially it maintains charge-sustaining mode and  
8 again can take several test cycles on the order of hours.  
9 We're looking for the opportunity to take the first one or  
10 two test cycles and shorten that procedure.

11 Other things I think are fairly  
12 non-controversial. And we appreciate the staff's work  
13 with us.

14 CHAIRPERSON NICHOLS: Thank you very much.

15 Mr. Chang, followed by Spencer Quong and Randy  
16 Reisinger.

17 MR. CHANG: Thank you very much for this  
18 opportunity to make a comment here.

19 First, I would like to commend Elise and her  
20 teams in both Sacramento and El Monte for their hard work  
21 and all their efforts in putting these plug-in hybrid test  
22 procedures together.

23 And American Honda has already submitted written  
24 comments and also worked with the staff members on all of  
25 the comments prior to the Board meeting.

1           Most of the comments, except for one, are, I  
2 think, minor in nature. I just want to take this  
3 opportunity to reemphasize one of the important points  
4 that we made on the comments, which is on the zero  
5 emissions VMT allowance table that's shown on page C-1 of  
6 Appendix D. And we believe that the table, as written --  
7 as it is right now, could create an unlevel playing field.  
8 And that is something that nobody desires. And I just  
9 wanted to make sure that we continue to work with staff to  
10 resolve those concerns before the first plug-in hybrid is  
11 officially certified.

12           And, finally, I just also want to commend Jeff  
13 Wong and Craig Childers here, staff engineers, for their  
14 continuous participation in the Society of Automotive  
15 Engineering test procedure committees. And we think -- I  
16 think their involvement is very valuable to the technical  
17 committee. They can also provide their point of view from  
18 a regulator's point of view.

19           Thank you very much.

20           CHAIRPERSON NICHOLS: Thank you.

21           Spencer Quong.

22           BOARD MEMBER SPERLING: Chairman Nichols?

23           CHAIRPERSON NICHOLS: I'm sorry. Yes.

24           BOARD MEMBER SPERLING: Since this was the last  
25 OEM presentation, can I ask a question --

1 CHAIRPERSON NICHOLS: Yes.

2 BOARD MEMBER SPERLING: -- you know, either  
3 for -- more for Mr. Cackette.

4 Are these rule -- so the auto industry seems  
5 pretty happy and it seems like the staff did a great job  
6 putting the rules together for the PHEV test cycles and I  
7 guess fuel cell test cycles.

8 What about EPA? Are these test procedures -- I  
9 mean, what's the status of what EPA's doing? I mean,  
10 because I would assume we want to have identical test  
11 procedures and we're not getting out front in some way  
12 that's --

13 MS. KEDDIE: No.

14 This is Elise Keddie.

15 We've been in contact with U.S. EPA. They're  
16 working a slightly different process. And, in fact, they  
17 will have a guidance document available by the end of this  
18 year. They do have a proposal that they'll be presenting,  
19 I believe in the next month, and may be conducting a  
20 workshop in the next few months. But they are moving  
21 forward.

22 We needed to move ahead with ours because the  
23 manufacturers are very keen about certifying OEM vehicles  
24 for the coming product year.

25 BOARD MEMBER SPERLING: Is there any danger we're

1 going to end up going in different directions, having  
2 different rules?

3 MS. KEDDIE: We'll work with them. And I think  
4 as you'll hear from the next presenter, we plan on -- we  
5 intend to review these test procedures within the next  
6 three years to make sure that we're not -- that we and  
7 U.S. EPA are following a similar process.

8 BOARD MEMBER SPERLING: Thank you.

9 SUSTAINABLE TRANSPORTATION TECHNOLOGIES BRANCH

10 CHIEF BEVAN: But I'd like to add -- this is Analisa --  
11 that we have been working with U.S. EPA through the J1711  
12 SAE process. They've been an equal partner in that  
13 effort.

14 CHAIRPERSON NICHOLS: But we do move a little  
15 faster than they do. And it looks like there's a good  
16 reason for that.

17 BOARD MEMBER SPERLING: I know, we're better  
18 and --

19 CHAIRPERSON NICHOLS: No, no, no. It's just  
20 that -- well, we are, of course.

21 (Laughter.)

22 CHAIRPERSON NICHOLS: That goes without saying.  
23 But the point is that we need to get these vehicles  
24 certified in California because of our mandates.

25 Ms. D'Adamo.

1           BOARD MEMBER D'ADAMO: It sounds like the  
2 automakers' concerns are relatively minor except for  
3 perhaps that one raised by Honda. I don't have a copy of  
4 the appendix. It looks like a lot of our materials have  
5 been taken overnight.

6           So if it's something that staff has concerns with  
7 and will be discussing, if we could get copies of the  
8 appendix.

9           MS. KEDDIE: I think that's also covered in  
10 Honda's comment letter, which that may have disappeared  
11 overnight also. But, yes, we've been working with Tommy,  
12 and we'll propose --

13          BOARD MEMBER D'ADAMO: So we expect to be able to  
14 resolve that issue?

15          MS. KEDDIE: Absolutely.

16          BOARD MEMBER D'ADAMO: Okay. Thanks.

17          CHAIRPERSON NICHOLS: Okay. Thank you.

18          MR. QUONG: Thank you for allowing me to speak  
19 today. And, excuse me, I have a cold.

20          CHAIRPERSON NICHOLS: That makes two of us.

21          (Laughter.)

22          MR. QUONG: We're a team.

23          My name is Spencer Quong. I'm with the Union of  
24 Concerned Scientists. My organization is a science-based  
25 nonprofit working on clean vehicles, clean energy,

1 scientific integrity, and other topics.

2           Personally, I've worked on the hybrid test  
3 procedures for over ten years and was a member of the  
4 original Society of Automotive Engineers Team J1711 to  
5 develop the procedures.

6           UCS would like to support the changes -- or I  
7 should say, I'm here to only talk about the plug-in hybrid  
8 exhaust test procedures. And the Union of Concerned  
9 Scientists would like to support these procedures.

10           We feel this is a good step -- a good first step  
11 in measuring the emissions of these vehicles. However,  
12 because there's a lack of vehicles to test the accuracy  
13 and consistency of these procedures, we do recommend that  
14 the procedures be reviewed within three years. And this  
15 review should include an actual testing of the shortened  
16 plug -- shortened hydrogen fuel cell zero emission range  
17 procedure using actual fuel cell vehicles since we do have  
18 those on the roads.

19           I would like to thank the staff, both in  
20 Sacramento and El Monte, for their very diligent work on  
21 these complex procedures. And thank you for letting me  
22 speak today.

23           CHAIRPERSON NICHOLS: Thank you.

24           Randy Reisinger, followed by Sanjeev Choudary and  
25 Patrick Huberty.

1           MR. REISINGER: Good morning, Madam Chair,  
2 members and staff. Randy Reisinger with CalCars.

3           CalCars initiative has been promoting PHEVs for  
4 seven years. As a nonprofit technology and advocacy  
5 group, we work to spark interest in PHEVs and have gained  
6 attention through conversions, our strategy for building  
7 awareness and motivating car makers to mass produce PHEVs.

8           In 2004 we did the first conversion in a Corte  
9 Madera garage, and placed our designs in the public domain  
10 on priusplus.org. We built on the work that was  
11 previously done by Professor Andy Frank of UC Davis and  
12 other dedicated people in the auto and utility industries,  
13 as well as government, to advance this PHEV concept.

14           Our advocacy and technology efforts since have  
15 helped bring us to the point where many car makers are now  
16 planning to build PHEVs. From that perspective, we now  
17 urgently propose that the California Air Resources Board  
18 take one step backward and decide to delay regulation of  
19 the aftermarket conversions, as it's still in a very  
20 developmental mode.

21           The industry is still so young and so small that  
22 most innovation is still coming from self-funded skilled  
23 dedicated engineers and entrepreneurs. These players and  
24 other affected parties have not yet had a chance to fully  
25 and productively present and discuss their concerns to

1 CARB, let alone complete the development of their proposed  
2 products.

3           Implementing the proposed rules will drastically  
4 slow growth of this conversion industry and could prevent  
5 further progress with components, software and usability.  
6 Only one or two companies have pockets deep enough to  
7 comply, and on that basis with only one or two models.

8           Other operating companies and entering  
9 entrepreneurs will have extreme difficulty gaining  
10 financing and personnel to handle the upfront costly  
11 engineering and testing, plus warranties, that CARB  
12 regularly gets from auto manufacturers, and if proposed  
13 rules are now adopted will also require from converters.

14           We propose that the Board members at this meeting  
15 require that all companies involved in the conversion  
16 simply register with CARB the inventory of their completed  
17 conversions and provide projections for 2009 volume, and  
18 make themselves available for a more deliberative process.

19           Further, we propose the staff devise a set of  
20 graduated rules suggested in our extended testimony.

21           CHAIRPERSON NICHOLS: Thank you very much.

22           MR. REISINGER: Thank you.

23           CHAIRPERSON NICHOLS: We do have your testimony.

24           Mr. Choudary.

25           MR. CHOUDARY: Good morning. And thank you for

1 the opportunity to speak here today.

2           My name is Sanjeev Choudary. I am General  
3 Manager of PHEV Systems at A123 Systems. I have overall  
4 business responsibility for our High Motion plug-in  
5 conversion module product line.

6           As you know, we've been working over the past  
7 year with the staff on emissions testing and other testing  
8 of our product. And we're currently selling our product  
9 in California under an Executive Order for an  
10 anti-tampering exemption for 500 vehicles.

11           I'd like to thank the staff for their cooperation  
12 and flexibility during that process and the Board for  
13 allowing the exemption that allows us to sell today.

14           Throughout the course of the process of getting  
15 our exemption, the staff's objective was to ensure that  
16 there was no backsliding on emissions during the OEM  
17 warranty period. And at A123 we support that objective.

18           However, we urge the staff and the Board to  
19 consider -- in their rule-making now, urge them to  
20 consider the conversion system design and failure modes  
21 specifically regarding the system architecture of a  
22 conversion system. There's a very large difference  
23 between the failure mode of a supplemental battery versus  
24 a replacement battery. In the case of the High Motion  
25 product line, if the supplemental battery fails, the worst

1 case is reversion to stock operating mode. So we're  
2 guaranteed that in all cases we'll be no worse off on  
3 emissions than we were before the conversion.

4           With that type of architecture, the warranty  
5 becomes a market mechanism for distinguishing the product  
6 and offering a value proposition to consumers.

7           With our current three-year warranty that we've  
8 been offering to consumers in California, we've sold well  
9 over 100 of our conversion systems. We're currently  
10 installing them through three installers, authorized  
11 dealers in California, two of which are small businesses  
12 and led by entrepreneurs similar to the ones I'm sure you  
13 will hear from later today and who've already commented on  
14 the proposed rules.

15           So the ten-year warranty that's being proposed by  
16 the staff, I think, is going to become a very limiting  
17 factor in our ability to continue to market in California,  
18 either by virtue of the fact that we will not be able to  
19 provide such a warranty or it will increase the cost of  
20 the conversion system to the point where it becomes no  
21 longer a viable value proposition to consumers.

22           So we urge the staff and the Board to consider  
23 the conversion system architecture and take that into  
24 account when considering what warranty mechanisms might be  
25 necessary in order to protect air quality.

1 Thank you.

2 CHAIRPERSON NICHOLS: Thank you.

3 Patrick Huberty, followed by Andrew Burnette and  
4 Richard Hatfield.

5 MR. HUBERTY: Good morning, Madam Chair and  
6 members of the Board. My name is Patrick Huberty,  
7 Business Development Manager with Gold Peak Industries  
8 North America.

9 I'd like to begin by thanking the Air Resources  
10 Board for their efforts in preparing this public hearing.  
11 I'd also like to thank industry colleagues and others  
12 attending today for your support of the plug-in conversion  
13 industry and your interest in the proposed ARB  
14 requirements for plug-in hybrid vehicles.

15 I'm sharing comments today on behalf of Plug-In  
16 Conversions Corporation and Gold Peak Industries. As an  
17 associate company, Gold Peak recently acquired a  
18 substantial equity stake in Plug-In Conversions. I'll  
19 share a little bit about each company quickly.

20 Since early 2007 Plug-In Conversions, also known  
21 as PIC, has been designing and installing conversion  
22 systems which convert Prius hybrid vehicles into plug-in  
23 vehicles -- or plug-in hybrid vehicles. This is done at  
24 their Poway, California, headquarters.

25 Gold Peak Industries North America, which is

1 headquartered in San Diego, is a division of GP Batteries  
2 International and a leading manufacturer of batteries and  
3 battery systems for many applications including electric  
4 and hybrid vehicles.

5           The PIC conversion system replaces the original  
6 1.3 kilowatt-hour nickel metal hydride battery with a  
7 larger six kilowatt Gold Peak nickel metal hydride system.  
8 The larger battery system allows the Prius to be driven 25  
9 miles on batteries alone, or EV-only mode, and an average  
10 fuel economy of 100+ miles per gallon based on battery and  
11 engine combined driving.

12           It's important to note that the conversion system  
13 implements the same nickel metal hydride chemistry as  
14 provided by the OEM and therefore allows the factory  
15 battery management system to be retained and operate as  
16 designed by the manufacturer. This integration, first and  
17 foremost, gives the vehicle the best level of safety.

18           The new certification and installation  
19 requirements and, in particular, the warranty requirements  
20 currently proposed by ARB would severely limit the ability  
21 of PIC and companies with similar conversion systems to  
22 sell and install aftermarket PHEV conversions.

23           We respectfully request your help in revising or  
24 postponing the warranty requirements proposed in ARB's  
25 Appendix G, which requires conversion companies, such as

1 PIC, to provide a ten-year, 150,000 mile warranty for the  
2 newly installed conversion battery system.

3           Our request to revise the warranty requirement is  
4 based on how the PHEV battery system is designed in terms  
5 of height of charge and depth of discharge. The PIC  
6 conversion system is designed to utilize a wider range of  
7 the battery's state of charge. This allows the battery  
8 system to provide the 25-mile EV-only range and 100+  
9 average mile per gallon benefit in the PHEV conversion in  
10 the first place.

11           However, by using a larger range of the battery's  
12 state of charge, the battery cycle life is reduced.

13           CHAIRPERSON NICHOLS: Mr. Huberty, your time's  
14 about up here.

15           MR. HUBERTY: Okay. I'll finish up quickly.

16           In contrast, the original Toyota battery system  
17 utilizes a much smaller SOC range, which reduces the  
18 vehicle EV-only range, but increases the battery's cycle  
19 life.

20           Therefore, we submit that the PHEV conversion  
21 battery system should not be subject to the same warranty  
22 requirements as an HEV battery. At a minimum, we  
23 recommend that the newly installed PHEV conversion system  
24 battery be subject only to the balance of the original OEM  
25 warranty.

1 CHAIRPERSON NICHOLS: Thank you.

2 MR. HUBERTY: Thank you for your time and  
3 consideration.

4 CHAIRPERSON NICHOLS: Mr. --

5 BOARD MEMBER BERG: Chairman Nichols, may I just  
6 ask what the battery life is?

7 CHAIRPERSON NICHOLS: Yes, sorry. Excuse me.

8 BOARD MEMBER BERG: Mr. Huberty, what is the  
9 battery life?

10 MR. HUBERTY: The battery life or the battery  
11 warranty?

12 BOARD MEMBER BERG: The battery life.

13 MR. HUBERTY: The battery life of a nickel metal  
14 hydride can vary under different conditions.

15 BOARD MEMBER BERG: But what's the range?

16 MR. HUBERTY: It's warrantied three years for the  
17 case of a plug-in conversion application -- a Prius  
18 conversion.

19 BOARD MEMBER BERG: So you'd say it's a  
20 three-year battery life --

21 MR. HUBERTY: A three-year battery warranty.

22 BOARD MEMBER BERG: -- and then they have to  
23 replace it?

24 MR. HUBERTY: A three-year battery warranty, and  
25 they would have to replace the battery after three

1 years --

2 BOARD MEMBER BERG: Thank you.

3 MR. HUBERTY: -- depending on how the warranty's  
4 structured.

5 BOARD MEMBER BERG: Thank you.

6 MR. HUBERTY: Okay.

7 CHAIRPERSON NICHOLS: Okay. Andrew Burnette,  
8 followed by Richard Hatfield and Daniel Sherwood.

9 MR. BURNETTE: Chair and Board members, thank you  
10 for this opportunity to speak. I would like to add my  
11 thanks to the staff for all their hard work on these  
12 amendments. I know it's a lot of effort.

13 And I'd like to also add my voice to the chorus  
14 to ask for a delay in some of this for a little more  
15 amendment.

16 So when I wrote my comments, I read through the  
17 75 existing comments, and basically agree with all of  
18 them. I later learned three hours later there was 140+  
19 comments. So I haven't seen them all, but I think  
20 they're -- they looked pretty representative to the folks  
21 I've been speaking with.

22 And basically I'd like to summarize what I got  
23 from that and then add a couple of bullets of my own.

24 First of all, the kind -- I'm speaking to the  
25 retrofit part of the regulation. The size of the market

1 is not large enough yet and I don't -- in my 15 years  
2 experience in regulation development and working with  
3 staff here, I don't think the market's going to grow to a  
4 significant size to really impact air quality. But at the  
5 same time, it's a very important modification, innovation  
6 and entrepreneurial change to the market that puts  
7 pressure on the OEMs as they bring their technology to the  
8 market.

9           So if we wait for the OEMs -- and I love the  
10 OEMs. But if we wait for them, it will take longer in my  
11 experience. So we should allow the market to pressure  
12 that normal fleet turnover. And at the same time we'll be  
13 saving fuel. And we will better align this regulation  
14 with AB 32 and other priorities at the federal level and  
15 state level.

16           So my bullets are: I think this is a perfect  
17 opportunity to gather real-world data, data that can be  
18 used to modify regulations down the road. And you have --  
19 the reason it's a perfect opportunity is -- you have these  
20 early adopters who are spending 7,000 to 11,000 extra  
21 dollars just to drive a vehicle that they can't possibly  
22 hope to recoup that cost. So they're so motivated,  
23 they're highly -- they're well informed. And so this is a  
24 perfect opportunity to do things to bring them into the  
25 process too with approaches like continuous INM, like was

1 done in the taxis down using cellular technology that can  
2 report OBD problems instantaneously, or in-use testing  
3 that can actually get the real emissions as the vehicles  
4 are used in the real world, not in the laboratory.

5           Secondly, I would ask that you help your staff  
6 see ways to apply AB 118 funds to this effort and help  
7 bring these technologies more quickly to market, and even  
8 expand them to heavier platforms where they can do more  
9 good for each conversion.

10           Thank you very much for this opportunity.

11           CHAIRPERSON NICHOLS: Thank you for your  
12 thoughtful comments.

13           Mr. Hatfield.

14           MR. HATFIELD: Good morning. I'm Richard  
15 Hatfield with Alliance Renewable Energy. We're importers  
16 and distributors of lithium batteries.

17           Our concern, of course, is adding to the chorus  
18 of the other companies regarding the battery warranties  
19 that are being requested. From our perspective, we agree  
20 with High Motion that a supplemental battery failure will  
21 not increase emissions. The vehicle will simply revert  
22 back to the OEM status of not being a plug-in hybrid.

23           Much of the newest technology in lithium  
24 batteries has only been commercially available for the  
25 last three or four years, particularly the lithium

1 ferro-phosphate batteries. So the knowledge of "will  
2 these batteries last for 150,000 miles, will they last for  
3 ten years?" is not really even available yet.

4           So our request would be that on supplemental  
5 battery systems where the failure does not increase  
6 emissions, that those warranties be set by market  
7 pressures; where a very small market of early adopters -  
8 it's my understanding right now there may be as few as 300  
9 plug-in hybrids in California - that those early adopters  
10 that are spending a great deal of money for this can  
11 determine what those warranties should be, what make sense  
12 for them financially.

13           Secondly, what I would like to request is there  
14 be an exemption for conversion system manufacturers for  
15 the first 500 vehicles that they convert, because the  
16 pressures of meeting the same costs for certifying these  
17 conversions that the OEMs would be forced to meet simply  
18 couldn't be borne by these companies. And this would make  
19 those companies unviable in the market. They would not be  
20 able to exist in California. They wouldn't be able to  
21 sell product. They wouldn't be able to employ people in  
22 California. It would force them out of this market,  
23 potentially into other states.

24           Thank you.

25           CHAIRPERSON NICHOLS: Thank you.

1 Daniel Sherwood, followed by Paul Guzyk and Robb  
2 Protheroe.

3 MR. SHERWOOD: Good morning. And thank you,  
4 Madam Chairman, members of the Board. My name's Daniel  
5 Sherwood. I'm with a company called 3 Prong Power. We  
6 convert hybrids to plug-in hybrids. We employ three  
7 people and we're based in Berkeley. We're a very small  
8 company, but we have a lot of heart.

9 This is my second CARB meeting I've been to. The  
10 first one was a workshop in September. And I think I've  
11 used more gasoline coming to these workshops than in --  
12 every month other than those two meetings. Because when I  
13 drive around town, my car runs on electricity, because I  
14 have an illegally tampered car -- please don't cuff me --

15 (Laughter.)

16 MR. SHERWOOD: -- illegally tampered car that  
17 uses no gasoline. It runs on electricity.

18 Now, I understand that this car might have some  
19 evaporation emissions from the fuel tank because my engine  
20 isn't running often enough. And we've actually modified  
21 our vehicles now to do a run cycle and start-up to help  
22 mitigate that.

23 But I would argue that the benefit of my car,  
24 with its decals as a demonstration for the technology to  
25 show people what's possible, outweighs a little bit of

1 evaporative emissions coming out of my fuel tank.

2 I think everyone has the same angle in mind. We  
3 want to step --

4 CHAIRPERSON NICHOLS: That's probably a defense  
5 you could put up if anybody went after you for the illegal  
6 conversion.

7 (Laughter.)

8 MR. SHERWOOD: Yeah, hopefully. I don't know.  
9 Hopefully.

10 I think we all -- we hold the same goal in mind.  
11 We want to walk out on the city streets and we want to  
12 hear the quiet of engines that aren't running and we want  
13 to smell the lack of exhaust from cars that aren't running  
14 their engine.

15 I think the only thing we differ on here is how  
16 we get to that goal.

17 So we don't think we need to regulate now before  
18 a single car can ever be more polluting. I would argue  
19 that we need to slow down a little bit and allow us some  
20 room -- some breathing room literally to innovate, so that  
21 we can all breathe better in the future. I think we all  
22 agree plug-in hybrids are critical to achieving that  
23 outcome.

24 I think there's a chicken and egg problem here.  
25 Being a plug-in hybrid converter, there's not a lot of

1 plugs out there. Not a lot of people know what plug-in  
2 hybrids are. So I think that we're actually really  
3 helping the OEMs by encouraging more plugs, the  
4 infrastructure to be set up, educating the public. I  
5 think that once the market grows, there's more plugs  
6 available, it will be way easier for the OEMs to release  
7 their fleet vehicles.

8 I always say there's two kinds of plug-in hybrids  
9 right now: Those you can get and those you can't get.  
10 And I would really urge you that until we get to the kind  
11 that we can get from the OEMs, become the kind you can  
12 get - right now, they're the kind you can't get - please  
13 don't stifle the industry that makes the kinds that you  
14 can get, because I think we serve a really useful purpose  
15 in pushing this technology forward.

16 So I guess -- and my comments there, I would  
17 really request some kind of waiver. You know, if we could  
18 be allowed to sell 500 vehicles, that'd be great. If we  
19 could get a little bit of money from AB 118 to pay for the  
20 testing, maybe make a coalition pay for everyone's  
21 testing, that would be great. Or just wait until the OEMs  
22 actually have a product that you can buy, and then we'll  
23 be happy to meet those regulations.

24 Thank you very much.

25 CHAIRPERSON NICHOLS: How many vehicles have you

1 converted to date?

2 MR. SHERWOOD: I believe 12 up till now.

3 CHAIRPERSON NICHOLS: Okay. And I see your  
4 partner is next up - Paul Guzyk. Or maybe your employee.  
5 I'm not sure. Anyway, it's two-thirds of the business is  
6 here today.

7 MR. GUZYK: Yeah, we're thirds of...

8 Thanks, everyone, for the opportunity to speak.  
9 I'm going to sort of talk about the same thing everyone  
10 else is in our position.

11 But it's basically too early in our opinion to  
12 regulate the aftermarket PHEV industry. I come from the  
13 Internet space. And you can imagine, if the Internet had  
14 been regulated in the 1990s, a lot of the innovation that  
15 occurred would never have happened and the Internet, as we  
16 know it today, may not be here. And now, of course, the  
17 Internet industry provides jobs for tens of thousands of  
18 Californians.

19 Now, we have an opportunity for Californians to  
20 be world leaders in electrification of automobiles. You  
21 know, we don't need Detroit, we don't need Japan. There's  
22 companies like us. There's Tesla. And most of the PHEV  
23 development and innovation is happening right here. So we  
24 want to keep California as a leader in green tech.

25 I believe there's around 32 million cars in

1 California, around 320,000 Prius. And well under 500 are  
2 plug-ins at this time. So while we feel long-term  
3 regulation is a good thing, at this time, it severely  
4 impacts our business.

5           You know, we certainly welcome the opportunity to  
6 work with CARB and come up with some way so we can stay in  
7 business and serve the needs of our customers.

8           And while some of the people talk about the major  
9 manufacturers having good intentions and doing plug-ins,  
10 like the GM Chevy Volt, who knows if these models will  
11 even make it to the marketplace. A lot of typical  
12 Californians on the street feel GM may not even be in  
13 business in two and three years. So, you know, we're  
14 doing stuff today and we want to keep evolving.

15           Thank you.

16           CHAIRPERSON NICHOLS: Thank you.

17           Rob Protheroe, followed by Charles Protheroe and  
18 Ben Jones.

19           MR. ROBB PROTHEROE: Good morning, Chairman  
20 Nichols and Board members and staff. My name is Robb  
21 Protheroe. I'm with Plug-In Supply and I am a start-up  
22 conversion business. I am based in my garage. And so far  
23 we've shipped about 70 of these aftermarket conversion  
24 systems.

25           We've only been in existence for a year. And so

1 because of that, we haven't been able to contribute to the  
2 proposed regulations. Although, we did submit comments  
3 today and at the previous session.

4 I'd like to reiterate our findings and -- which  
5 is supported by our submission, is the actual cost of  
6 complying with the proposed regulations. Our staff  
7 analysis shows that it would cost us \$1.5 million in the  
8 first year to comply with the regulations as written. And  
9 my submission goes into the nitty-gritty detail. And we  
10 have more backup if that's required.

11 The largest contributor to that is the warranty.  
12 The warranty is at \$275,000 in the first year and then  
13 every year after that, for the next ten years.

14 And I submit that this is just for one model.  
15 And we currently make a product just for the Prius. And  
16 so that would be \$1.5 million just to approve that  
17 particular model.

18 We have three other models in our pipeline. So  
19 the cost of complying with the proposed regulations  
20 would -- even for one model are beyond our reach.

21 So I submit that it's going to be a vast negative  
22 impact as far as creating jobs, lost revenue for  
23 California, and actually suppressing a new technology.

24 The second point that I want to make is that the  
25 proposed regulations do not address all possible modes of

1 operation of these new hybrid vehicles. And point in  
2 fact, our product that we ship has a mode of operation  
3 where the driver can choose to suppress the use of the gas  
4 engine completely. So, in effect, our product gives the  
5 car a split personality. It's both a stock hybrid and  
6 it's also an electric vehicle. And we get away from these  
7 cold engine starts by forcing the person to stop the car  
8 and start it as a normal car. This takes like five  
9 seconds. But for me to comply with these regulations, it  
10 would cost me \$1.5 million to show that I'm not polluting.

11           And so I join with the others here and support  
12 CalCar's recommendations that implementation of these  
13 regulations be delayed and require further study, and also  
14 ask for an exemption for start-ups such as myself and  
15 others that I'm sure you'll hear from.

16           Thank you very much.

17           CHAIRPERSON NICHOLS: Thank you.

18           Charles Protheroe.

19           MR. CHARLES PROTHEROE: Good morning. I'm here  
20 with Plug-In Supply as well.

21           Along with echoing what everyone else has said  
22 earlier in this meeting along the lines of aftermarket  
23 conversions, I would also like to bring up a minor point  
24 that came up in the last workshop that I attended in El  
25 Monte.

1           In this workshop we brought up the case that our  
2 lead acid conversion system, which is the cheapest on the  
3 market today, available to most Prius owners out here,  
4 would not be able to match the warranty requirements of  
5 your batteries, like was brought up with the Plug-In  
6 Conversions' battery.

7           Lead acid batteries last two to three years, then  
8 we replace them. But the cost of a lead acid battery, the  
9 whole replacement is about \$500, compared to lithium --  
10 any lithium batteries or nickel metal hydride batteries,  
11 which are always in the thousands.

12           So we're just wondering if any allowances have  
13 been given for these battery chemistries that won't last  
14 up to the warranty requirements. And if not, we would ask  
15 that some allowance for replacement be allowed in there so  
16 that we can continue selling our cheapest product.

17           Thank you.

18           CHAIRPERSON NICHOLS: Thank you.

19           Ben Jones, Marston Schultz, and then Paul Kydd.

20           MR. JONES: Good morning, Madam Chair, Board,  
21 staff. I'm here both as a citizen as well as affiliated  
22 with Plug-In Supply.

23           I feel we're all actually here, you know, in the  
24 same -- as I believe Daniel said from 3 Prong Power, we  
25 all have the same goals. But I also pretty much echo, I'd

1 say, over 90 percent of the comments that I had read on  
2 your -- that had been submitted, and that it is too early  
3 for these particular regulations for the plug-in  
4 aftermarket conversion systems.

5           And I'd just like to point out that without these  
6 entrepreneurs and small companies, some of whom you've  
7 already heard from, and there probably will be more,  
8 without these companies that do plug-in hybrids and  
9 awakening consumer demand for these vehicles that few  
10 previously knew were possible, and forcing a reluctant  
11 auto industry to take this technology seriously, we very  
12 well may not be here discussing this particular thing this  
13 morning.

14           And so I merely just urge the Board to, as Randy  
15 Reisinger mentioned from CalCars, take a step backward,  
16 work with these smaller companies. We both have the same  
17 end goals in mind, and we'd just like to get there in a  
18 way that doesn't hurt the California economy, and also  
19 make sure that these larger number of vehicles will  
20 eventually hit the roads in California.

21           Thank you.

22           CHAIRPERSON NICHOLS: Okay. Thank you.

23           Mr. Schultz.

24           MR. SCHULTZ: Well, I'm here as a consumer. I  
25 only --

1           CHAIRPERSON NICHOLS: You can pull that mic down  
2 a little bit.

3           Yeah, thank you.

4           MR. SCHULTZ: I'm here as a consumer. I bought a  
5 Prius with the idea of eventually converting to plug-in.  
6 And I'm on the blog for plug-in hybrids and have followed  
7 the development of them. And I was alarmed to see that  
8 these regulations could, in fact, stifle these new  
9 entrepreneurs. And I support the CalCars' proposal. And  
10 I would like to see -- you know, take it easy.

11           And I'm particularly concerned about the  
12 warranty -- this ten-year warranty. I don't understand.  
13 Are gasoline cars required to have a ten-year warranty on  
14 their emission system? And if they are, then what's the  
15 point of having smog checks? If we warrantied the cars  
16 for their emissions for ten years, then there'd be no  
17 point in going and checking our vehicles every two years.  
18 So are you -- does this balance -- does it balance between  
19 a gasoline vehicle and the electric vehicle or are you  
20 being more onerous with the electric vehicle?

21           I would like to be able to design -- to drive  
22 pure electric and then go to hybrid after that. And in  
23 that case, the start-up issue was, you know, to me a very  
24 minor one.

25           So thank you.

1 CHAIRPERSON NICHOLS: Thank you.

2 Paul Kydd, followed by Jeanne Trombly.

3 And I believe those are the last witnesses who've  
4 signed up.

5 MR. KYDD: All right. Thank you, Madam Chairman.

6 (Thereupon an overhead presentation was  
7 Presented as follows.)

8 MR. KYDD: My name is Paul Kydd. I'm President  
9 of Partnerships 1, which is a small company in  
10 Lawrenceville, New Jersey.

11 Next slide, please.

12 --o0o--

13 MR. KYDD: We're focusing on converting pickup  
14 trucks and SUVs to plug-in hybrids. And the reason we're  
15 doing that is that's where we can get the biggest impact  
16 on gallons per mile for the U.S. fleet as a whole. There  
17 are a large number of these vehicles their gas mileage is  
18 lousy, their emissions are not very good. And so, with  
19 our technology, which can save something like 25 percent  
20 of the fuel they burn, if it were applied to all of them,  
21 you could save 140 million tons of CO2 a year. So it's a  
22 big target.

23 And we have -- and we're working on the third  
24 generation of our technology. We have patents and we've  
25 won some competitive events.

1           The next, please.

2                                 --o0o--

3           MR. KYDD: We have, what I call, supplemental  
4 plug-in hybrid conversion technology. We leave the  
5 original IC engine, its emissions control, its evaporation  
6 control completely alone. They function the same. The  
7 electric drive is simply added to the drive shaft. So  
8 electric energy supplements the gasoline. And the IC  
9 engine is running all the time. The control system  
10 operates so that as you press on the accelerator, the  
11 first call is on the electric system to supply as much  
12 energy as it can for as long as it can. And then when the  
13 battery is down to its limits, it converts back to pure  
14 gasoline.

15           And the operation is transparent to the driver.  
16 Basically our objective is to make a V6 truck feel like a  
17 V8 but sip gas like an in-line 4.

18           Next slide, please.

19                                 --o0o--

20           MR. KYDD: Our feeling, along with a bunch of  
21 other people today, is that additional regulations in this  
22 area are unwarranted at the time. The emissions are  
23 regulated by state inspections every two years you have to  
24 pass. And so you can't drive the vehicle unless it  
25 passes -- it's at least as good as it was originally.



1 unaffordable. So CARB regulations are copied by ten other  
2 states, which is why I'm here. It will apply in New  
3 Jersey as well. And my plea, like everybody else, I think  
4 is please let the industry develop a little bit. It's  
5 very small now. The emissions are de minimus. Let's get  
6 a little experience under our belt and then regulate them.

7 Thank you very much, Madam.

8 CHAIRPERSON NICHOLS: Okay. Thank you.

9 Is Jeanne Trombly here?

10 Yes.

11 And if there's anybody else who wanted to  
12 testify, would you please raise your hand.

13 MS. TROMBLY: Good morning, Madam Chair and the  
14 Board. I'm Jeanne Trombly with Plug-In America. I like  
15 to think that we represent the voice of past, present and  
16 future consumers of plug-in cars.

17 We have an extensive database of folks that are  
18 interested in particularly the OEMs offering more cars.  
19 But in the last six months or so, we just have, you know,  
20 a lot of Emails asking about conversions. And  
21 historically we've taken a very conservative step. We  
22 never wanted to encourage people to do their own  
23 conversions in their garage. And we feel it's very  
24 important for conversions to comply with safety, crash  
25 testing, emissions.

1           With that said, Plug-In America strongly believes  
2 that plug-in electric vehicle conversions will play an  
3 important role in the next five years in helping  
4 California meet its ambitious AB 32 goals. We believe  
5 even currently that plug-in hybrid vehicle conversions  
6 offer consumers a faster and more affordable way to get  
7 into plug-in vehicles while the general public waits for  
8 plug-in automobiles.

9           You know, we're hearing prices of like the Volt,  
10 you know, \$40,000. And some consumers are just going,  
11 great. And even with some potential tax breaks, I mean  
12 that's still a hefty price tag. So we've got consumers,  
13 and especially in the SUV and the truck category, that  
14 are -- or even on their cars. And we're seeing technology  
15 now that is not one-off technology.

16           The gentleman that preceded me, I'm so glad he  
17 preceded me. Because I was sitting on the train on my way  
18 up here and I got a call from a plug-in conversion  
19 entrepreneur, and they were trying to explain the fact  
20 that these regulations are really going to kill their  
21 company. And he was saying, "We don't have the cold start  
22 problem. We don't have" -- you know, "we don't" -- "if  
23 we're forced to comply with these regulations, you know,  
24 we're not going to be able to do it. But our technology  
25 shouldn't even be subject to these regulations because" --

1 and this is a California company and it's actually part of  
2 a brilliant team of scientists and business people.

3           So, you know, what we are trying to encourage  
4 CARB is to, you know, maybe commit to revisiting their  
5 regulations to really make sure that, you know, they don't  
6 stifle innovation.

7           And then just as far as the battery warranty, we  
8 think that the -- you know, if there's clarification on  
9 which cars, whether it's hybrid conversions or, you know,  
10 the regulations that hybrid conversions are subject to  
11 versus non-hybrid conversions, I think that will offer the  
12 clarity that consumers need -- that conversion companies  
13 need.

14           And then we appreciate your flexibility with your  
15 OBD system compatibility and allowing folks to phase that  
16 in, because we know that sometimes the data codes are very  
17 difficult for the testing procedure folks to get.

18           So with that, I'll just end my -- you know, just  
19 to -- the final point is that if somebody already owns  
20 their truck, if they already own their SUV and they can  
21 have that car converted for less than \$10,000, so that  
22 they're getting 30 to 40 miles of pure emissions free  
23 range, you know, that is starting to be within the realm  
24 of affordability. So, you know, we have 32 million cars  
25 on the road in California. How many of those cars are

1 large cars that could benefit the consumer, could benefit  
2 emissions greatly by undergoing a conversion?

3           So we just ask that, you know, we take a step  
4 back and look at that from a philosophical standpoint.

5           Thank you very much.

6           CHAIRPERSON NICHOLS: Thank you for coming in and  
7 for the work that Plug-In America does.

8           Okay. That will conclude the testimony.

9           And, at this point, I'll ask Mr. Goldstene, if  
10 you have any further comments? I think the Board is going  
11 to have some questions too. But perhaps now you may want  
12 to have some concluding comments.

13           EXECUTIVE OFFICER GOLDSTENE: I'll just sum up.

14           The staff proposal provides the technical  
15 amendments necessary for the plug-in hybrid vehicle  
16 emissions testing and electric range determination. The  
17 proposed conversion system certification requirements will  
18 allow manufacturers to sell verified products in  
19 California. The proposed fuel cell vehicle range test  
20 offers manufacturers a more appropriate method for  
21 determining fuel cell vehicle range.

22           Staff is recommending that the Board approve the  
23 proposed amendments.

24           And we are also prepared to respond to some of  
25 the comments that we heard today.

1           CHAIRPERSON NICHOLS: Okay. Well, let me go  
2 ahead and officially close the record, with the  
3 understanding that it's reopened when the 15-day notice of  
4 public availability is issued.

5           So we won't be accepting any written or oral  
6 comments after this hearing date and before the notice is  
7 issued. But that when the record is reopened on the  
8 15-day period, the public can submit written comments on  
9 the proposed changes, which will be considered and  
10 responded to before we adopt a final rule.

11           So just to clarify the process for people who  
12 have been following us all along. What that means is that  
13 there may still be changes proposed to the rule that's  
14 before us. But the comments on those would not be  
15 considered until after that process goes forward.

16           And I think we'll then proceed to a discussion on  
17 the proposed rule.

18           I guess before we do that, we should also  
19 consider any ex parte communications that Board members  
20 wish to disclose at this time. Are there any?

21           BOARD MEMBER SPERLING: My only one is a phone  
22 conversation with Spencer Quong from UCS, where we  
23 basically indicated his support for the rules.

24           CHAIRPERSON NICHOLS: All right. Thank you.

25           Anybody else?

1           BOARD MEMBER D'ADAMO: Yes, I spoke with Spencer  
2 Quong with Union of Concerned Scientists yesterday, and  
3 his comments were consistent -- the comments he made today  
4 were consistent with the telephone conversation.

5           CHAIRPERSON NICHOLS: That's it?

6           Okay. I think, at this point, then we can  
7 proceed to a discussion on the rule. Formally, we should  
8 have a motion and a second to put it into consideration.

9           Do you care to move the proposal? Somebody?

10          Care to do that? Just under the rules of order,  
11 I think it's the right thing to do.

12          BOARD MEMBER D'ADAMO: Yes, I'll move the  
13 resolution.

14          CHAIRPERSON NICHOLS: All right. Do we have a  
15 second?

16          BOARD MEMBER SPERLING: I'll second.

17          CHAIRPERSON NICHOLS: Thank you.

18          Okay. I take it the Board wants to have some  
19 further discussion.

20          So I don't think there's any discussion about the  
21 test procedure. It sounds like that's no opposition, it's  
22 a good thing to do, unless I'm mistaken. I think we can  
23 move right into the question of the conversions and the  
24 approach to the conversions. And obviously we've heard  
25 from a number of people. Based on what they've stated --

1 I don't know the companies, but they appear to be small  
2 businesses doing something that they certainly feel is  
3 righteous and useful, and which I think probably we would  
4 agree with.

5           Although it happens that what they're doing right  
6 now is illegal. So without some process for making it  
7 legal, both they and we are in kind of an awkward  
8 position. We need to have some structure for certifying  
9 these conversions. And the question is, is what's  
10 going -- is what the staff is proposing too onerous or  
11 premature, or is there some way we can adapt it that  
12 doesn't have too drastic an effect, but continues to allow  
13 what's going on to go on as long as it doesn't turn into a  
14 major problem.

15           And I'd kind of like to hear the staff's response  
16 first, if that's okay, since you've been listening to  
17 this.

18           BOARD MEMBER BERG: Madam Chair?

19           CHAIRPERSON NICHOLS: Yes.

20           BOARD MEMBER BERG: Could I just ask a couple of  
21 technical questions in regards to the -- I mean, the  
22 actual process itself? It would help me --

23           CHAIRPERSON NICHOLS: Oh, sure.

24           BOARD MEMBER BERG: -- if we could understand the  
25 warranty issue --

1           CHAIRPERSON NICHOLS: The factual one, yes.

2           BOARD MEMBER BERG: -- because that would apply  
3 to everybody. And I'm a little confused on the warranty  
4 time.

5           CHAIRPERSON NICHOLS: Sure.

6           CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Let me  
7 get that one started.

8           There's a couple of issues. One is, should there  
9 be any warranty or should it be longer than a couple of  
10 years when the -- on the battery in particular, when the  
11 battery warranty for a hybrid that you buy today, a Prius  
12 or any other one, is, you know, ten years and 150,000  
13 miles.

14           So if you replace that battery, then what's being  
15 suggested is -- by one of these small companies, that the  
16 warranty is now only three years, for example.

17           The second issue related to that is -- and they  
18 are somewhat separate -- is that a few of these companies,  
19 I think more of them are not trying to do what some of the  
20 earlier one did, which is go into the Prius, for example,  
21 and reengineer most of what is being done on the vehicle,  
22 replace its small battery with a big battery and come up  
23 with this, you know, highly modified vehicle.

24           What many of them are trying to do now is sort of  
25 firewall the existing vehicle and add a battery. And in

1 overly simplistic terms, what they do is they add a second  
2 battery, leave the original one alone, and then they kind  
3 of trick the car into thinking that the battery -- it's  
4 original battery is always full, when, in fact, what's  
5 happening is the second battery is providing that extra  
6 energy. And in doing that, the car runs pretty much like  
7 it did before.

8           And the argument is that if their second battery  
9 fails, it will just default back to the way the Prius ran  
10 in the first place. And, therefore, this warranty on the  
11 supplemental battery becomes more of a consumer issue than  
12 it does an emission issue. And I think there's some truth  
13 to that. And the staff was giving that some thought last  
14 night. And they at least have -- you know, to deal with  
15 the separate battery issue, it adds a lot more complexity  
16 to what we've proposed. And so what we were thinking is  
17 that a better approach, a simplified approach might be to  
18 simply say that when the conversion occurs, the warranty  
19 on the battery and the vehicle is whatever's left on that  
20 vehicle. You have to warrant it until it normally -- the  
21 normal warranty would have expired or five years,  
22 whichever's greater. So if you convert the vehicle when  
23 it's one or two years old, you'd have the warranty for,  
24 let's say, eight years if that was the case. If you did  
25 it when it was eight years old, you would have the

1 warranty for only five years. And that the supplemental  
2 battery, since it doesn't have as much impact -- if that's  
3 the design approach that you use and have a supplemental  
4 battery, don't replace the original one, then that one  
5 would just have the five-year warranty on it.

6           So that was one way of trying to make this a lot  
7 simpler and not have it as somewhat convoluted as we  
8 proposed it and even more if we try to add in the  
9 supplemental battery. That does not address the first  
10 issue, because the battery warranty length for --  
11 particularly for one who replaces the existing battery is  
12 still longer than what they're asking for, which is  
13 somewhere between zero and three years.

14           But it would deal with the second one that A123  
15 addressed and some of the other manufacturers addressed.

16           BOARD MEMBER BERG: Do I understand that there is  
17 no approved conversions packages?

18           CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Right.  
19 There's one -- I believe one manufacturer maybe, maybe  
20 another one - I'm not sure - that's in the conversion  
21 process right now and, you know, expects to get through  
22 it. But --

23           CHAIRPERSON NICHOLS: Wasn't that what A123  
24 testified?

25           CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Yeah.

1 CHAIRPERSON NICHOLS: Yeah, that's what I  
2 thought.

3 BOARD MEMBER BERG: And so the --

4 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: But I  
5 don't believe anybody else -- no one else has gone through  
6 it. And part of the reason is that the procedures aren't  
7 finalized. But we've been trying to, you know, get people  
8 into the process anyway.

9 BOARD MEMBER BERG: So the cars that we have seen  
10 in the past as maybe demonstrations were prototypes, part  
11 of the --

12 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Right.  
13 Some of them, I think, are covered by, what we call,  
14 experimental permits. They write in and say, "I want to  
15 put three or four on the road to see how they go," and  
16 that's all. They just get approval for it.

17 The other ones people talked about, you know,  
18 selling 70 or this, I think most of those are currently  
19 illegal.

20 So the problem is, not having this regulation  
21 does two things: One, is it makes their sale illegal --  
22 not having some kind of regulation makes it illegal. It  
23 also results in the auto manufacturers being able to void  
24 the entire warranty on the car -- the original car,  
25 because now it's, quote, tampered.

1           If they go under this procedure, the auto  
2 manufacturers can no longer do that. They can only void  
3 the warranty where they can demonstrate that the  
4 conversion kit somehow messed up other parts of the car.

5           So right now it -- you know, the people who buy  
6 this - and I think, you know, most of them do it with  
7 their eyes open - are buying something that gets rid of  
8 the long warranty that's currently on the Prius.

9           BOARD MEMBER BERG: And could you speak to the  
10 smog check and having their cars smog checked, how that  
11 may or may not help keep things in line.

12           CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Well,  
13 first of all, hybrids aren't in the smog check program,  
14 so --

15           BOARD MEMBER BERG: -- at all.

16           Okay. Thank you.

17           Thank you, Madam Chairman.

18           CHAIRPERSON NICHOLS: Okay. Well, even if they  
19 were, the fact that you have a warranty is irrelevant.

20           BOARD MEMBER BERG: No, I understand.

21           CHAIRPERSON NICHOLS: That's one of those  
22 comments that you get every once in a while.

23           BOARD MEMBER BERG: I just wanted to --

24           CHAIRPERSON NICHOLS: I know. But I just -- I  
25 want to take advantage of this opportunity to say that the

1 fact that a car is subject to smog check and has a  
2 warranty is a good deal for the consumer, because that  
3 means they can use their warranty to pay to get it fixed.  
4 But the warranty does nothing to make sure that the car  
5 continues to actually meet its emission standards. I  
6 just -- Okay. Thank you.

7 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: And the  
8 reason they're not a smog check is exactly the problem  
9 we're trying to deal with the test procedure, is the smog  
10 check test procedure doesn't work very well for these  
11 vehicles either. So they were just left out until we  
12 could come up with something.

13 CHAIRPERSON NICHOLS: Right. Okay.

14 BOARD MEMBER TELLES: I have a battery question.

15 CHAIRPERSON NICHOLS: Yes.

16 BOARD MEMBER TELLES: My understanding is that  
17 the warranty doesn't have anything to do with the  
18 emissions. It just -- it's a warranty for ten years on a  
19 hybrid. I have a hybrid, and I thank Ford Motor Company  
20 for developing that. And it was more to attract the  
21 consumer to buy the hybrid. You wouldn't want to buy  
22 something off the line that would only last for two or  
23 three years. And it was a major thing to entice the  
24 consumer to buy the hybrid. And there was other  
25 enticements, a tax credit for the first hundred thousand

1 vehicles that were sold by each company selling hybrids.

2           But I don't see -- I mean, just from listening to  
3 the testimony. And what's the problem with having the  
4 consumer decide that he wants to buy a battery that has a  
5 warranty of only two years or one year?

6           CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Well,  
7 the warranty does affect the emissions -- the battery  
8 warranty does affect the emissions, because the car's  
9 designed to run on the battery energy sometimes and on the  
10 gasoline energy at other times. If the battery loses its  
11 capacity, which is what happens when they start to fail,  
12 then it runs on the gasoline motor more and it will end up  
13 putting out more emissions.

14           BOARD MEMBER TELLES: Then I'm talking about the  
15 extra battery that would be installed by one of these  
16 plug-in companies.

17           CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Well,  
18 if it's a supplemental one, meaning that you keep the  
19 existing -- you have an Escape, I take it. If you have  
20 the existing battery stays there and the design of the  
21 conversion is just to add another battery and to trick the  
22 car into thinking that its original battery is always  
23 full, which is what the extra battery does, then it tends  
24 to run pretty much the way it did before, except it has  
25 the potential for more -- somewhat more exhaust emissions

1 and certainly more evap emissions, which the procedure is  
2 supposed to deal with. But you're correct there.

3           And so for the supplemental battery it's largely  
4 an issue of consumer protection on that battery.

5           But some of these people are replacing the main  
6 battery with -- you know, a 1.5 kilowatt-hour battery,  
7 replacing it with a 6. And that is one that tends to --  
8 you know, you have to completely redesign much of the  
9 control architecture of the car.

10           CHAIRPERSON NICHOLS: Could I just interject on  
11 that issue about consumer protection, because one of a  
12 plethora of categories of ZEVs and ULEVs, et cetera, that  
13 we have is one that includes an extended warranty  
14 provision in it. And it was my understanding that that  
15 was done, not because of consumer protection issues, but  
16 because of a belief, which I think has factual basis to  
17 it, that if the companies were required to offer the  
18 extended warranty, they would build the product in a way  
19 that would guaranty that they didn't have to pay off very  
20 often and, therefore, they would simply design the systems  
21 to be more durable, which is what we were really looking  
22 for, which was the emissions performance.

23           So, you know, I don't necessarily have a problem  
24 with the idea of a warranty being used as a tool for  
25 emissions control. But now I'm hearing you say that that

1 really wasn't your intent, at least as far as --

2 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: No, I  
3 think you're -- no, you're absolutely -- I'm sorry, I  
4 confused it. You're absolutely right. For the vehicle  
5 itself and the main battery in a normal hybrid electric  
6 vehicle, that's absolutely true. The only case where I  
7 think the warranty -- you know, from this discussion,  
8 where the warranty is perhaps more of a consumer issue  
9 only is if you add this extra battery to the car to give  
10 it more electric range. And if that battery -- and it's  
11 done in a way that if that battery fails, the car goes  
12 back and looks just like the original vehicle did, if  
13 that's the way the conversion works, then the -- much of  
14 the advantage of the battery warranty would be consumer  
15 protection, which is why, in response to Ms. Berg, was  
16 that perhaps that battery -- in that design situation, the  
17 battery warranty should be less for the supplemental one.

18 CHAIRPERSON NICHOLS: Right. I see.

19 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: But on  
20 the main engine I think that's not the case, or the main  
21 battery.

22 CHAIRPERSON NICHOLS: Sorry, I interrupted.

23 BOARD MEMBER TELLES: No, no, that's fine.

24 Are we just for general comment --

25 CHAIRPERSON NICHOLS: I think we're in the

1 process now of trying to -- I'm still trying to get the  
2 staff to respond to whether there's any openness or  
3 sympathy on their part to this issue of allowing for  
4 somewhat more leeway for people who are in the start-up  
5 mode to be start-ups before they have to go through the  
6 whole certification process. And maybe there isn't, and I  
7 could be told that this just isn't possible. But I know  
8 you're all secret backyard tinkerers, so I suspect you've  
9 thought about this.

10 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Well, I  
11 think -- the reason we proposed it the way we did is based  
12 on existing policy. And so I'm not trying to second guess  
13 whether you think the policy in this situation should be  
14 different. But, you know, all other conversion kits have  
15 to have similar requirements to what we have here. We  
16 have the constraint of the law, which says that you can't  
17 just, willy-nilly, even on one car, go ahead and modify  
18 it. If you modify something in your backyard, it's  
19 technically illegal under state law. So we have that  
20 constraint.

21 We have the precedent. And the precedent  
22 generally says that other than a few vehicles -- when  
23 you're modifying or trying to design a new part or a  
24 conversion kit, other than a few that you can experiment  
25 with, they all have to be covered under some kind of

1 regulation.

2           So just looking at what people commented on, if  
3 you would want to say that a hundred vehicles, you know,  
4 do whatever you want and after a hundred vehicles then  
5 they come under some kind of regulation, that would be a  
6 change in policy. But it's just that the existing policy  
7 would be that that might be tending to sort of allow --

8           CHAIRPERSON NICHOLS: Well, a hundred is a lot  
9 based on what we hear about the nature of this market.

10           CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Well,  
11 and a \$1.5 million cost, as was suggested by one person  
12 here, which a lot of that was warranty, but then even if  
13 you sell a hundred in total, that still adds \$15,000 to  
14 the price of the car. So it basically says that you can't  
15 have a business whose business plan is a hundred vehicles.  
16 It just doesn't pencil out, even if we cut the warranty  
17 out, even if we -- and didn't cut the testing out, they're  
18 still looking at, you know, half a million or more,  
19 according to their calculations. Some of them, though, I  
20 think are not correct. But still it's a significant  
21 amount of money. And if your business plan doesn't  
22 support that level of overhead, then this isn't going to  
23 work.

24           CHAIRPERSON NICHOLS: Right.

25           Dr. Sperling, did you have a comment there?

1           BOARD MEMBER SPERLING:  Yeah, I'm, you know,  
2 listening to this spirit of innovation and  
3 entrepreneurialism out there, you know, it's kind of the  
4 American and the California way.  And it's, you know, hard  
5 to feel like, you know, you want to quash it.  It seems  
6 like the CalCars -- something like the CalCars' proposal,  
7 you know, a graduated program, seems like it makes a lot  
8 of sense.  And I guess I'd like to hear -- I mean, there's  
9 certainly the details of how to -- whether to follow  
10 exactly how CalCars has laid it out, I don't think that  
11 would work exactly, you know.  And they got up to a  
12 thousand before they said the full rules would take  
13 effect.  I think that number's too big.

14           But is there any reason not to do some more  
15 graduated program?

16           MOBILE SOURCE CONTROL DIVISION CHIEF CROSS:

17           Well, it kind of exists.  I mean, that's what Tom  
18 was saying.  In other words, the experimental process --  
19 permit process is already a way for the tinkerer,  
20 innovator, experimenter, initial business planner to  
21 legally modify vehicles and do these kinds of projects.  
22 And I think what the staff struggles with is that at some  
23 point the person says, "My experiment's a success and I  
24 want to go into business making them."  And what  
25 we're -- what the long term -- and this was the case for

1 natural gas and propane vehicles too. At the point where  
2 they decide that they're going to go in business, I think  
3 then that the staff has -- we feel that we should have  
4 somewhat more onerous requirements on them in terms of  
5 demonstrating that the vehicles are responsible -- you  
6 know, environmentally responsible. And still the  
7 procedure is far less onerous than what we put on the new  
8 vehicle manufacturer. So we feel like the system is  
9 already balanced.

10 BOARD MEMBER SPERLING: The system is already  
11 what?

12 MOBILE SOURCE CONTROL DIVISION CHIEF CROSS:  
13 Balanced in terms of amount of effort. In other  
14 words, it provides for the experimenter and then it  
15 becomes more onerous for the people going into production.  
16 And then if you're a car company, it's way onerous.

17 BOARD MEMBER SPERLING: So where's the threshold  
18 with the experimenter?

19 MOBILE SOURCE CONTROL DIVISION CHIEF CROSS:  
20 Several vehicles.

21 BOARD MEMBER BERG: Is several like five or is it  
22 50, or what is the definition?

23 MOBILE SOURCE CONTROL DIVISION CHIEF CROSS: More  
24 like five typically.

25 BOARD MEMBER TELLES: I've got to comment on

1 this.

2 I mean, we're talking about .00002 percent of the  
3 vehicles in California that are currently these plug-in  
4 hybrids. I think this is way too early to have an  
5 industry that potentially could help push the large  
6 companies to make plug-in hybrids. Even if we -- even if  
7 every Prius out there had a plug-in on it, it would  
8 represent 0.1 percent of the vehicles in California. I  
9 think -- I read the rule and it makes sense. I mean, it  
10 does what it's supposed to do. But I agree with Tom -- or  
11 maybe Tom didn't say this. But my comment is that maybe  
12 the policy shouldn't be the same for this particular  
13 industry that it is for the rest of the state right now,  
14 until we hit some threshold that is more than two cars,  
15 perhaps more than 500 cars, perhaps 1,000, 2,000 3,000  
16 cars.

17 If this industry doesn't have ability to develop  
18 some capital selling their product, it will never start.  
19 And this Board will basically kill an industry that is  
20 trying to do something that the bigger industry didn't do,  
21 you know, five or ten years ago when they had an electric  
22 car and abandoned it.

23 And to me it makes no sense to kill this industry  
24 by this regulation. That's my own personal viewings on  
25 this, but --

1 (Applause.)

2 CHAIRPERSON NICHOLS: Thank you.

3 Ms. D'Adamo.

4 BOARD MEMBER D'ADAMO: Well, I agree with  
5 everything that you say, Dr. Telles. But at the same  
6 time, we have the integrity of the overall program that I  
7 think it's our responsibility to protect. And what makes  
8 me nervous is that if we have - and I don't know that I  
9 would subscribe to this - but a lax program and then we  
10 end up with problems where we have emission failures and  
11 other failures on the vehicle. And what we're trying to  
12 do is encourage innovation, but we also want to have  
13 products that do what they say they're going to do, and  
14 that is lead us toward zero emissions.

15 So what I'd be nervous about is situations where  
16 it could potentially blow up the whole program, that these  
17 cars are not meeting the emission standards and that the  
18 public gets confused about, you know, maybe even a Prius  
19 doesn't meet the emission standards.

20 So what I'd like to do before going down the path  
21 of tinkering with, you know, the number of cars that would  
22 qualify for a demonstration or, you know, a hundred-car  
23 exemption or something like that, what more can we do at  
24 the testing procedures to streamline testing and to  
25 provide some form of financial assistance? And in that

1 discussion, is there any information that staff has on  
2 what the true costs would be? I guess it depends on  
3 whether we have this supplemental battery exemption. But  
4 would it be along the lines of 1.5 million, or is there  
5 some other set of financial data that you have?

6 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Well,  
7 if we use the data that was presented in the commenters  
8 from Plug-In Supply, you know, it shows that their  
9 estimate of the emission testing is \$38,000 and OBD  
10 compliance of 16,000. So out of the one and a half  
11 million, that's 50,000, I guess, is the emission testing  
12 part.

13 The rest of it is related to application process,  
14 testing in-use vehicles, and, as the gentleman testified,  
15 a big chunk of it to the warranty. So I think the actual  
16 emission testing part is not insignificant, but it's a  
17 smaller portion of the total. So I don't know that we  
18 could, you know, shorten up an emission test or an evap  
19 test. And if we did, it would probably save, you know,  
20 5,000 here or 5,000 there. But I don't think it would  
21 address the bigger issue, which is that to get into this  
22 game, you know, it takes some -- if we're going to  
23 regulate at all, it's going to take some investment in  
24 compliance, which is the larger part of the issue.

25 BOARD MEMBER D'ADAMO: And what about financial

1 incentives? I think we need to encourage the industry.  
2 Do we have some leeway under AB 118 dollars? And also  
3 what can staff do to help maybe shave off some of those  
4 costs by way of technical assistance?

5 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Well,  
6 on the 118 we can -- you know, the Energy Commission is  
7 proposing to include plug-in hybrid conversions as a  
8 funding opportunity under 118.

9 CHAIRPERSON NICHOLS: There will be funding  
10 available under 118 through the CEC.

11 MOBILE SOURCE CONTROL DIVISION CHIEF CROSS:

12 Tom, could we offer some type testing? In other  
13 words, like for the one where they add a battery and  
14 essentially they leave the vehicle alone, couldn't we work  
15 with them and the lab to come up with sort of a protocol  
16 that does the demonstration with the folks who want to do  
17 that kind of system and essentially standardize it? In  
18 other words, we do some standardized tests with them  
19 consistent with our procedures and sort of certify --

20 CHAIRPERSON NICHOLS: I think there was a  
21 suggestion from one of the witnesses for sort of a  
22 prototype testing procedure.

23 MOBILE SOURCE CONTROL DIVISION CHIEF CROSS:

24 Yeah. But basically there are a lot of them are  
25 essentially doing the same thing. And I'm wondering if

1 there are ways which we can group them and use some of the  
2 test facility's capabilities in L.A. to help with the  
3 burden.

4 CHAIRPERSON NICHOLS: That would certainly help  
5 reduce the costs on that piece of it, yeah.

6 I mean, I'm in agreement that -- it's funny,  
7 there's sort of two ways of looking at the exact same  
8 issue. In the long run, life being how it is, the Toyotas  
9 of the world are going to be doing their own conversions.  
10 And most people are probably -- who bought a regular  
11 hybrid are going to go -- if they don't buy a brand new  
12 plug-in, you know, they'll get the adapter kit from the  
13 dealership where they bought their car, because it's  
14 easier. You know, it's just more comfortable. At least  
15 that would be my bet about how the market would develop.

16 But there's a lag time here of a few years at  
17 least where, you know, we seem to have a small but scrappy  
18 group of entrepreneurs who are doing something worthwhile.  
19 And, you know, we're just trying to find a way to allow  
20 for that to happen without our regulations being the thing  
21 that drives it underground or out of California. And I  
22 think that's kind of a -- just kind of to state the  
23 overall objective here.

24 So what we're looking for, and it's maybe not the  
25 most productive way to have the discussion, is are there

1 some suggestions that the staff could make that might be  
2 responsive to the proposal that don't undercut the  
3 fundamental philosophy, which I think Ms. D'Adamo  
4 articulated very well, about maintaining the integrity of  
5 our emissions programs? Because we really do not want to  
6 be in a situation where, you know, somebody thinks they're  
7 doing a good thing and spends the \$7,000 to \$15,000 on a  
8 conversion and then as a result of some later testing or  
9 whatever discovers that, in fact, they've actually been  
10 making the air worse.

11 MOBILE SOURCE CONTROL DIVISION CHIEF CROSS: One  
12 other I guess just sort of background comment is that  
13 the -- I was just reminded that the degree of  
14 demonstration required of the OEMs for all of this is so  
15 much greater than anything that we're asking the  
16 aftermarket to do, that I think we -- you know, in other  
17 words, they have to run specialized durability test  
18 vehicles, they have to run data vehicles, they have to  
19 demonstrate, you know, that every OBD system works.  
20 They're subject to enforcement testing on vehicles in use.  
21 And if they fail, they have to recall them. There's just  
22 a huge array of very tough environment-protecting  
23 requirements that are on the OEMs, which have already been  
24 sort of whittled away and adjusted to make the aftermarket  
25 viable at all. And that's both the aftermarket hot rod

1 equipment and the fuel and other conversion systems.

2           So I think we need to remember that we're talking  
3 about something that we already shifted way, way away  
4 from, where we're requiring the large volume folks to do.  
5 And I think we just kind of -- that's why the staff feels  
6 like we shouldn't go too much further.

7           CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Yeah, I  
8 think to put it another way -- and Bob's point is really  
9 good -- is we've already whittled it way down, and so the  
10 difference between where we are and zero, you know,  
11 there's not a whole bunch of room to move things without  
12 basically saying, well, you don't have to worry about that  
13 aspect of the conversion.

14           So, you know, I think Bob's suggestion that we  
15 could work with the supplemental battery approach folks,  
16 which is one that I think makes some sense. Whereas, the  
17 idea that the small entrepreneur can go in and reengineer  
18 what Toyota spent, you know, \$500 million trying to design  
19 is just not realistic. This is something that has huge  
20 risks, I think, for the environment. But the idea of this  
21 supplemental one that sort of tricks the car into thinking  
22 it's got more energy in it, that approach has, you know,  
23 some merit. And I think we -- you know, if we could help  
24 with testing, we'd be willing to do it. And maybe that  
25 would encourage that type of conversion and not the other

1 types where there are more radical tearing apart of the  
2 original vehicle.

3           And we can, you know, try to deal with this  
4 warranty thing. Like I said, we can shorten the  
5 supplemental warranty -- battery warranty to either what's  
6 traditional on other parts, which is always at least five  
7 years, or a lesser number if you feel that's appropriate.  
8 But that doesn't address the issue of do we want to  
9 actually allow a conversion kit to decrease the warranty  
10 that was on the original vehicle.

11           BOARD MEMBER BERG: On the warranty, I would  
12 agree that whatever we decide to do, that there should be  
13 consumer notification. And so that it would be absolutely  
14 required of the conversion manufacturer -- or the  
15 conversion operations to notify the consumer, as part of  
16 their sale of this conversion, exactly what the warranty  
17 is or isn't.

18           I do feel, along with the description of our  
19 Chair, these scrappy innovators, we also have scrappy  
20 consumers. And I think together they're probably pushing,  
21 or at least encouraging, the battery development. And  
22 they're finding out what works, what doesn't work. I'm in  
23 full agreement that we need to legitimize them and bring  
24 them above ground rather than keeping them underground.  
25 And I think this is a real opportunity, but I don't want

1 to kill the innovation.

2 CHAIRPERSON NICHOLS: Yes.

3 BOARD MEMBER YEAGER: My thoughts are more in  
4 line with what Dr. Telles was mentioning as well. I think  
5 that, you know, if there's hope to make great progress  
6 with AB 32 and AB 375, it's going to be -- a lot of it's  
7 going to be through new technology. And I am concerned  
8 about if this would suppress one of those areas. And  
9 maybe that's a hard thing to sort of quantify. Certainly  
10 I understand the reasoning behind staff's recommendation  
11 and am in support of it. I mean, I think there are areas  
12 where you have to have regulation, particularly as  
13 technology keeps on changing. And this is just an area  
14 that we haven't -- where we don't have those regulations.  
15 But I'm just trying to figure out in my own mind, I know  
16 that there's some validity to what we've heard as far as  
17 what this would do to our scrappy entrepreneurs. It's a  
18 little harder to know whether kill it, delay it, make it  
19 go more underground, or how you can get some sort of  
20 assessment of what actually this will do to the people in  
21 that business.

22 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Well, a  
23 couple of comments. You know, we try to look at the  
24 30,000 foot level of this too. And that was my original  
25 comment, which I think maybe was taken as not being

1 supportive of small entrepreneurs. But the point is is  
2 that, and particularly for you, Supervisor Yeager, being  
3 new on the Board, is that the Board just modified the ZEV  
4 mandate which affects the original -- the Ford, GM,  
5 Chrysler type folks. And out of that, we are going to  
6 have at least 60,000 plug-in hybrid electric vehicles  
7 being produced in the next couple of -- starting in the  
8 next couple of years. And it's the beginning of a  
9 ramp-up. And we're going to come back to you next year --  
10 at the end of next year -- or end of this year now, end of  
11 2009 to explain how that number and the program that  
12 encourages that may expand greatly, because we need it for  
13 greenhouse gas control.

14           So the point there is that while five years ago I  
15 think the entrepreneurial aspect of this was taking a new  
16 technology that nobody else was playing around with and  
17 helping start to raise people's eyebrows as to this might  
18 have some potential, car manufacturers are now going to  
19 produce large numbers of these. And so as a  
20 technology-forcing thing, I don't think the small  
21 businesses are going to be adding that much at this point,  
22 because the big businesses have now opened up their eyes  
23 and said, "This is going to happen."

24           What the other policy issue is is, well, could we  
25 convert a lot of the in-use vehicles, which nobody is -- I

1 don't think the OEMs are proposing to do right now -- and  
2 is there a market there to clean them up. And, you know,  
3 I think ideally you'd say, yeah, we could have lots of  
4 these conversion kits out there and people would pay the  
5 \$10,000 and convert their cars. But you have to balance  
6 that, I think, against the downsides of that, which is it  
7 may increase smog emissions, and there may be warranty  
8 implications for the consumer and we could give a bad name  
9 to the product. And, again, you know, it takes a lot of  
10 engineers to do these really right. And there's always a  
11 risk when you do it as a small business that it's not done  
12 quite right. So that's another consideration, you know,  
13 to balance off the entrepreneurial part.

14           But it's not like five years ago where I think we  
15 would have said, you know, "This is great. Let's see the  
16 technology on the road in," you know, "units of a  
17 thousand", or whatever it is, because that will wake  
18 people up to the advantages here. They've woken up. And  
19 our regulations actually are forcing them to move forward  
20 in this area of new plug-in hybrid electric vehicles. So  
21 I'm just offering that as, you know, kind of a balancing  
22 big picture issue.

23           BOARD MEMBER BERG: When would the certification  
24 go into effect? When would this procedure go into effect?

25           CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Well,

1 we would be using it right away for those who want to use  
2 it. And then when they get approved -- if the final reg  
3 hadn't been blessed by the labyrinth -- the process that  
4 occurs after the Board decides what to do, then we would  
5 just conditionally approve it. So the regulation process  
6 post-today would not delay people being able to use this.

7 BOARD MEMBER BERG: And those 60,000 cars, we're  
8 not expecting them on the road till 2010?

9 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Yeah,  
10 they're -- the first ones are expected to be -- being  
11 offered in the 2010 calendar year. The requirement that  
12 we have is for the '12 through '14 period.

13 BOARD MEMBER BERG: So is it possible to set up  
14 some registration process for the aftermarket industry and  
15 allow them to ease into this testing over the next 12 to  
16 18 months so they can make business decisions as to  
17 whether they're going to legitimize their companies?  
18 Because the car companies have promised time after time  
19 again that they're going to deliver. And so we're hopeful  
20 they're going to deliver in 2010, but they have not done  
21 so yet.

22 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Right.

23 BOARD MEMBER YEAGER: Just a procedural question.

24 You had mentioned, Tom, that you would be willing  
25 to look at certain aspects that we've been talking about.

1 I guess I don't quite know how we work. It sounds like,  
2 obviously, that we have support for the vehicle test  
3 procedure amendments. But until we sort of got final  
4 wording from staff, would we just hold this or -- I'm just  
5 not sure --

6 CHAIRPERSON NICHOLS: We can ask that it be  
7 brought back or we can delegate to the Executive Officer  
8 with instructions. I'm not sure that there's any other  
9 mechanism that we could use to make the kinds of  
10 adjustments that people are interested in here.

11 I think it's difficult -- it's always difficult  
12 to sit, you know, at a meeting like this and craft  
13 proposals. Although, I think we've heard a few that  
14 people are generally supportive of. Basically, what we're  
15 talking about is, I think, trying to phase the  
16 requirements in in some manner that matches the ramp-up of  
17 the industry and of the availability of plug-in hybrids,  
18 in recognition that the OEMs have not always kept up with  
19 their statements about what they were planning to do. I  
20 agree with that.

21 I heard some interest, and I personally think it  
22 would be valuable, to have a certification process in  
23 place and be operating it for those who want to do it,  
24 because I think they will have a competitive advantage  
25 too. I mean it's a -- if I were planning to convert a

1 vehicle, I think it would be helpful to me to know that,  
2 you know, I was going to a converter that had an Air  
3 Resources Board seal of approval versus going to Joe's  
4 Garage. So I think that is a real advantage, and we  
5 should be making that available as soon as possible.

6 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Yeah,  
7 that's the one part that will prevent the auto  
8 manufacturers from denying warranty on the --

9 CHAIRPERSON NICHOLS: Right. So this is --

10 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: -- on  
11 the whole vehicle, because it's converted, would be that  
12 it went through an ARB-certified process.

13 CHAIRPERSON NICHOLS: Right. So again the idea  
14 that the ARB should be in the business of certifying these  
15 things seems to me to be very practical.

16 So the only question really is, can we adjust the  
17 certification requirements or is there room within what's  
18 proposed here within the 15-day notice to give some -- a  
19 little more of a balance in terms of the requirements that  
20 we're putting on the converters? And I need to ask staff  
21 that question, because I really can't tell.

22 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: I think  
23 the challenge here would be that -- it would be hard for  
24 us to say no harm, no foul for the first hundred vehicles,  
25 because under the law, not the regulations, those

1 conversions are illegal. So we almost would have to come  
2 up with two versions of the certification process. One  
3 would be the -- you know, the quickie version for small  
4 volumes of production, the first X vehicles; and then the  
5 more thorough one for longer. But I don't think we -- I  
6 don't know how we would do one where it just says it's  
7 okay to go ahead for the first hundred, because --

8 CHAIRPERSON NICHOLS: Right.

9 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: -- the  
10 only way I know how to do that would be experimental  
11 permits. And right now we try to keep those small,  
12 because many of the modifications that we see people  
13 promoting wouldn't stir your hearts the way that they do  
14 there for -- you know, for a thousand horsepower race cars  
15 or for that kind of stuff that, you know, is perhaps not  
16 consistent where we're trying to go policy-wise.

17 CHAIRPERSON NICHOLS: Right.

18 BOARD MEMBER BERG: Madam Chair?

19 CHAIRPERSON NICHOLS: Yes.

20 BOARD MEMBER BERG: Would it be appropriate then  
21 to suggest that we send this back to staff to give staff  
22 an opportunity to kind of take our comments? Because I  
23 too don't want to vote quickly on something that I didn't  
24 mean to have unintended consequences. And so that maybe  
25 another 30 days they would be able to come back to us with

1 some suggestions that make them comfortable and us  
2 comfortable. And, yes, we'll be pushing industry along,  
3 but would make a little sense.

4 CHAIRPERSON NICHOLS: If it's possible to legally  
5 separate these two items -- I know you put them together  
6 for convenience purposes -- I'd like to move on getting  
7 the test procedure for the plug-in hybrids just done, so  
8 we don't have to bring that back again or leave it in  
9 limbo.

10 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: And the  
11 changes for the range test --

12 CHAIRPERSON NICHOLS: Correct.

13 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: -- for  
14 fuel cell vehicles and --

15 CHAIRPERSON NICHOLS: Yes.

16 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE:  
17 -- everything but the conversion part is what  
18 you're saying?

19 CHAIRPERSON NICHOLS: Right, everything that  
20 relates to the new vehicles, I think, we are completely  
21 prepared to move on right now.

22 EXECUTIVE OFFICER GOLDSTENE: Yeah.

23 SENIOR STAFF COUNSEL JOHNSTON: This is Diane  
24 Johnston, the attorney on this. And I think that the  
25 Board does have the option of moving forward, you know, on

1 the test procedures for -- and kind of bifurcating that  
2 from the conversion question on those procedures. And the  
3 staff could bring back to you some proposals on the  
4 conversion.

5           And on the conversion as well, I think there's a  
6 possibility under the statutes to have some minimal  
7 certification requirements. And then, you know, that  
8 would be perhaps less onerous as they're perceived.

9           CHAIRPERSON NICHOLS: All right. Well, then I  
10 think we have a plan then, if I may see some heads nodding  
11 on this --

12           BOARD MEMBER SPERLING: Before you go forward,  
13 maybe -- I mean, is it possible that we could have a kind  
14 of a sense of the resolution -- a resolution of some sort  
15 from the Board that lays out kind of what we would like to  
16 see, and without it having to go through a formal action  
17 that it would be a report back? Because I think that  
18 we're pretty -- you know, I'm getting a sense here that  
19 we're all of the same mind up here. And, you know, let me  
20 articulate what I think that is.

21           CHAIRPERSON NICHOLS: Okay.

22           BOARD MEMBER SPERLING: And I think it is to  
23 have, you know, this minimal certification up to some  
24 cumulative, you know, number. I don't know, maybe 50,  
25 something like that, would be, you know, what I would be

1 thinking. And then -- and maybe there's even two -- you  
2 know, three levels of these certifications, some, you  
3 know, like CalCars suggested. But I think the idea is a  
4 fairly substantial number that allows some of these  
5 companies to go.

6           And I would say one of the reasons -- you know, I  
7 would add another reason for supporting that idea, is that  
8 while what Mr. Cackette said is -- you know, I agree with  
9 that eventually pretty soon we're anticipating large  
10 volumes of plug-ins from these vehicles -- you know, the  
11 OEMs. In the meanwhile, you know, we are getting CO2  
12 reductions and we are -- probably most importantly, there  
13 are all those people out there learning to work with this  
14 electric technology. And while they're probably -- most  
15 of them will probably go out of business or at least, you  
16 know, of the type of business that they're proposing here  
17 in a few years, you know, that's the most likely scenario,  
18 there is a lot -- you know, there is this important cohort  
19 of people out there developing these experiences, and who  
20 knows where they're going to migrate to. But they are  
21 definitely going to be contributing to this evolution of a  
22 EV industry, whether plug-in, hybrid or whatever.

23           So I think, you know, we do want to support this  
24 activity for a number of reasons. We want to make sure --  
25 it's not our mission to protect safety, but actually that

1 is one of my concerns also in this, you know, make sure  
2 some of these conversions are not completely, you know,  
3 irresponsible, let's say.

4           So that, I mean, I think the Board here is of a  
5 common mind that, you know, there'd be a substantial --  
6 you know, some number, I'll throw out 50 as a number that  
7 would be the first cutoff, and then, you know, maybe 300  
8 or something like that as the next cutoff. And then after  
9 that, you go where you require the full Board process that  
10 was proposed by the Board -- by the staff.

11           Is that --

12           CHAIRPERSON NICHOLS: My only reason for not  
13 jumping to support that is that I just don't feel like I  
14 understand enough about the economics of the industry to  
15 know what's actually viable. I mean, the number could be  
16 right. It could be an order or magnitude off in terms of  
17 what creates a viable business. And we're not very good  
18 at the ARB at, you know, planning other people's  
19 businesses for them. I think all we can do is to try to  
20 take account of the reality of what's going on when we do  
21 our regulations and do no harm. I mean, that really is  
22 what our duty is I think.

23           And so in that respect, I would prefer to suggest  
24 that the staff look at the proposal that was brought to us  
25 by the coalition as a starting point, but not necessarily

1 from here, direct them as to where to go with the numbers.  
2 If you would be willing to go along with that, I think  
3 that's a better approach.

4           But with that said, I think that pretty much does  
5 represent a consensus of where people would like to see us  
6 go.

7           Subject to that sense of the Board discussion,  
8 can I get then a vote on the resolution so that we can  
9 move the other parts that we all agree with.

10           BOARD MEMBER BERG: Do we need to modify the  
11 resolution --

12           CHAIRPERSON NICHOLS: I'm not quite sure how  
13 we're going to do this.

14           BOARD MEMBER BERG: -- I mean the motion?

15           EXECUTIVE OFFICER GOLDSTENE: We'll adjust the  
16 resolution based on your motion. So we'll cover  
17 everything except for the conversion.

18           CHAIRPERSON NICHOLS: Except for conversions.  
19 We'll not be voting on conversions. We'll only be voting  
20 on changes --

21           BOARD MEMBER BERG: And we did agree on the 15  
22 days that they would work with Honda and the few  
23 modifications; you'll just work that out however that  
24 works?

25           CHAIRPERSON NICHOLS: Yes.

1 BOARD MEMBER BERG: I'm ready to vote.

2 BOARD MEMBER TELLES: When is this going to be  
3 brought back as far as the conversion part?

4 CHAIRPERSON NICHOLS: That's a question.

5 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Well, I  
6 guess I want to ask our lawyers. Are we -- is there some  
7 aspect of this of keeping the record open and proposing  
8 something or are we closing it and starting all over on  
9 the conversion one? Or what would be the process?

10 SENIOR STAFF COUNSEL JOHNSTON: We'll, we've  
11 already closed the record on the testimony. But we could  
12 have the conversion aspect of the regulation continued and  
13 reopened at a future Board meeting for the Board to hear  
14 staff's suggestions as to how the modifications would be  
15 for that.

16 CHAIRPERSON NICHOLS: Do we need to continue to a  
17 date certain then at this point? I mean, we'd like to if  
18 we can, I think.

19 SENIOR STAFF COUNSEL JOHNSTON: Yeah, if the  
20 Board wishes to do that, you could. Or you could leave it  
21 open. And we have until December of this year to complete  
22 the rule-making. But, you know, the staff could bring it  
23 back to you in a couple of months and then --

24 CHAIRPERSON NICHOLS: Three months.

25 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: I think

1 it's going to be more like three, because we have to go --  
2 you know, have these discussions with the small businesses  
3 and figure out a little bit more about what their business  
4 plans are and how this might phase in. And then we also  
5 have to put the proposal together and give some notice to  
6 everybody else what we are going to propose. So I think  
7 it takes three months, maybe even four.

8 CHAIRPERSON NICHOLS: Okay. So we're looking at  
9 April or May?

10 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: April  
11 or May, yeah. That would still allow us to wrap it up  
12 before December, in which case the original action would,  
13 you know, vaporize, at that point, if we don't have it  
14 finalized.

15 CHAIRPERSON NICHOLS: Right. And meanwhile, I  
16 think not only do we want to encourage some more  
17 conversation between staff and the industry, but also  
18 encourage the industry to actually come into the process,  
19 so that we have more data to work with and so that they  
20 will be lined up and ready to go when we do have the  
21 regulation in effect. I think that will be helpful to the  
22 status of this whole industry if it can be legitimized.

23 BOARD MEMBER TELLES: Can I just say one thing?

24 CHAIRPERSON NICHOLS: Yes.

25 BOARD MEMBER TELLES: You mentioned that there's

1 going to be 60,000, you know, electric cars in 2010. The  
2 problem I see is there will be 60,000 electric cars that  
3 almost nobody can afford. And that this not only drives  
4 the technology, it's going to drive the price down. And  
5 that I would hope when you talk to -- and come up with a  
6 new plan on this, that you consider that too, that, you  
7 know, we want to legitimize them and make them more  
8 effective in selling their product rather than less  
9 effective. Because I think the price issue is going to be  
10 what drives that electric vehicle and not just the  
11 presence of it.

12 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Well,  
13 just to be clear, the 60,000 we're talking about were plug  
14 hybrid electric vehicles from the OEMs. And I don't think  
15 we know what the price increment will be on the Volt.  
16 We've heard numbers like \$40,000, which is kind of  
17 high-end. On the plug Prius, it's a more minimal version  
18 and I would expect that it would be somewhat less. But  
19 whatever it is, it's going to be -- you know, it's  
20 probably going to be less than what you could get by a  
21 conversion just because of the volume.

22 CHAIRPERSON NICHOLS: Okay. So just to be clear  
23 here, what we have now is a resolution to approve the  
24 modifications to test procedures for hybrids -- plug-in  
25 hybrids and for fuel cell vehicles. And we will defer to

1 a later date a decision on the certification of retrofits  
2 and direct the staff to go work with the industry to  
3 develop a modified proposal that hopefully will do more to  
4 address the need really to maintain a viable conversion  
5 industry here.

6 And with that, I think I can just ask for a voice  
7 vote.

8 Would all in favor please say aye?

9 (Ayes.)

10 CHAIRPERSON NICHOLS: Are there opposed?

11 Okay. That's it then.

12 We will take a 15-minute break before we take up  
13 the appointment of the RTAC. And that's it. Thank you.

14 Thanks, everybody.

15 (Thereupon a recess was taken.)

16 CHAIRPERSON NICHOLS: Ladies and gentlemen, we're  
17 going to resume our meeting.

18 The next agenda item relates to the appointment  
19 of an advisory committee to assist the Air Resources Board  
20 with implementation of SB 375.

21 The Board -- hello. Am I working now?

22 Thank you.

23 This Board has the responsibility to set  
24 greenhouse gas reduction targets for California's 18  
25 metropolitan planning organizations by September 30th of

1 2010 as a result of SB 375 passing the Legislature and  
2 being signed by the Governor last year. It's an exciting  
3 opportunity. It's an integral part of our work under AB  
4 32, but it also is the first time that the ARB will have  
5 ventured into this area of doing overall vehicle  
6 greenhouse gas reduction targets. And the impacts of this  
7 are going to be, I think, profound.

8           The advisory committee that we're establishing  
9 today will assist us in that process by providing  
10 recommendations on the technical methodologies that can be  
11 used in the target-setting process. After they complete  
12 their work, the Air Resources Board will still need to  
13 work with the MPOs before we can actually set the targets.  
14 But the first step is to have this technical input.

15           Given the level of interest in SB 375 and in the  
16 Committee, it has been a challenge to keep the group small  
17 enough to be effective, but I think that the staff have  
18 accomplished that goal.

19           So, Mr. Goldstene, would you please begin the  
20 presentation.

21           EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman  
22 Nichols.

23           Senate Bill 375, as Chairman Nichols just said,  
24 directs ARB to form a regional targets advisory committee.

25           There's a tremendous amount of expertise in areas



1 California's greenhouse gas goals, we must rethink how we  
2 design our communities."

3 SB 375 provides an important piece to the State's  
4 climate change strategy by targeting carbon emission  
5 reductions from passenger vehicle use and complementing  
6 ARB's other transportation measures to cut emissions  
7 through vehicle and fuel technology.

8 --o0o--

9 MR. WEIR: SB 375 requires the Air Resources  
10 Board to set regional passenger vehicle greenhouse gas  
11 emission reduction targets for 2020 and 2035 for the major  
12 regions in the state covered by the 18 metropolitan  
13 planning organizations, or MPOs. These regions account  
14 for 97 percent of the state's passenger vehicle travel.

15 The Regional Targets Advisory Committee, or RTAC,  
16 is appointed by the Board to provide technical  
17 recommendations to help ARB during its target-setting  
18 process.

19 Regions are required to develop plans showing how  
20 to meet ARB-established targets through integrated  
21 land-use and transportation strategies.

22 And to incentivize the sustainable development,  
23 the new law provides that projects that are consistent  
24 with target-meeting plans get some relief from the  
25 environmental review process.







1 California; knowledge of land use, air quality, and  
2 transportation strategies and how local, state and federal  
3 laws affect planning decisions; and understanding of the  
4 impacts of regional and local planning on the environment,  
5 jobs, housing and more.

6           Here is the RTAC membership list for board  
7 consideration:

8           Andrew Chesley, Executive Director of the San  
9 Joaquin Council of Governments; Stuart Cohen, Executive  
10 Director of TransForm, formerly the Transportation and  
11 Land Use Coalition; Greg Devereaux, City Manager for the  
12 City of Ontario; Roger Dickinson, Sacramento County  
13 Supervisor; Stephen Doyle, President of Brookfield San  
14 Diego Builders; Amanda Eaken, Policy Analyst for the  
15 Natural Resources Defense Council; Gary Gallegos,  
16 Executive Director of the San Diego Association of  
17 Governments; Steve Heminger, Executive Director of the Bay  
18 Area Metropolitan Transportation Commission; Richard Katz,  
19 Board Member, Los Angeles County Metropolitan  
20 Transportation Authority; Shari Libicki, Technical  
21 Consultant, ENVIRON Corporation; Mike McKeever, Executive  
22 Director of the Sacramento Area Council of Governments.

23           The Board is asked to consider Mr. McKeever to  
24 serve as Chair of the RTAC. His collective knowledge of  
25 SB 375 regional planning and the technical underpinnings



1 appoint the members of the Regional Targets Advisory  
2 Committee and appoint Mr. Mike McKeever as the Chair of  
3 the Committee.

4 That concludes my presentation. Thanks.

5 CHAIRPERSON NICHOLS: Well, thank you, Mr. Weir.  
6 I know you've spent many, many hours considering not only  
7 membership, but also how this Committee is going to  
8 function. And perhaps you might just want to say a word  
9 or two about the Committee's agenda, how they're going to  
10 work and so forth.

11 MR. WEIR: The Committee has eight months to  
12 work. I know that Mr. McKeever is very anxious to start  
13 and move forward. They're looking at providing the  
14 technical recommendations regarding the factors and  
15 methods for the ARB to do its target setting over the next  
16 year. And so they will be needing to look at a lot of  
17 different factors regarding -- a lot of different issues  
18 regarding those factors and methods. So they --

19 CHAIRPERSON NICHOLS: And how will the Committee  
20 be staffed? I mean, I think there's a concern with  
21 something like this that you're creating a new entity with  
22 a big need to get people up to speed quickly and to look  
23 at a lot of information. How do you expect that to  
24 happen?

25 MR. WEIR: I would say ARB is looking to provide

1 support and coordinate technical support for the  
2 Committee. We are looking at having the MPOs provide some  
3 in-kind support. They have experts on their staff  
4 regarding the factors and methods that are used by the  
5 MPOs now and what could be used.

6           We have right now a UC contract to get technical  
7 support from UC; to work with MPOs on current and  
8 near-term modeling and data needs, resources, and  
9 capabilities; to identify and evaluate performance metrics  
10 to evaluate the impacts of transportation and land-use  
11 strategies; and to provide general technical support for  
12 the RTAC as it comes up.

13           CHAIRPERSON NICHOLS: Okay. So there's --  
14 obviously, there's a high degree of interest on the part  
15 of the -- I think every member of this Board in one way or  
16 another has a particular background and interest in  
17 getting this all right.

18           I know at least one of our Board members, who's  
19 not able to be here today, Ron Roberts, has already met  
20 with the San Diego team to make sure that he's going to be  
21 continually kept apprised of what's going on with the air  
22 district, the MPO, on bringing others in and make sure  
23 that they're contributing to all of this. And I'm  
24 expecting others will do the same. I just happen to have  
25 had a conversation with him about that.

1 I've also spoken with Professor Sperling. Given  
2 the nature of the work that he does at Davis on  
3 transportation studies, I've asked him to serve as a  
4 liaison to this Committee in a kind of a ex officio way  
5 just to make sure that he's keeping an eye on things and  
6 keeping the Committee out of trouble and I don't know what  
7 else. Or maybe "in trouble" might be more like it.

8 (Laughter.)

9 CHAIRPERSON NICHOLS: But, anyway, you know, that  
10 he will be making sure that the Board, as a whole, is also  
11 represented there.

12 And with that, I'll just open it up for any other  
13 questions that any members may have?

14 Yes.

15 BOARD MEMBER SPERLING: To follow up on your  
16 earlier question. Is there an intent for ARB staff to  
17 provide any support to this Committee?

18 MR. WEIR: Yes.

19 DEPUTY EXECUTIVE OFFICER TERRY: Jeff was being  
20 very modest. The team that you see sitting back there,  
21 Jeff Weir, Doug Ito, Kurt Karperos, as well as our Legal  
22 staff, have a huge commitment to making this process be  
23 successful. And additional staff that you don't see here  
24 are part of the team within our organization. It spans  
25 multiple divisions within our organization. Our

1 researchers we have on contract. Our wonderful Professor  
2 Sperling to help us keep on the straight and narrow.

3           So we think we have a fabulous extended team to  
4 support the Committee.

5           And we do expect a lot of requests from the  
6 Committee to do follow-up work, to bring back information,  
7 to pursue issues outside of the Committee meetings,  
8 because this is a very elite and busy crowd. So we expect  
9 monthly meetings, but in between those monthly meetings a  
10 lot of technical work going on.

11           And then, lastly, as Jeff mentioned, there are a  
12 lot of technical experts work in this arena that staff  
13 will be working with day in and day out and bringing that  
14 information back to the RTAC as a group.

15           CHAIRPERSON NICHOLS: So the intent is to have an  
16 actual report come from this Committee by the end of the  
17 year back to the ARB?

18           DEPUTY EXECUTIVE OFFICER TERRY: Yes, their  
19 recommendations are due -- of the report to do by  
20 September 30th. So we would plan to come back to the  
21 Board immediately thereafter, most likely the October  
22 Board meeting, with their recommendations.

23           We also -- the Board expressed interest in having  
24 an interim report before their recommendations were  
25 completed. So, at this time, we are thinking perhaps in

1 the May or June time frame we could give a status report  
2 on the activities of the Committee.

3 CHAIRPERSON NICHOLS: That's a good idea. And to  
4 invite them to come in also and to present on how things  
5 are going.

6 BOARD MEMBER SPERLING: You know, having served  
7 on many national academy committees, which are not too  
8 dissimilar from what this is, I would suggest it's very  
9 important to have a point staff person. You know, if it's  
10 going to write a report, like who's going to write this  
11 report, for instance. It's absolutely essential for that  
12 to happen.

13 DEPUTY EXECUTIVE OFFICER TERRY: Doug Ito has  
14 graciously agreed to serve in that role as the primary  
15 point person. And his team of staff will be supporting  
16 him.

17 BOARD MEMBER SPERLING: And one last question.  
18 Is this Committee going to disappear in September  
19 or will it continue -- is it the idea that it will  
20 continue thereafter?

21 EXECUTIVE OFFICER GOLDSTENE: The Committee has a  
22 very specific task in the statute. But if we think that  
23 there's a need for some sort of ongoing outside input as  
24 the Board moves forward on taking the methodologies to  
25 actually -- and use them to do the target setting into

1 2010, you could decide to keep some form of a committee in  
2 place to advise the Board, you know, to have outside  
3 experts advise us.

4 CHAIRPERSON NICHOLS: My experience -- I know we  
5 all have different experiences with different kinds of  
6 committees. But with something like this, giving them a  
7 target and a product to do and then saying, "Thank you  
8 very much." But at the end of the day I know many of  
9 these people are going to continue to be very interested  
10 in implementation. And we'll need to figure out whether  
11 there's some formal structure or better keep it informal.

12 All right. We had a couple of people who signed  
13 up to speak, if you wish to do so.

14 Moira Topp and Robert Phipps.

15 MS. TOPP: Good morning, Madam Chair. It's still  
16 morning. I'm Moira Topp on behalf of the Orange County  
17 Transportation Authority.

18 And we very much appreciate the work that your  
19 staff has engaged with us to include Orange County  
20 Transportation Authority on the Board.

21 We think that OCTA really does provide a unique  
22 voice for the RTAC. We were the first transportation  
23 agency to actually sign an agreement with the Attorney  
24 General's office to deal with and include greenhouse gas  
25 mitigation in our transportation projects. And so we've

1 been grappling with this idea of modeling and data  
2 management and forecasting for several years. Now, we  
3 think we can provide an important voice on the RTAC,  
4 appreciate -- I really do appreciate your including us  
5 today.

6           The only small request that I do have, when we  
7 requested -- we wrote the letter to the Board. It was two  
8 months ago. And we have a rotating chairman of the board.

9           Chris Norby is no longer -- he's an elected  
10 official and still a member of the board, but is no longer  
11 the chairman of the board.

12           To be consistent with the membership that you did  
13 include, Art Leahy is kind of comparable to the other  
14 members, Gary Gallegos and Steve Heminger, and I would  
15 request, if you could --

16           CHAIRPERSON NICHOLS: I think we could make that  
17 substitution --

18           MS. TOPP: -- to do that substitution.

19           CHAIRPERSON NICHOLS: -- as a clerical  
20 correction.

21           MS. TOPP: We very much appreciate it.

22           Thank you.

23           CHAIRPERSON NICHOLS: Thank you.

24           Mr. Phipps.

25           MR. PHIPPS: Madam Chair, members of the Board.

1 Again, I would also like to thank staff for the  
2 representation that the San Joaquin Valley has had so far.  
3 My name is Robert Phipps. I'm an administrative analyst  
4 with Kern Council of Governments in Bakersfield. And I'm  
5 here representing Kern County first but kind of the valley  
6 as a whole.

7           Our position is that MPOs will kind of be the  
8 foot soldiers in the implementation of this process. As  
9 staff mentioned earlier, the MPOs do have the land use and  
10 transportation modeling expertise with which to implement  
11 the program. So we would argue that all MPOs should be  
12 granted a seat at the table of this Committee, if you  
13 will. But knowing the time and size restrictions, we  
14 simply would like to focus on some of the representation  
15 in the San Joaquin Valley in particular.

16           I just want to take a moment to point out that  
17 the San Joaquin Valley is -- the eight counties within  
18 that valley are larger collectively than ten states; more  
19 populace than 23 states; and, as you are well aware,  
20 plagued with some of nation's worst air quality because of  
21 its weather and its topography. The valley also includes  
22 the city of Arvin, which is the -- now rated consistently  
23 the worst city in the nation for air quality.

24           The Department of Finance has forecasted that the  
25 eight counties, San Joaquin Valley, will absorb more than

1 20 percent of the state's growth over the next decade,  
2 which collectively amounts to more than a million people.  
3 By 2050, the valley is expected to grow at a rate that is  
4 nearly 200 percent greater than the statewide average.

5           Again, the MPOs in the valley have the  
6 modeling -- transportation and land-use modeling expertise  
7 to contribute to this Committee and to the standards that  
8 are going to be established.

9           I would say also that we have admittedly sort of  
10 bungled our request in this matter. The San Joaquin  
11 Valley COG Directors Association did establish a point  
12 person for this Committee - that was Jess Brown, the  
13 Director of Merced - but failed to follow through with a  
14 letter on our letterhead immediately after that decision.

15           And, in addition, there may have been some  
16 confusion, because a couple of the other counties  
17 including Kern had requested seats on this Committee as  
18 well. And so we were not aware of what the criteria was,  
19 which is why I think some of the confusion existed.

20           Effectively, we're asking, if you can, to admit  
21 at least one or two more of the valley counties that did  
22 ask for representation on the Committee. At the very  
23 least, we would like to see Jess Brown included from  
24 Merced County Associated Governments.

25           Thank you for your time.

1 CHAIRPERSON NICHOLS: Okay. Thank you.

2 Well, we do have one additional witness. Greg

3 Albright

4 Hi, Mr. Albright. Welcome.

5 MR. ALBRIGHT: Thank you for including me.

6 CHAIRPERSON NICHOLS: You cannot have a seat on  
7 the RTAC.

8 MR. ALBRIGHT: What's that?

9 CHAIRPERSON NICHOLS: I said you can't have a  
10 seat on the RTAC.

11 MR. ALBRIGHT: I don't want a seat on the RTAC.

12 CHAIRPERSON NICHOLS: No state agencies.

13 MR. ALBRIGHT: I don't want a seat.

14 By the way, I do have a new title. I'm a Deputy  
15 Secretary with BT&H, Business, Transportation & Housing  
16 Agency, and I will be doing their environmental policy and  
17 integration work. And I'm very excited. I just  
18 started -- just started, and I get a phone call saying  
19 "Come by, help testify."

20 Simply placed -- oh, I also have got to tell a  
21 quick story in my three minutes. The last two weeks have  
22 been amazing. I was at a national conference in DC, and  
23 then I just got back late last night from the New Partners  
24 in Smart Growth conference in New Mexico. And people are  
25 watching California. This is such a dynamic time. And I

1 told them -- I've been telling them in all my sessions,  
2 "We're going to get it right."; because they're depending  
3 upon California to figure this out. So thank you for your  
4 good work. I told them -- I did confess that it's messy,  
5 but we're going to get it right.

6 So basically --

7 CHAIRPERSON NICHOLS: Thank you.

8 Thank you for warning them. No.

9 (Laughter.)

10 MR. ALBRIGHT: No, it's the world's eyes -- for  
11 certainly the national eyes are watching California right  
12 now, and I'm just getting that consistently. So what a  
13 great place to be. It's a good week, by the way.

14 Essentially, what I'd ask is that we could  
15 formalize -- and I'm speaking right now for Director Will  
16 Kempton of the California Department of Transportation as  
17 well as BT&H -- that we simply formalize our role to  
18 participate with staff in supporting this RTAC. The  
19 intent is that we want to make sure that it's a  
20 well-informed decision-making process where interregional  
21 travel is considered. Obviously, MPOs are well equipped  
22 to deal within their region. It's the statewide  
23 interregional modeling and other things that we could  
24 bring to the table to make a more robust decision making.  
25 We don't want the interregional trips to be lost.

1           Obviously, we have that responsibility, along  
2 with the relationship we have with the MPOs in their  
3 regional transportation planning as we pass through the  
4 federal dollars. So we want to make sure there's a strong  
5 nexus with the regional transportation plans and the work  
6 of this Committee.

7           So that's it, simply put. We'd like to formally  
8 request that we're engaged and support your staff and  
9 bring resources for well-informed decision making, and we  
10 want to have fun.

11           CHAIRPERSON NICHOLS: Well, we take your  
12 appointment as a very good sign from Secretary Bonner and  
13 from Director Kempton that BT&H and CalTrans are going to  
14 be playing a very high level role in this effort. And I  
15 think we definitely have been assuming that the  
16 partnership would be a robust one. But if there's a need  
17 for some sort of a formal letter or statement to that  
18 effect, we certainly would be happy to do that.

19           MR. ALBRIGHT: I think we'd appreciate just an  
20 acknowledgement that we will be part of that process would  
21 be fantastic.

22           CHAIRPERSON NICHOLS: I think you're more than a  
23 part of it. I think you're fully implicated.

24           (Laughter.)

25           MR. ALBRIGHT: We're a partner and we want to

1 behave like a partner.

2 So thank you very much.

3 CHAIRPERSON NICHOLS: Thank you. Thanks for  
4 coming over today.

5 Are you here to testify on this item?

6 MR. BAKER: I am.

7 CHAIRPERSON NICHOLS: Okay. Come forward and  
8 give your name, please.

9 MR. BAKER: Excuse me. My name is Mathew Baker.  
10 I'm the Habitat Director at the Environmental Council of  
11 Sacramento, ECOS.

12 CHAIRPERSON NICHOLS: Okay.

13 MR. BAKER: I was only informed moments ago --  
14 please excuse my appearance -- that we had no one to  
15 represent us today.

16 I believe you've received a letter on behalf of  
17 attorney Keith Wagner, who would very much like an  
18 appointment to the Advisory Committee on SB 375.

19 So I am here to formally endorse Keith Wagner for  
20 this appointment. And I don't know -- excuse me, again.  
21 I'm not prepared at all.

22 Do you need me to explain the Environmental  
23 Council of Sacramento or make a case for why I think we  
24 should have representation on --

25 CHAIRPERSON NICHOLS: No, I am familiar with the

1 organization. And I think maybe I would -- I would just  
2 say personally, I received dozens of letters and Emails  
3 and calls. At one point I was joking, and that was before  
4 the indictment of the Governor of Illinois, that if I  
5 could have just been selling the seats on this Committee,  
6 that we could have financed our budget deficit for the  
7 year.

8           But in all seriousness, I think it's a tremendous  
9 sign of the support that this bill has and that this  
10 process has that so many people came forward to volunteer.

11           We expect that the meetings of the Committee will  
12 be open, and that they will include a very substantial  
13 input, not just in a sort of a public comment way, but  
14 actual working committees will be set up to deal with  
15 specific issues where input from environmental  
16 organizations, groups that have been advocates for  
17 land-use reform and many other issues, will be included in  
18 the process.

19           We have this struggle to try to make sure that  
20 the Committee is not so big that they can't actually get a  
21 report out in a short space of time. It really is -- it's  
22 not a committee of representatives, I think, so much as it  
23 is a committee of individuals who are going to be able to  
24 bring not only their own expertise, but staff and really  
25 get the report done to bring back to the ARB. And at

1 every step along the way we will be looking for input.

2           But I think I would have to say that the staff  
3 did a good job of considering the various interests and  
4 issues that are out there that needed to be committed to.  
5 And while you may not feel that anybody on this Committee  
6 necessarily speaks for you or for your group, there are  
7 individuals here who do bring expertise in the same issues  
8 that your organization has been working on.

9           So my inclination is to not sit here and sort of  
10 tinker with the makeup of the Committee, but to recognize  
11 that the staff did a good job of balancing a lot of  
12 requests and interests, and just let the process start to  
13 move forward at this point.

14           MR. BAKER: Well, thank you.

15           If Keith is not admitted into the Committee, I  
16 really hope that the doors are open for input from ECOS.  
17 ECOS has been doing regional planning issues -- has been  
18 dealing with regional planning issues for over three  
19 decades and --

20           CHAIRPERSON NICHOLS: Oh, I know. You guys have  
21 been active and effective. We applaud you for it. And I  
22 hope you see this as a natural outgrowth of the work that  
23 you've been doing all these years.

24           MR. BAKER: Thank you. Thanks for the  
25 consideration.

1 CHAIRPERSON NICHOLS: Thanks for coming over.

2 MR. BAKER: Thank you.

3 CHAIRPERSON NICHOLS: Okay. Comments, questions  
4 from the Board?

5 I know we've got people who have deadlines and  
6 planes and other things to meet.

7 Question?

8 BOARD MEMBER TELLES: Actually, I would -- even  
9 though I agree that the Committee shouldn't be -- and  
10 perhaps it's already too big. But I would like you to  
11 consider the request from Mr. Phipps. Eight of the 18  
12 MPOs are located in the San Joaquin Valley. And I think  
13 to get their buy-in, it would be nice to have the person  
14 that they suggested to be on this Committee to be able to  
15 be on the Committee and communicate back with those MPOs  
16 with the process that they have going.

17 They're just in the process of kind of organizing  
18 the countywide -- I mean, a regional-wide MPO network, and  
19 I think this would help assist that and would also help  
20 assist making it successful in the valley. Because really  
21 when it gets down to it, we're creating -- this  
22 Committee's going to create guidelines to tell MPOs what  
23 to do. And if they feel that they haven't been part of it  
24 from the get-go, it may be more difficult to get what  
25 we're trying to do accomplished.

1           CHAIRPERSON NICHOLS: Does staff want to respond  
2 to that comment?

3           DEPUTY EXECUTIVE OFFICER TERRY: Obviously, the  
4 eight MPOs in the valley are critical to the process. And  
5 I just want to emphasize that this Committee has a fairly  
6 narrow charge. And I think there might be some confusion  
7 about, this is not an advisory committee for the entire  
8 process, because we will go through our standard  
9 stakeholder process in terms of developing staff proposals  
10 for targets for each region.

11           So really the Regional Targets Advisory Committee  
12 has a very technical assignment, time certain. It's the  
13 first step in the process. Once that process is done, we  
14 will have a very expansive stakeholder process, like we  
15 always do. So all of the organizations that have  
16 expressed interest in being part of that process, we will  
17 be working with them beginning next week - I won't say  
18 tomorrow - to get their technical input, bring that input  
19 back to the RTAC - as Chairman Nichols asked earlier, what  
20 will staff's role be. One of those roles will be to work  
21 with all the MPOs in the Valley as a technical team and  
22 make sure that that input reaches the Committee and that  
23 there's coordination among the two valley representatives  
24 that are on the Committee, so that the input of the group  
25 is considered.

1           There's always been a strong technical team in  
2 terms of our staff and MPOs. And this newest joint  
3 assignment is just really going to strengthen that  
4 technical team. And so we have the firm commitment. We  
5 have a liaison to the valley who works on air quality and  
6 transportation issues, as well as our team working on 375.

7           And we'd be happy to provide updates at the  
8 Board's pleasure in terms of how those additional  
9 activities are going outside of the RTAC process itself.

10           CHAIRPERSON NICHOLS: Well, I'm not sure -- I  
11 don't want to assign additional workload to Board members.  
12 But I do think that the point that -- about the importance  
13 of the valley obviously is inescapable. We understand the  
14 growth issues and the concerns in that region. And I  
15 think it was very noble of Mr. Phipps to acknowledge that,  
16 you know, there was a problem in terms of the counties  
17 getting their act together, so to speak, to nominate a  
18 representative, and that that perhaps could have been an  
19 issue in terms of timing of putting this Committee  
20 together.

21           Because, believe me, I sat with the group a few  
22 times when they were going over names. And there were  
23 dozens and dozens of names of people that could have been  
24 asked and could have done a very good job and who would  
25 have brought in some expertise and some constituency that

1 would be very useful to us. But at the end of the day, we  
2 came up with what we did.

3           And I thought Supervisor Roberts' idea of how to  
4 kind of keep folks in San Diego -- who wanted to be on,  
5 but were told they couldn't even though they also had a  
6 very strong claim, particularly I know their air pollution  
7 control district really felt that they should be included  
8 and often don't get considered. His idea of sort of  
9 hosting a regular session himself in the San Diego area to  
10 work on these issues seemed to me to be a really great way  
11 of making sure that we're getting the input and also that  
12 folks there are hearing about what's going on and feel  
13 like they're included.

14           So, I don't know if our valley Board members --  
15 valley-residing Board members would like to do the same  
16 thing, but that might be a role that could help bridge  
17 this gap here without opening up the flood gates of people  
18 who feel like they should be on the Committee.

19           BOARD MEMBER D'ADAMO: Well, I'd be happy to  
20 participate with Dr. Telles.

21           And I would say that I know the two  
22 representatives -- I understand one of these are not  
23 regional representatives. But Carol Whiteside and Andy  
24 Chesley, I know them both well. And Andy Chesley has some  
25 additional credentials that are not included in the bio

1 here and, that is, that he was recently appointed to the  
2 Governor's Partnership for the San Joaquin Valley. And  
3 that's the group that's been working on the blueprint  
4 process. So he's very much engaged in that. And I called  
5 him this morning. And he is committed to doing, well,  
6 maybe some of that extra work in outreach with the San  
7 Joaquin Valley.

8 I know Jess Brown very well, and I'd be happy to  
9 contact him as well.

10 I think that if we could have sort of maybe  
11 somewhat of a dual process going on, so that the input  
12 could be provided as much as possible by those who would  
13 have wanted to participate. And let's face it, a lot of  
14 these meetings are probably going to be in Sacramento. So  
15 to have local meetings would, I think, help facilitate  
16 additional information gathering.

17 CHAIRPERSON NICHOLS: Well, that's a -- I  
18 appreciate that.

19 BOARD MEMBER TELLES: Can I just --

20 CHAIRPERSON NICHOLS: Yes.

21 BOARD MEMBER TELLES: Could I just ask Mr.  
22 Phipps, would that work for our region?

23 MR. PHIPPS: You know, again, our --

24 CHAIRPERSON NICHOLS: I'm sure it's not your  
25 first choice. You could say that.

1 MR. PHIPPS: Yes, precisely. I mean, you know,  
2 clearly we'll all give CARB the authority to set the  
3 parameters of the Committee as they choose. You know,  
4 again our -- I apologize for the mix-up and the late  
5 notice with regard to Mr. Brown. And I do respect your,  
6 you know, desire to not open up a can of worms with this.

7 So we appreciate any consideration you can get  
8 us, and I will leave it at that.

9 CHAIRPERSON NICHOLS: Thank you.

10 I think we probably need to bring this to a  
11 resolution.

12 Do we have a motion?

13 BOARD MEMBER D'ADAMO: So moved.

14 CHAIRPERSON NICHOLS: And a second?

15 BOARD MEMBER BERG: Second.

16 CHAIRPERSON NICHOLS: May I call the question at  
17 this time? This is to approve the Committee going  
18 forward.

19 All in favor please say aye.

20 (Ayes.)

21 CHAIRPERSON NICHOLS: Opposed?

22 Thank you so much. I appreciate it.

23 I know we have people who have to leave.

24 Is it all right for me to continue to hear the  
25 public comments without a full quorum?

1 CHIEF COUNSEL PETER: Yes.

2 CHAIRPERSON NICHOLS: All right. Then those who  
3 need to go, please feel free to do so.

4 We do have three people who had asked to speak  
5 during the public comment period. So I will now call them  
6 forward.

7 And they are Max Ordonez, Anibal Guerrero, and  
8 John Williams. Please come forward and address the Board  
9 members who are here and the staff.

10 Thank you.

11 MR. ORDONEZ: Good afternoon, Chairman Nichols  
12 and Board members. My name is Max Ordonez. I'm the  
13 Treasurer of the California Spanish Chambers of Commerce,  
14 various local chambers, and a member of NFIB.

15 I just wanted -- and I've been here a few times.  
16 I think the first time was to talk about what small  
17 businesses -- wanted to make sure we understood the impact  
18 on the financing aspect for a lot of the micro -- small  
19 businesses.

20 And today I just wanted to bring up a third point  
21 regarding the economic analysis. Just a concern that  
22 although small businesses don't have the need of the large  
23 investment capital of a lot of the big companies, we're  
24 still concerned and want to know more about what the cost  
25 will be to the smaller businesses and the consumer. In

1 many cases -- sometimes in some cases those who have a  
2 greater hardship are again the small business person.

3           And then again bringing back the point that --  
4 although, the net costs are stated over the long term, I  
5 still feel that it would be -- from a planning aspect, to  
6 know more about what the mid-term and the near-term  
7 aspects could be. And I know that's something that's been  
8 discussed. I know there's been a lot of hard work on  
9 behalf of a lot of your Board members and staff and  
10 creating that dialogue between the small business  
11 community. And also I want to thank you for that as well.

12           As far as I just -- real quick point on the  
13 economic analysis, just that it does compute and disclose  
14 how much it's going to cost. Not so much -- our concern  
15 is what it's going to cost the big players, the big  
16 companies, again, what those impacts will be for a lot of  
17 the smaller businesses and consumers. I just wanted to  
18 make sure that that point gets across. And once we know  
19 that, to really consider what will be implemented on  
20 behalf of your -- of CARB.

21           Thank you so much.

22           CHAIRPERSON NICHOLS: Thank you. It's nice to  
23 see you back again. And we do have your concerns in mind.  
24 And I know that the staff is planning on producing some  
25 further economic information about the low carbon fuel

1 standard. That's the next big effort that's coming  
2 forward. And so hopefully you'll be involved in that as  
3 well.

4 Thank you.

5 Mr. Guerrero.

6 MR. GUERRERO: Good afternoon, ladies and  
7 gentlemen. My name is Anibal Guerrero. I'm representing  
8 the San Fernando Valley Chapter of the Mexican-American  
9 Political Association.

10 And I do kind of want to piggyback on what Max  
11 just indicated to us, with a little twist on the concerns  
12 of the organization and as it affects the Latino  
13 community.

14 Members, the Latino community have been hit hard  
15 by the current economic crisis. Many hard working Latino  
16 families are having trouble paying their rent, keeping  
17 lights on and putting food on the table.

18 Although we support AB 32, we worry about the  
19 costs. In the time since work started on the scoping plan  
20 until now, economic conditions have gotten a little bit  
21 worse. It's more important than ever that costs be  
22 seriously considered, no matter how small they may seem in  
23 the grand scheme of things, over the next decade or so.  
24 And it's imperative that staff spend the time necessary to  
25 determine what is -- what this rule and others will cost

1 people like our members and their community in terms of  
2 fuel for their vehicles, fares for taking the bus, for  
3 taking the train, and for everyday products like food that  
4 comes to us by freight and vehicles.

5 We respectfully suggest you examine this  
6 information in a delicate manner and devise a policy that  
7 won't make a bad economic situation worse.

8 I thank you for letting us speak.

9 CHAIRPERSON NICHOLS: Thank you for your  
10 comments.

11 Okay. John Williams.

12 MR. WILLIAMS: Good morning. My name's John  
13 Williams. I'm an industrial researcher here on behalf of  
14 a group known as Valley Citizens in the east Sacramento  
15 County. Thanks very much for the opportunity to speak to  
16 the Board.

17 I'm here to describe an abuse of one of the  
18 Board's permitting activities. I sent a full packet in  
19 three weeks ago, a complaint letter and a list of exhibits  
20 regarding a facility called Hardesty Sand and Gravel.

21 For the last 15 years Hardesty Sand and Gravel  
22 has run a sand and gravel processing operation in east  
23 Sacramento. And for ten years they've operated that  
24 facility without any kind of air permit at all. No air  
25 permit for ten years. Finally, the district -- the air

1 district inspected the facility, discovered they had no  
2 air permit, and issued a violation notice.

3           In response, the Hardesty operation has taken  
4 inappropriate advantage of the Air Resources Board program  
5 for portable equipment. Now, the ARB issues what's called  
6 a Registration for Portable Equipment. This is typically  
7 for a crusher or a cement plant. This is no bigger than a  
8 cement truck. It travels to a location, operates there  
9 for a few hours or days or weeks, and then moves to  
10 another location. And that's the intent of the program,  
11 is for the equipment that functions in multiple sites for  
12 short periods.

13           In this instance, this is a large stationary  
14 source, covers several acres. It would take weeks to take  
15 it apart and move it. And, in fact, the air district's  
16 conclusion upon repeated inspections is that it's been  
17 there since 19 -- or at least 2005 at its current  
18 location, increasing production every year, has never been  
19 moved, never been portable, and, in effect, is an abuse of  
20 the situation.

21           And what's happening now is the air district is  
22 trying to force the facility to get a permit for a  
23 stationary source. And the operator waives his ARB  
24 registration and says, "Oh, no, I've got permits. Air  
25 district, go away. Leave me alone." This is entirely

1 inappropriate. It's giving this particular operator a  
2 competitive advantage against legitimate companies that  
3 play by the rules. And, in fact, he's driven some folks  
4 out of business. There have been layoffs. And there was  
5 testimony yesterday at the air district hearing about  
6 other companies that have had to lay off workers because  
7 of this unfair competition.

8           Also, a permit for a portable source like this is  
9 an inferior permit, allows higher emissions than would a  
10 district permit, because the assumption is the facility is  
11 only going to operate for a short time. Instead, it's  
12 operated day in, day out, year after year.

13           So in conclusion - and the district staff had  
14 told me this is appropriate - I would like to ask the ARB  
15 to consider canceling the registrations for the Hardesty  
16 facility because they violated their own permit, they  
17 violated ARB rules, and it's likely they obtained those  
18 registrations by misrepresenting the status of the  
19 facility.

20           Thank you very much.

21           CHAIRPERSON NICHOLS: Thank you. I've not seen  
22 the letter. I assume it went to staff in the Enforcement  
23 Division or the Legal Division probably?

24           MR. WILLIAMS: Well, actually I addressed it to  
25 you. And I got kicked down the food chain. And I've

1 heard from staff and from one of the Board attorneys.

2 CHAIRPERSON NICHOLS: Oh, you have already.

3 Okay. Well, I'm going to ask Ellen Peter, our  
4 Chief Counsel, to keep an eye on this and to follow up  
5 with you and make sure there's a resolution.

6 MR. WILLIAMS: Great. Thank you very much.

7 CHAIRPERSON NICHOLS: Thank you.

8 I don't see anyone else who's lined up to speak  
9 to us. I think we can actually adjourn this meeting.

10 And thank you all very much.

11 (Thereupon the Air Resources Board meeting  
12 adjourned at 12:22 p.m.)

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## 1 CERTIFICATE OF REPORTER

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

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

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 3rd day of February, 2009.

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