

MEETING
STATE OF CALIFORNIA
AIR RESOURCES BOARD

JOE SERNA, JR. BUILDING
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
BYRON SHER AUDITORIUM, SECOND FLOOR
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APPEARANCES

BOARD MEMBERS

Ms. Mary Nichols, Chairperson

Dr. John Balmes

Ms. Doreene D'Adamo

Mr. Hector De La Torre

Mr. Ronald Loveridge

Mrs. Barbara Riordan

Dr. Alex Sherriffs

Dr. Daniel Sperling

STAFF

Mr. James Goldstene, Executive Officer

Mr. Tom Cackette, Chief Deputy Executive Officer

Mr. Bob Fletcher, Deputy Executive Officer

Ms. Lynn Terry, Deputy Executive Officer

Ms. Mary Alice Morency, Board Clerk

Mr. Michael Carter, Chief, Emission Research and
Regulatory Development Branch, MSCD

Mr. Richard Corey, Division Chief, SSD

Mr. Jack Kitowski, Chief, Freight Transport Branch, SSD

Mr. Ajay Mangat, Air Resources Engineer, Goods Movement
Strategies Section, SSD

Ms. Cynthia Marvin, Assistant Division Chief, SSD

APPEARANCES CONTINUED

STAFF

Mr. Lex Mitchell, Substance Evaluation Section, SSD

Ms. Yun-Hui Park, Air Resources Engineer, Off-Road Controls Section, Mobile Source Control Division

Ms. Aubrey Sideco, Substance Evaluation Section, Stationary Source Division

ALSO PRESENT

Mr. Andrew Barrera

Ms. Stephanie Batchelor, BIO

Mr. Will Barrett, American Lung Association

Mr. Jack Broadbent, BAAQMD

Mr. Todd Campbell, Clean Energy

Ms. Julian Canete, California Hispanic Chamber of Commerce

Ms. Yadira Carrasquillo, Operation Free

Mr. Terry Davis, Sierra Club

Mr. Chris Dettore, DuPont

Mr. Harrison Dillon, Solazyme

Mr. Carl Dolk, Devine Intermodal

Mr. Steve Douglas

Mr. Todd Ellis, Imperium Renewables

Mr. Bob Epstein, E2

Ms. Susan Frank, California Business Alliance for a Green Economy

Mr. Chris Hessler, AJW, Inc.

APPEARANCES CONTINUED

ALSO PRESENT

Mr. Henry Hogo, South Coast AQMD

Mr. Jim Iaconi, Propel Fuels

Mr. Paul Kamp, Inbicon

Ms. Jamie Knapp, Environmental NGOs

Mr. Neil Koehler, Pacific Ethanol, Inc.

Mr. John Larrea, California League of Food Processors

Mr. Jim Levine, R Power Biofuels

Mr. Michael Lewis, CIAQC

Mr. Edwin Lombard, CA Black Chamber of Commerce

Mr. Mark Loutzenhiser, Sacramento Metro AQMD

Mr. Jim Lyons, Sierra Research

Mr. Duncan Macleod, Iogen

Mr. Tim Martinez, San Joaquin County Hispanic Chamber of
Commerce

Mr. Steven Maxwell

Mr. Jay McKeeman, CIOMA

Mr. John McKnight, National Marine Manufacturers
Association

Mr. Paul Monroe

Mr. Ralph Moran, BP

Mr. Simon Mui, NRDC

Ms. Michelle Passero, TNC

Mr. Ken Percival

APPEARANCES CONTINUED

ALSO PRESENT

Ms. Elizabeth Perez, Operation Free

Mr. Mark Riechers, Mercury Marine

Ms. Betsy Reifsnider, CA Interfaith Power and Light

Ms. Cathy Reheis-Boyd, WSPA

Mr. Dan Romasko, Tesoro Corp.

Ms. Dorothy Rothrock, CA Manufacturers & Technology
Association

Mr. Seyed Madredin, San Joaquin Valley APCD

Mr. Michael Saragosa, Latin Business Association

Mr. John Shears, CEERT

Mr. Chris Shimoda, CA Trucking

Mr. Lawson C. Stuart, Truman National Security Project

Ms. Eileen Tutt

Mr. Mike Watt, San Diego County APCD

Mr. Mike Williams, IWLA

INDEX

PAGE

Item 11-10-1	
Chairperson Nichols	12
Executive Officer Goldstene	13
Staff Presentation	16
CEC Executive Director Ogelsby	30
Mr. Macleod	34
Mr. Epstein	37
Mr. Iacoponi	39
Mr. Dillon	42
Mr. Campbell	44
Mr. Hessler	46
Mr. Barrett	48
Mr. Lyons	50
Mr. Moran	53
Mr. Barrera	56
Mr. Shimoda	57
Ms. Reifsnider	59
Mr. Kamp	61
Mr. Douglas	63
Mr. Romasko	64
Ms. Batchelor	66
Mr. Stuart	69
Ms. Perez	71
Mr. Levine	73
Ms. Carrasquillo	76
Mr. Koehler	77
Ms. Reheis-Boyd	80
Ms. Rothrock	83
Mr. Dettore	85
Mr. Mui	85
Mr. Malins	87
Mr. Shears	89
Mr. Williams	91
Mr. Lombard	93
Mr. McKeeman	95
Ms. Knapp	96
Ms. Passero	98
Mr. Canete	100
Mr. Martinez	101
Ms. Tutt	103
Ms. Frank	104
Mr. Monroe	106
Mr. Saragosa	108
Mr. Maxwell	110
Mr. Davis	112

INDEX CONTINUED

	<u>PAGE</u>
Item 11-10-2	
Chairperson Nichols	117
Executive Officer Goldstene	118
Staff Presentation	119
Ms. Doyle	133
Mr. Romasko	135
Ms. Reheis-Boyd	137
Mr. Mui	146
Mr. Moran	148
Mr. Clarke	150
Mr. Braeutigam	152
Ms. Tutt	153
Mr. Pedersen	156
Mr. Kim	158
Mr. Karner	160
Ms. Winn	164
Mr. Andreoni	166
Mr. Teall	169
Mr. Hwang	171
Mr. Langton	173
Mr. Boyce	175
Mr. Plotkin	179
Mr. Eisenhammer	182
Ms. Holmes-Gen	183
Mr. Chandler	186
Ms. Hoyos	193
Ms. Houston	193
Mr. Malins	197
Mr. Costantino	199
Mr. Harris	200
Mr. Shears	203
Discussion	204
Motion	208
Vote	228
Item 11-10-3	
Chairperson Nichols	229
Executive Officer Goldstene	231
Staff Presentation	232
Mr. Sadredin	241
Mr. Hogo	244
Ms. McCree	246
Mr. Dolk	248

INDEX CONTINUED

	<u>PAGE</u>
Mr. Watt	250
Mr. Loutzenhiser	252
Motion	258
Vote	259
Item 11-10-4	
Chairperson Nichols	259
Executive Officer Goldstene	260
Staff Presentation	261
Mr. McKnight	267
Mr. Riechers	269
Motion	272
Vote	272
Public Comment	
Mr. Larrea	274
Mr. Percival	277
Mr. Lewis	280
Adjournment	287
Reporter's Certificate	288

PROCEEDINGS

1
2 CHAIRPERSON NICHOLS: Before we actually begin,
3 we will start as we usually do by saying the Pledge of
4 Allegiance. If you'll all stand and join me, please.

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

7 CHAIRPERSON NICHOLS: And now before the Clerk
8 calls the roll, it's my great pleasure to swear in our
9 newest Board member. We are delighted to have a complete
10 Board. We are grateful to the Governor for having found
11 us a doctor from the San Joaquin Valley who was able and
12 willing to come and serve with us.

13 And so I'm going to ask him to stand and join me
14 here in the center, and then I will officially swear him
15 in and then he can sign the oath.

16 (Whereupon Mr. Sherriffs was duly sworn.)

17 CHAIRPERSON NICHOLS: That's it. That's the same
18 oath that everybody takes in the State of California
19 takes, from the Governor on. Welcome.

20 (Applause)

21 BOARD MEMBER SHERRIFFS: Thank you.

22 CHAIRPERSON NICHOLS: A few general
23 announcements. I think these are pretty much known to
24 everybody who's ever been to one of our meetings, but just
25 to repeat them anyway.

1 Anyone who wishes to testify and hasn't signed up
2 online should fill out a request to speak card. Those are
3 available in the lobby outside the auditorium. And please
4 turn it into the Clerk of the Board.

5 If you've already signed up online, you don't
6 need to sign up again. But you do need to check in with
7 the Clerk anyway, or your name will be removed from the
8 speaker's list.

9 We will be imposing a three-minute time limit,
10 and we'll stick so that, unless things get to be so
11 repetitive that we end up feeling like we have to limit
12 the time even further, but I don't think that's going to
13 be the case.

14 We do appreciate it if when you come up to the
15 podium if you give your first and last name and if you can
16 put your testimony into your own words, especially if you
17 submitted written testimony in advance. It's just much
18 easier for the Board to follow you if you go straight to
19 your main points. And it will use your time more
20 effectively as well.

21 Your written testimony will be entered into the
22 record. And I can assure you that the Board members do
23 read the testimony they receive.

24 For safety reasons, we need to point out the
25 exits at the rear of the room and to the sides of the

1 podium. In the event of a fire alarm, we are required to
2 evacuate this room immediately, go downstairs and out of
3 the building until we hear the all-clear signal that
4 allows us to come back into the room.

5 And finally -- and this is not part of the usual
6 monthly remarks -- I want to take a couple of minutes here
7 to recognize tremendous contributions to public health and
8 to the ARB's clean air mission: Bob Fletcher and Bob
9 Jenne, two of our long-time staff members who are going to
10 be retiring at the end of this year. Over the past 34
11 years, Bob Fletcher has shepherded countless items to the
12 Board, with each item reflecting his personal commitment
13 to quality science and a truly interactive engagement with
14 stakeholders.

15 Bob was a staff engineer at ARB during my first
16 term as Chairman of this Board, and he's gotten a lot
17 older. I haven't. I don't know how that happened. But I
18 have gotten to know him much better during this time
19 around, as he has guided our very significant programs on
20 fuels, diesel risk reduction, energy, and most recently,
21 climate change.

22 I have personally appreciated his counsel on many
23 of the most complex issues facing the Board as well as his
24 unflagging good humor. He's an amazing cheerful person.

25 Bob has always acted with integrity and

1 maintained his focus on what's important in working
2 through the controversial subjects. He's well known for
3 his pragmatism for pushing for public health protection,
4 balanced by a willingness to address real world challenges
5 of implementation.

6 I'm also willing to share this opportunity with
7 others who may wish to add a comment or two about Bob
8 before we wish him well when he retires at the end of this
9 month. And I will start with my colleague to my immediate
10 right, because I know she's known Bob longer than anyone.

11 EXECUTIVE OFFICER GOLDSTONE: Chairman Nichols,
12 we have to take the roll. We haven't taken the roll yet.

13 CHAIRPERSON NICHOLS: Oh, for Pete's sake. Do we
14 really have to take the roll?

15 EXECUTIVE OFFICER GOLDSTONE: For the record, we
16 do.

17 CHAIRPERSON NICHOLS: All right. Go ahead. Take
18 the roll.

19 BOARD CLERK MORENCY: Dr. Balmes?

20 BOARD MEMBER BALMES: Here.

21 BOARD CLERK MORENCY: Ms. Berg?

22 BOARD MEMBER BERG: Here.

23 BOARD CLERK MORENCY: Ms. D'Adamo?

24 BOARD MEMBER D'ADAMO: Here.

25 BOARD CLERK MORENCY: Mr. De La Torre?

1 Mayor Loveridge?

2 BOARD MEMBER LOVERIDGE: Here.

3 BOARD CLERK MORENCY: Mrs. Riordan?

4 BOARD MEMBER RIORDAN: Here.

5 BOARD CLERK MORENCY: Supervisor Roberts?

6 Dr. Sherriffs?

7 BOARD MEMBER SHERRIFFS: Here.

8 BOARD CLERK MORENCY: Professor Sperling?

9 BOARD MEMBER SPERLING: Here.

10 BOARD CLERK MORENCY: Supervisor Yeager?

11 Chairman Nichols.

12 CHAIRPERSON NICHOLS: Here.

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

15 CHAIRPERSON NICHOLS: Thank you. Have to do it
16 right.

17 So I'm going to turn the mike over to Mrs.
18 Riordan.

19 BOARD MEMBER RIORDAN: Thank you.

20 Let me just say that working with Bob Fletcher
21 has been a real pleasure for me for over 20 years, and I
22 want to thank you for the outreach that you've done over
23 the years. Many people will know you for the technical
24 things that you've led, but I know you as one who was not
25 afraid to go into some community meetings and groups and

1 really be wonderfully calm and collected and thoughtful
2 and taking the message of the ARB and what we are doing
3 for cleaning up the air in California. So I thank you for
4 those many public contacts that you've made on our behalf
5 all these years. Thank you, Bob.

6 CHAIRPERSON NICHOLS: Yes, Ms. D'Adamo and then
7 Ms. Berg.

8 BOARD MEMBER D'ADAMO: Well, I have to just
9 reiterate what Madam Chair and Mrs. Riordan have said:
10 Calm, collectible. And the result is I feel in my own
11 personal case is that you give me the confidence, the
12 confidence we need to make the tough decisions. So thank
13 you very much. I've been in a lot of those tough meetings
14 with you as well and really do appreciate all that you've
15 done.

16 CHAIRPERSON NICHOLS: Great.

17 BOARD MEMBER BERG: Thank you.

18 I will also ditto, because I've also been in some
19 of those very tough meetings and have been extremely
20 impressed, not only by your leadership, but by the way you
21 also mentored and brought up other people. And I really
22 appreciated that. And I appreciate your accessibility to
23 me personally, to explain where maybe I wasn't getting it
24 right, but also on the times where you listened. And I
25 really appreciated that. So it was a pressure to work

1 with you.

2 And I'm sure I speak on behalf, we all wish you
3 the very best. And I hope we get you back on a few
4 projects, I'm sure.

5 CHAIRPERSON NICHOLS: Yes, Dr. Sperling.

6 BOARD MEMBER SPERLING: I'll just add to all that
7 by saying, given today's event, this is one of Bob's
8 shining moments I think because he's the one that took
9 this whole low-carbon fuel standard which was a amorphous
10 concept and put together a large team of people, managed
11 it, made good sense out of it. And working with all the
12 stakeholders and turned it over to Richard Corey now. In
13 great shape. So I think today is especially momentous and
14 good time to acknowledge that.

15 Thanks, Bob.

16 CHAIRPERSON NICHOLS: When Bob stepped into the
17 roll, he had some big shoes to fill, because his
18 predecessor had been there for such a long time. But he's
19 managed to slip in and out a little quicker than the last
20 incumbent in this job. I hope we're not setting a trend
21 here. I would hate to see that happen.

22 Bob, on behalf of all the Board, we want to thank
23 you for the significant role that you've played in making
24 ARB a world leader in air pollution control. And we all
25 wish you a very long and fulfilling retirement.

1 Before I let you saying anything, though, I have
2 to acknowledge another retirement that's occurring this
3 month, because the person who I'm referring to I think is
4 not with us. But our outgoing Assistant Chief Counsel bob
5 Jenne, who served for a period of time as the Acting Chief
6 Counsel, is also going to be leaving us at the end of the
7 year. Bob was with the Office of Legal Affairs since
8 December of 1988 and made very significant contributions
9 to this agency throughout his 23 years service with ARB.

10 I'm particularly mindful as a lawyer myself of
11 the difficult roll that lawyers often have to play in an
12 agency like ours in advising and giving staff guidance
13 without giving them bad news in a way that makes them not
14 want to come and get advice at all. It's a delicate
15 balance that you've got to be constantly marketing your
16 services to your clients who may or may not always
17 appreciate them, but know that they need them at the time.
18 And Bob was terrifically effective, particularly in
19 shepherding through some of the consumer products
20 regulations, some of our greenhouse gas measures, as well
21 as dealing with some of the trickier issues with the
22 Office of Administrative Law. He's really an ultimate
23 professional with a terrific sense of humor and a balance
24 between his personal and professional lives.

25 So I'm very glad to announce he is going to be

1 continuing to give us his counsel as a retired annuitant.
2 We want to thank him as well, because he's about to take
3 off apparently for some sort of a trek around the country
4 in a clean diesel van. So we want to make sure he comes
5 back safe and sound.

6 Now, Bob, I understand you've asked for time to
7 address the Board. So you have the microphone, but please
8 limit your remarks to three minutes.

9 (Laughter)

10 DEPUTY EXECUTIVE OFFICER FLETCHER: I actually
11 wrote that part, the three-minute part.

12 But this is actually a little harder than I
13 thought it was going to be. But the really kind words are
14 very much appreciated, and it's just been really, really a
15 pleasure. I'll do my best to keep it to three minutes.

16 But for the better part of my life, since 1975,
17 the Air Resources Board really has been my second home.
18 Throughout this time, I've had the pleasure of working on
19 many, many different projects, from quality assurance for
20 air monitoring to fuels and most recently climate change.

21 But more importantly, I've had the pleasure of
22 working with an enormously talented group of individuals
23 both within the Air Resources Board and our sister
24 agencies, as well as our stakeholders, many of them who
25 are in the audience today.

1 But I cannot describe how much I enjoy working
2 with the Executive staff members here. It's just really
3 truly an awesome team.

4 And I have really been honored to have the
5 opportunity to represent staff in front of this Board.
6 Under the outstanding vision and leadership of our
7 Chairman, the members of this Board are truly outstanding.
8 You're insightful. You ask incredibly difficult
9 questions, and you make us better staff by holding us
10 accountable for our findings and recommendations. It is
11 incredibly satisfying to know you will engage in
12 thoughtful discussion with us and listen to what we have
13 to say.

14 You don't always accept our recommendations, but
15 we always believe that you have acted in an informed,
16 responsible, and independent manner as you should.

17 I regret that I will not get to know our two new
18 Board members, as I'm quite certain they will continue the
19 Board's tradition of excellence.

20 I'm also very, very proud of the Board's
21 accomplishment throughout the years, from air quality to
22 air toxic, and now climate change, California has
23 consistently led the nation and often the world in
24 adopting innovative and effective programs that have
25 either been adopted directly or pave the way for similar

1 actions. The examples are many, and I won't even attempt
2 to list them here. But as staff, it is enormously
3 satisfying to know what you do on a daily basis actually
4 matters.

5 I do look forward to continuing to contribute to
6 the Board's mission, although in a substantially like Mike
7 capacity. I'm sure this will ease my transition to full
8 retirement. However, I'll certainly miss the day-to-day
9 activity at the Board.

10 I do want to acknowledge my wife Susan who's
11 sitting over here and will wave. After all these years, I
12 thought it was about time she actually came to a Board
13 meeting in person, although I don't expect her to last
14 here very long.

15 She's been incredibly supporting and
16 understanding of my passion for this effort. I think we
17 both agree it's just time for me to say, "Yes, I can play
18 golf." Instead of, "No, sorry, honey. Must work."

19 I'd also like to acknowledge Mr. Corey, who will
20 be my successor as a Deputy here. I'm quite confident
21 he's going to do an outstanding job in his training over
22 the last couple years in understanding the program is
23 going to serve him well.

24 In closing, thanks for the opportunity. It's
25 been a real pleasure. Now on with the agenda and let the

1 fun begin. Thank you.

2 (Applause)

3 CHAIRPERSON NICHOLS: Well, let the fun begin.

4 Today's agenda has two separate items related to
5 the low-carbon fuel standard. The first of the two items
6 today is an update of the implementation of the low-carbon
7 fuel standard, including the results of the first formal
8 review of the standard. It's a non-regulatory item, and
9 no specific action is required or will be taken by the
10 Board.

11 The second low-carbon fuel standard agenda item
12 is regulatory, and this item staff will be presenting
13 various amendments to the regulation based on their
14 ongoing review.

15 And I again want to remind folks we're going to
16 be taking separate testimony on each of these two agenda
17 items.

18 I think everybody knows that the low-carbon fuel
19 standard is one of the essential elements of our overall
20 strategy to reduce greenhouse gas emissions and to meet
21 the targets that were established by AB 32. The
22 regulation requires two formal reviews of the LCFS
23 program, the first of which is being presented today.

24 The regulation also requires the Executive
25 Officer to convene an Advisory Panel to assist with the

1 staff's review. I understand that the Advisory Panel had
2 its last meeting a few weeks ago, and the final draft of
3 the review report was recently released. I'm looking
4 forward to hearing about the activities of the panel and
5 the staff's assessment of the LCFS Program in its first
6 true year of operation when reducing carbon reductions.

7 I'm also interested in hearing about the staff's
8 efforts to consider provisions to address sustainability
9 provisions for this standard, which is an issue that has
10 been raised from the beginning.

11 I also note that we have Mr. Rob Ogelsby and Mr.
12 Pat Perez here today representing the California Energy
13 Commission. Clearly, our partnership on this issue and
14 many others, for that matter, is critical to the
15 implementation of a sound transportation fuels policy and
16 a sound energy policy for the State.

17 So I want to welcome them in particular and thank
18 them for participating in today's meeting.

19 Now, Mr. Goldstene, will you please begin the
20 staff's presentation.

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

23 The Board approved the low-carbon fuel standard
24 in April 2009. This year was the first year of full
25 implementation and last year was a reporting only year.

1 Based on this first full year of implementation,
2 the regulation appears to be working as intended. Fuel
3 providers are in compliance to date and credits are being
4 generated.

5 We are also seeing the types of innovations that
6 we anticipated. However, there are still some
7 uncertainties with program compliance in the latter years
8 of the program. While there are scenarios that we can
9 construct that demonstrate there are plausible pathways
10 for compliance, there are other scenarios that can be
11 developed that show compliance will be more difficult and
12 potentially costly.

13 Part of the uncertainty rests on whether very
14 low-carbon intensity alternative fuels in vehicles will be
15 available in sufficient quantities.

16 You'll hear today from stakeholders who will
17 express concerns about the future as well as stakeholders
18 who are optimistic about the future and the investments
19 and innovation that's occurring.

20 It's very important that the Board stay the
21 course on the LCFS to ensure that regulatory certainty
22 exists to provide the proper market signal to alternative
23 fuel and vehicle providers and investors.

24 The design of the LCFS is such that ongoing
25 monitoring will provide adequate opportunity to adjust the

1 program, if needed.

2 Staff is continuing to work with stakeholders and
3 our sister agencies to look at various flexible compliance
4 mechanisms and will continue to update the Board annually
5 on progress.

6 Today's presentation provides the results of the
7 first of two program reviews required by the regulation as
8 well as a general overview of the program status. We have
9 several members of the Advisory Panel here today that plan
10 to testify, and we appreciate their efforts because it's
11 been a significant commitment of time and energy.

12 Following the staff presentation, Mr. Ogelsby,
13 who's the Executive Director of the California Energy
14 Commission, will provide some comments on the program from
15 the CEC perspective.

16 As Chairman Nichols indicated, our partnership
17 with the CEC staff and management is a very important
18 aspect of the LCFS programming implementation.

19 Now I'll have Lex Mitchell of our Stationary
20 Source Division begin the staff presentation.

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

23 MR. MITCHELL: Thank you, Mr. Goldstene.

24 Good morning, Chairman Nichols and members of the
25 Board.

1 --o0o--

2 MR. MITCHELL: I will start the presentation with
3 a little background on the LCFS. And then I will
4 transition to an update on the formal LCFS program review.
5 I will complete the presentation with an update on ARB's
6 sustainability activities.

7 --o0o--

8 MR. MITCHELL: As a reminder, the transportation
9 sector is a large and increasing contributor to greenhouse
10 gas emissions. Transportation emissions are expected to
11 account for about 40 percent of total GHG emissions in
12 California by 2020. Therefore, large reductions in GHG
13 emissions must be made in order to offset expected growth.

14 --o0o--

15 MR. MITCHELL: To address these emissions, the
16 Board has adopted a range of programs, including the LCFS,
17 that work collectively to reduce to GHG emissions from the
18 transportation sector. Some of the different GHG programs
19 that ARB has adopted or plans to adopt in the near future
20 are presented in this slide.

21 --o0o--

22 MR. MITCHELL: The LCFS alone accounts for 15
23 million metric tons of GHG emission reduction, equivalent
24 to 13 percent of the reductions mandated by AB 32. It is
25 the third largest measure identified in terms of GHG

1 reductions.

2 --o0o--

3 MR. MITCHELL: In addition to reducing GHG
4 emissions, the LCFS objectives include spurring innovation
5 and investment to transform the California fuel market
6 into a low-carbon fuel market.

7 The LCFS was developed as a durable framework for
8 reducing GHG emissions from fuels that could serve as a
9 model for other jurisdictions. If more jurisdictions
10 adopt LCFS-like policies, it strengthens the GHG
11 reductions of the LCFS.

12 --o0o--

13 MR. MITCHELL: The primary requirement of the
14 LCFS is to reduce the carbon intensity of transportation
15 fuels. Carbon intensity is the metric by which life cycle
16 GHG emissions of the fuel are measured and is sometimes
17 called the currency of the LCFS.

18 It is important to note that the LCFS is
19 performance-based and remains fuel neutral. This lets the
20 market choose how to reduce the carbon intensity of
21 California's transportation fuels by 20 percent by 2020.

22 --o0o--

23 MR. MITCHELL: The LCFS is structured such that
24 most of the required carbon intensity reductions occur in
25 the latter part of the program.

1 The first five percent reduction in carbon
2 intensity occurs over the first seven years. Whereas, the
3 final five percent reduction in carbon intensity occurs
4 over the latter three years.

5 This slide shows the compliance curve for
6 gasoline and fuels that replace gasoline. The compliance
7 curve for diesel and fuels that replace diesel is largely
8 similar.

9 --o0o--

10 MR. MITCHELL: Carbon intensity accounts for all
11 of the GHGs emitted during the life cycle of the fuel,
12 including direct and indirect emissions. Each fuel
13 pathway has a unique carbon intensity which can vary
14 widely based on feedstocks and other key factors.

15 Credits are generated by producing or importing
16 fuels that are lower carbon intensity than the yearly
17 targets. Deficits are generated by producing or importing
18 fuels that are higher carbon intensity of yearly targets.
19 As a result, it is important to properly account for the
20 carbon intensity to ensure the right mark signal is sent.

21 --o0o--

22 MR. MITCHELL: This slide shows the factors that
23 are considered while performing life cycle assessment of
24 the fuel, in this case, corn-based ethanol. Each step in
25 this slide represents a fuel production step, including

1 land use charge and coproducts. Please note that this
2 slide contains numerical values for illustrative purposes
3 only.

4 --o0o--

5 MR. MITCHELL: An important aspect of the LCFS is
6 the question: Who is regulated? The LCFS includes the
7 concept of regulated parties. This clearly defines who is
8 and is not subject to the regulation.

9 The LCFS affects primarily providers of petroleum
10 fuels and biofuels. The fuel producer is usually the
11 regulated party. The importer of the fuel is the
12 regulated party if the fuel is produced out of state.

13 Producers of certain fuels are exempt and may
14 voluntarily opt into the regulation in order to receive
15 credits. Credit trading in the LCFS occurs between
16 regulated parties.

17 Now I will move on to the LCFS program review
18 update.

19 --o0o--

20 MR. MITCHELL: Although the program is in its
21 early years, the LCFS is working as designed. This is
22 evidenced by the fact that excess credits are being
23 generated and the amount of excess credit generation has
24 increased steadily each quarter this year.

25 Fuel providers are beginning to make alternative

1 fuels an increasing part of their product slate and have
2 worked to more than double the number of fuel pathways in
3 the regulation.

4 It should be noted that this year is the first
5 year that reduction in carbon intensity has been required,
6 as last year was a reporting only year.

7 --o0o--

8 MR. MITCHELL: The LCFS regulation requires staff
9 to complete two formal program reviews in consultation
10 with an Advisory Panel. The two program reviews are to be
11 presented to the Board by 2012 and 2015. The program
12 reviews are required to cover a number of topics in order
13 to monitor the ongoing implementation of the LCFS. At the
14 discretion of staff and the Advisory Panel, additional
15 topics can be added in order to enhance the review.

16 --o0o--

17 MR. MITCHELL: As required by the regulation, the
18 Executive Officer established an Advisory Panel to
19 participate in the program review. A solicitation for
20 applications for the Advisory Panel was sent out by list
21 serve and advertised on the ARB website.

22 The Advisory Panel consisted of 39 panelists who
23 were selected out of a pool of applicants based on
24 qualifications and area of representation. The panel
25 represented a broad range of interests, as shown on this

1 slide.

2 --o0o--

3 MR. MITCHELL: The Advisory Panel was formed to
4 assist staff in completing the LCFS program review by
5 offering perspective from their areas of expertise, as
6 well as commenting on and contributing to the review
7 report.

8 Panelists were also frequently consulted on an
9 individual basis. Some panelists conducted independent
10 analyses geared specifically at contributing to the
11 review.

12 --o0o--

13 MR. MITCHELL: The review was conducted in a
14 public process. As you can see by the schedule presented
15 here, there were eight meetings conducted prior to this
16 Board meeting, all of which were open to the public and
17 announced by list serve. At these meetings, specific time
18 was lent to public comments.

19 --o0o--

20 MR. MITCHELL: Panel discussions covered all the
21 topics specified in the LCFS regulation, as well as two
22 topics suggested by panelists: The treatment of high
23 carbon intensity crude oil under the LCFS and credit
24 trading. Staff made a concerted effort to ensure that the
25 report captured the range of opinions expressed during the

1 panel discussions.

2 --o0o--

3 MR. MITCHELL: Several major themes emerged from
4 the panel discussions. One of these themes recognize's
5 that the LCFS is in its early years. At this early stage,
6 the market is responding to the signal of the LCFS.
7 However, it is likely that the next generation of
8 low-carbon fuels will be needed in order to meet the
9 targets in the latter years of the program. Many
10 panelists requested that ARB continue to monitor the
11 developing fuels market, which we plan to do.

12 --o0o--

13 MR. MITCHELL: Investments in biofuels have
14 increased over the last several years. This graph shows
15 North American investments in advanced biofuels since
16 2007.

17 The market signal sent by the LCFS and other
18 alternative fuel incentives has been heard by investors
19 and they have responded. In order to continue this
20 investment response, it is essential that the market
21 signal of this program remains strong.

22 The program review that we conducted outlined
23 several concepts that could maintain the strong market
24 signal through enhanced regulatory certainty and
25 additional support for a transparent credit market. The

1 regulatory amendments to be presented later also contain
2 provisions that will enhance regulatory certainty.

3 --o0o--

4 MR. MITCHELL: This slide is a summary of some of
5 the major biofuel investments that have been made in
6 California. As you can see, there is a lot of capital
7 flowing to the California biofuel industry. And much of
8 this is to help meet the demands of the LCFS.

9 --o0o--

10 MR. MITCHELL: Another theme that came out of the
11 panel discussions was the need to maintain and enhance
12 regulatory certainty. Panelists expressed that in order
13 to maintain and increase the amount of investment in
14 low-carbon fuels, there must be certainty in the
15 investors' minds that the regulation will be strong enough
16 to lead to returns on investment.

17 Suggestions by panelists for how to send a
18 regulatory signal included: Strengthening and expanding
19 the credit market, as well as introducing a flexible
20 compliance mechanism. Although the program review found
21 that no change in course is needed at this point, a well
22 designed flexible compliance mechanism may provide a path
23 toward regulatory compliance if regulated parties
24 experience temporary fuel supply disruptions.

25 --o0o--

1 MR. MITCHELL: The work of staff and the panel
2 ultimately led to a final draft program review report
3 issued in early December. While staff considered public
4 and panel input, the final draft report represents ARB's
5 staff analysis of the implementation of the LCFS so far.

6 The report does attempt to capture the range of
7 input, opinions, and discussions that occurred during the
8 Advisory Panel meetings. Some of the important areas of
9 analysis in the report are shown in this slide. I will go
10 into further detail on some of these in the next few
11 slides.

12 --o0o--

13 MR. MITCHELL: The report includes an analysis of
14 the supply and availability of the fuels needed to comply
15 with the LCFS, including the challenges to bringing these
16 fuels to market. This analysis concludes that although
17 some fuels, such as cellulosic ethanol are not coming to
18 market as quickly as expected, other fuels are coming to
19 market more quickly than expected. Combined with the
20 continued marginal carbon intensity improvements made by
21 conventional ethanol, there are a range of options
22 available to regulated parties to meet the requirements.
23 There appear to be sufficient supplies of low-carbon fuels
24 in the near term. Continued transformative innovations
25 are required to meet the long-term goals of the LCFS.

1 --o0o--

2 MR. MITCHELL: The report includes an assessment
3 of 16 illustrative scenarios, 11 gasoline scenarios, and
4 five diesel scenarios. These scenarios were built around
5 the concept of finding multiple paths that lead to
6 compliance with the LCFS and were not intended to meet
7 projections. These scenarios show what compliance with
8 the LCFS would look like for different what-if situations.

9 For example, what if cellulosic ethanol is lower
10 than projected?

11 Or what if FFVs are readily available?

12 Some of these scenarios rely on the use of banked
13 credits to meet the standards in the latter years. The
14 conclusions of these illustrative scenarios is that they
15 showed multiple potential paths to compliance with the
16 LCFS.

17 --o0o--

18 MR. MITCHELL: The report also includes an
19 economic assessment. Staff updated the 2009 economic
20 analysis. Updates included: Loss of tax credits and
21 tariffs, higher crude prices, and change in feedstock
22 costs.

23 The assessment did not take into account carbon
24 intensity based market effects.

25 The assessment was based on the 16 illustrative

1 scenarios. This work shows there are negligible impacts
2 in the gasoline scenarios and no near-term impacts in the
3 diesel scenarios. The economic work on the LCFS is
4 ongoing and expected to continue in 2012, including
5 discussions with stakeholders. We will work especially
6 close with the CEC on this analysis.

7 --o0o--

8 MR. MITCHELL: The report also includes an
9 environmental assessment. Based on continuous monitoring,
10 staff found that there have been no changes since the
11 environmental assessment completed in the initial LCFS
12 staff report.

13 Since 2009, staff has completed guidance on
14 biorefinery siting to help air districts deal with the
15 effects of the LCFS and other alternative fuel incentives.

16 Going forward, ARB plans to continue conducting
17 multi-media evaluations of emerging fuels and working on
18 developing sustainability provisions.

19 --o0o--

20 MR. MITCHELL: Other topics included in the
21 report are listed on this slide. Amendments to the high
22 carbon intensity crude oil provisions and credit trading
23 provisions are being proposed in the next item.

24 Life cycle analysis updates will be brought to
25 the Board next year. Staff will continue to monitor

1 developing LCFS activities in other jurisdictions.

2 --o0o--

3 MR. MITCHELL: Although the LCFS is still in its
4 early stages, the review indicates that the program is
5 working as designed. This is evidenced in part by the
6 generation of excess credits. However, further
7 refinements to the regulation can help regulated parties
8 and ensure success.

9 Additionally, communicating regulatory certainty
10 to investors may be essential to the long-term success of
11 the program as this will help spur investments in the next
12 generation of low carbon fuels.

13 --o0o--

14 MR. MITCHELL: Following the Board meeting, staff
15 expects to finalize the formal program review report.
16 Specific items that we expect to continue working on
17 include: Discussions on flexible compliance mechanisms,
18 credit market expansion, and our economic assessment.

19 Going forward with the LCFS, we expect to perform
20 informal periodic reviews of the program and provide
21 annual updates to the Board. These reviews will include
22 discussions with stakeholders and panelists and will
23 include close work with the CEC.

24 The next few slides present an update on our
25 efforts to address sustainability.

1 --o0o--

2 MR. MITCHELL: In addition to the LCFS program
3 review, I'm an presenting an update on our ongoing
4 sustainability activities.

5 As you may recall, when the Board approved the
6 LCFS in 2009, it directed staff to develop sustainability
7 provisions, recognizing that alternative fuels should be
8 made in a sustainable and responsible manner. The common
9 definition of sustainability is shown here and there are
10 typically three major components of sustainability:
11 Environmental, social, and economic sustainability.

12 --o0o--

13 MR. MITCHELL: Pursuant to the Board's direction,
14 staff developed a sustainability work plan and transmitted
15 the plan to the Board in May of 2010. Further, we
16 established a work group consisting of a broad spectrum of
17 stakeholders to help develop sustainability provisions.
18 The work group has drafted core principles and is
19 developing criteria and indicators by which sustainability
20 can be measured.

21 --o0o--

22 MR. MITCHELL: The sustainability provisions will
23 likely be voluntary to avoid trade and commerce issues.
24 However, staff is evaluating some degree of reporting by
25 regulated parties on the sources of their alternative

1 fuels.

2 Because alternative fuels can come to California
3 from around the globe, third-party certification can play
4 a key role in determining sustainability. Examples of
5 third-party certifiers are: The Round Table for
6 Sustainable Biofuels and the Forest Stewardship Counsel.

7 One of the key topics that the work group has
8 discussed is the role of incentives. There is a cost
9 associated with getting certified, and sustainable
10 practices should be rewarded. The work group continues to
11 discuss these topics.

12 --o0o--

13 MR. MITCHELL: The work group has also made a
14 first pass through the environmental sustainability
15 principles and is currently working on social principles.
16 The topics addressed in each of these areas are shown on
17 this slide.

18 --o0o--

19 MR. MITCHELL: The next steps in our
20 sustainability efforts are to complete the first pass
21 through the social sustainability component and then begin
22 addressing economic sustainability, as well as other items
23 identified in this slide.

24 We plan to return to the Board with
25 recommendations in about a year. The provisions could

1 take the form of policies, regulatory language, or both.

2 --o0o--

3 MR. MITCHELL: In summary, the LCFS is working as
4 designed, and ongoing monitoring will take place to ensure
5 its successful implementation.

6 No Board action is necessary on either the
7 program review or the sustainability update.

8 This concludes my presentation. I will now turn
9 the mike over to Rob Ogelsby of the CEC.

10 CHAIRPERSON NICHOLS: Welcome.

11 CEC EXECUTIVE DIRECTOR OGELSBY: Good morning,
12 Chairman Nichols and Board members. It's a pleasure to be
13 here today. My name is Rob Ogelsby, Executive Director
14 the California Energy Commission.

15 And before I proceed with the testimony, I, too,
16 would like to offer my congratulations and best wishes to
17 Bob Fletcher and Tom Jennings. I had the pleasure of
18 working with them for many years here at the Air Resources
19 Board and well deserved and a tremendous record of service
20 for the Air Resources Board, air quality, and global
21 warming over the years. So congratulations and best
22 wishes for that.

23 First, I'd like to echo ARB staff's discussion of
24 the importance of California's low carbon fuel standard as
25 a pathway for reducing greenhouse gas emissions while

1 diversifying our fuel supplies. When fully implemented,
2 the carbon intensity of California's transportation fuels
3 will provide multiple benefits, ranging from lower carbon
4 emissions and improved air quality, to creation and
5 expansion of California's clean energy infrastructure and
6 advanced vehicle industry.

7 Over the years, the Energy Commission has
8 developed a solid reputation as one of the world's leaders
9 in energy forecasts and analysis. These are used by a
10 wide variety of public and private stakeholders and
11 underlie California's efforts to develop effective energy
12 policy, conserve natural resources, protect the
13 environment, and promote public health and safety, while
14 ensuring adequate energy supplies and economic growth.

15 Energy Commission staff worked closely with our
16 partners at the ARB and other State agencies, alternative
17 energy, and petroleum industries, and numerous other
18 valued stakeholders to assess a wide range of possible
19 future outlooks. One of the Energy Commission's strengths
20 has been our ability to provide a large range of
21 projections based on a range of assumptions and variables.

22 With regard to the low carbon fuel standard,
23 Energy Commission staff is still working with the ARB and
24 others to analyze the impacts and potential costs of the
25 program. Unfortunately, some components of the low carbon

1 fuel standard are selectively quoting Energy Commission
2 staff work on one of several cases and studies without
3 context or qualification. It is impossible to predict
4 with 100 percent certainty what various fuels will cost in
5 the future. That is why the CEC analysis analyzes a
6 number of different possible scenarios. Investment and
7 innovation have huge impacts on the future. Who could
8 have predicted that people could afford and would have
9 available more computing power in a handheld phone than
10 one could find in a main frame computer that occupied an
11 entire room.

12 The Energy Commission is also working hard to
13 help support alternative transportation technologies.
14 Through our alternative and renewable fuel and vehicle
15 technology program, the Energy Commission has awarded more
16 than \$350 million to support activities that will develop
17 and deploy clean, efficient, and lower carbon alternative
18 fuels and technologies.

19 The Energy Commission will invest another 400
20 million over the next four years. This funding has been
21 critical in attracting private venture capital to
22 California. A recent NEXT 10 study showed California took
23 in \$840 million in venture capital investment in the
24 EV-related sectors, representing 80 percent of the U.S.
25 and 60 percent of global venture capital investment in

1 these sectors.

2 These investments will support the increasing
3 demand for alternative transportation fuels and vehicles.
4 The Energy Commission has funded approximately 4,300
5 charging stations for electric drive vehicles.

6 Firm long-term public policy, such as a low
7 carbon fuel standard, provide the market certainty needed
8 to continue to encourage these kinds of investments in
9 California. These policies are essential for building
10 financial confidence of lenders to support cleaner
11 home-grown technologies and in-state fuel production to
12 achieve our energy, environmental, and energy security
13 objectives. The low carbon fuel standard provides the
14 right market signals for investors.

15 In closing, we support the flexibility ARB has
16 built into the low carbon fuel standard program. We
17 applaud ARB's establishment of the Low Carbon Fuel
18 Standard Advisory Panel and are committed to continue
19 working with our long-standing partners at ARB, along with
20 a host of other stakeholders, to ensure successful
21 implementation of the low carbon fuel standard.

22 I'd also like to point out that I have Pat Perez,
23 our Deputy Director for fuels and transportation will be
24 here for the duration of the two items to respond to any
25 questions.

1 CHAIRPERSON NICHOLS: Thank you very much.
2 Thanks for coming to join us here this morning and for
3 your support and ongoing partnership. I think we'll be
4 talking further about all of what needs to be done as we
5 move forward in terms of improving the level of analysis
6 that we're able to do on this rule. But your presence
7 here today is a very strong signal of our collaboration,
8 and we really appreciate it. Thank you.

9 I think we turn now to public testimony; is that
10 correct?

11 Are we going to be projecting a list of the
12 witnesses up on the screen there? I'm not quite sure. We
13 sometimes do that.

14 Well, in any event, we have 36 people who signed
15 up to speak here. And we're going to give you all three
16 minutes. So let's get started.

17 The first is Duncan Macleod, followed by Bob
18 Epstein.

19 MR. MACLEOD: Madam Chairman and members of the
20 Board, thank you for the opportunity to speak today. I'd
21 like to comment on the alternative or the flexible
22 compliance mechanism.

23 And my name is Duncan Macleod, and I'm the
24 President and CEO of Iogen Energy in Canada, which is a
25 world leading biotechnology firm specializing in cellulose

1 ethanol.

2 I'm here on behalf of the Iogen Corporation,
3 which owns 50 percent of the Iogen Energy. And the other
4 50 percent is owned by Shell.

5 Iogen Energy has had a large demonstration plant
6 in Ottawa, Canada producing cellulose ethanol from waste
7 straw since 2004. And we're working on a much larger
8 plant with Shell in central Canada.

9 I worked for over years in Shell across the
10 global, of which ten were in renewables. And apart from
11 biofuels, that included the hydrogen fuel cells, and I was
12 privileged to meet some of you here a few years ago. But
13 I retired from Shell two years ago.

14 I wanted to commend the ARB for putting in place
15 the forward-thinking low carbon fuel standard. And Iogen
16 is here today to support the LCFS and I believe a
17 technology neutral standard that drives the future of
18 innovation in transport energy is of critical importance
19 to California and U.S. and the world. But because I want
20 the LCFS to be successful, I'm concerned that the private
21 sector remains committed and takes action. And investors
22 don't worry about regulatory uncertainty, real or
23 perceived. Other risks, such as technology, market
24 construction, et cetera, they can handle.

25 When it comes to the LCFS, investors who have

1 been asked sometimes to commit hundreds of millions of
2 dollar are asking questions like, "What will the market
3 pay for LCFS credits? Who will buy LCFS credits? What
4 will happen if the market supply of low carbon fuels is
5 insufficient to meet the LCFS schedule? And what will
6 happen if a regulated party finds themselves falling short
7 at the end of the year and there is no additional low
8 carbon fuel and no additional credits available in the
9 market?"

10 Unfortunately, this type of regulatory
11 uncertainty triggers a reinforcing negative cycle whereby
12 uncertainty about market opportunity leads to
13 under-investment, which leads to under-supply, which leads
14 to under-performance and speculation around reducing
15 stringency of standard, which leads back to uncertainty
16 about the market opportunity.

17 Now, I noted earlier here that a subgroup of the
18 LCFS Advisory Panel are recommending to you that the LCFS
19 be enhanced by adding a mechanism to address how the ARB
20 will respond in the event that market supplies of low
21 carbon fuel and LCFS credits are insufficient to enable
22 full compliance. This subgroup has also suggested some
23 specific designs for this mechanism, which are clear and
24 predictable. My belief --

25 CHAIRPERSON NICHOLS: Sorry. That's your three

1 minutes.

2 MR. MACLEOD: So I'd just like to finish
3 therefore and say that I think this is the kind of
4 mechanism that will ensure stability for the long term and
5 I recommend you go forward and study it. Thank you.

6 CHAIRPERSON NICHOLS: Thank you.

7 Bob Epstein followed by Jim Iacononi.

8 MR. EPSTEIN: Thank you, Madam Chair.

9 My name is Bob Epstein. I'm a cofounder of E2
10 and also one of the Advisory Committee members that has
11 participated over this last year.

12 I'm here representing a letter that we submitted
13 that was signed by a variety of investors, including
14 Kleiner Perkins, Coastal Ventures, and other 19 major
15 alternative fuel providers, as well as a variety of other
16 representatives. And we had three messages in the letter,
17 which you received.

18 The first one is the market certainty, which
19 you've heard about, is what's inspiring the \$2.4 billion
20 invested so far since the LCFS was established in
21 companies, that that's the fundamental requirement to keep
22 it strong.

23 We've suggested two enhancements that other
24 speakers will talk about: Flexible compliance mechanism,
25 as well as an advanced trading system.

1 For our part, E2 produced a report which we sent
2 to you. We wanted to know between now and 2015 if fuel is
3 going to come into California, those companies must
4 already exist. We identified 240 companies capable of
5 meeting supply through providing extremely low carbon
6 fuel. Eighty of those are 100 -- 80 of those are in
7 things other than biodiesel. A lot of them are in
8 biodiesel. That gave me the confidence that 440 million
9 gallons were produced this year in the United States and
10 that these companies' forecasts add up to well more -- a
11 lot more fuel than California needs.

12 So the question really comes down to not a
13 technology risk, but who is going to pay for the
14 construction of these new facilities? And will they have
15 the confidence to build it?

16 We think it's unlikely that money is going to
17 come from the established players. And, therefore, a lot
18 of this is going to be new money coming into the market.
19 We call these willing participants.

20 I'd like to quote a message that was delivered to
21 you by Vinode Khoshla, the single largest investor in this
22 marketplace. "The long stable horizon set by the LCFS
23 gives the industry and other potential investors time to
24 explore the cheapest and the most effective ways to adhere
25 to this standard. However, interest in this will dry up

1 the second the standard becomes vague through undefined
2 triggers or annual reviews or other such mechanisms that
3 you'll hear about later in this meeting."

4 So in summary, just like seat belts and all the
5 other ideas that have originated in here, the perceived
6 higher costs usually end up being much cheaper and the
7 people in this industry believe the unsubsidized cost of
8 future fuels will be significantly below the \$100 per
9 barrel of oil that we currently see over time.

10 So given the opportunity, California can have a
11 more secure fuel supply. It can be low carbon. It can be
12 cost competitive. Working together, we can meet this. We
13 thank you for your time and attention. And I yield my
14 retaining time to the next speaker.

15 CHAIRPERSON NICHOLS: Well done. We don't allow
16 for that kind of trading. Nice try. Thank you.

17 Jim Iacoponi followed by Harrison Dillon.

18 MR. IACOPONI: Good morning, Chairman Nichols,
19 members of the Board.

20 My name is Jim Iacoponi. I'm Vice President of
21 Operations for Propel Fuels. Propel owns and operates the
22 largest network of renewable fuel retail locations in the
23 state, spanning from Sacramento to San Diego.

24 Today, I represent the customers, the
25 individuals, businesses, and public fleets that chose

1 lower carbon biofuels for their vehicles. Every day,
2 these customers speak with their purchases. And these
3 tell us two things.

4 First, customers with access to our locations
5 vote in support of the LCFS by choosing ethanol and
6 biofuels blends that we offer. Low carbon fuel pumps in
7 the state sell volumes at twice the rate of the national
8 average, outperforming those in Minnesota, Illinois, and
9 even Nebraska. California's drivers have already begun
10 this shift toward a lower carbon future.

11 Second, customers tell us that price does matter.
12 Widespread change, for it to occur, low carbon fuels must
13 not only be widely accessible, but also affordable.
14 Californians will continue to chose low carbon fuels when
15 they see reasonable value at the price of the pump and the
16 cost per mile.

17 What's the take-away from this? First, consumers
18 need locations to buy renewable fuels from. These
19 locations require investment. Propel's investors need to
20 know that the LCFS will continue to stimulate the demand
21 for our products into the future. Keeping the compliance
22 targets intact will underpin investor confidence and allow
23 Propel to expand consumer access to these fuels.

24 Second, consumers need value to switch from
25 something they know to something new. Access to low

1 carbon fuels will grow, but these fuels will likely carry
2 a higher cost. And ethanol blends require a price
3 discount at the pump. No one brags about having paid more
4 for fuel, and adoption of these fuels depends on price we
5 put out on the street. The value Propel realizes from
6 selling its credit bank is critical to offset these costs
7 and provide the right price point for consumers to buy our
8 products.

9 Propel needs a credit trading market that is
10 liquid, and giving us confidence that we can cash in our
11 credit bank when we choose to and having the transparency
12 about the price of CI credit at any time. We are relying
13 on the value of our CI bank and the availability to
14 readily monetize that value to be able to offer our
15 products to the consumers at a reasonable price and
16 provide our investors an attractive return.

17 A market with too few participants and too few
18 trades will be neither liquid, nor transparent. Without
19 this value from our CI bank, customers won't buy and our
20 investors won't continue to back us.

21 Today, we ask the ARB to hold firm in its
22 commitment to the LCFS targets without annual
23 re-evaluation. This will give greater assurance to our
24 investors that they be rewarded and for their risk taking.

25 And, finally, we ask the State take bold steps to

1 support the active trading of CI credits, make it a broad,
2 liquid, and transparent and expand the credit market as
3 per the letter that we have endorsed. Thank you.

4 CHAIRPERSON NICHOLS: Thank you.

5 Mr. Dillon followed by Todd Campbell and Chris
6 Hessler.

7 MR. DILLON: Thank you. I'm Harrison Dillon, the
8 cofounder and President of Solazyme. Solazyme is a
9 publicly-traded biotechnology company based in south
10 San Francisco, California, with about 180 employees. We
11 raised about \$370 million in equity financing from our IPO
12 as well as equity investors, including Chevron. By 2015,
13 we expect to have capacity in place to produce over 140
14 million gallons a year of oil and we are on track for
15 that.

16 Our process works by converting plant sugars
17 directly into crude oil. It's feedstock flexible, so
18 sugars such as sugarcane and waste biomass are converted
19 into crude oil, which then goes directly through existing
20 oil refineries to make hydrocarbon fuels that are
21 chemically indistinguishable from petroleum-based fuels.

22 We have manufactured in commercial-scale
23 facilities in Pennsylvania and California since 2007. And
24 in the last two years, we've manufactured about 450 metric
25 tons of oil using this process.

1 We have a partnership with the United States
2 military that wants direct drop-in hydrocarbon fuels, not
3 ethanol, to use in ships and boats and planes. And they
4 have used our fuel in ships, boats, and planes and
5 helicopters. They recently sailed a destroyer up the
6 California coast on our fuel. This is not experimental.
7 This is not laboratory scale. The Navy is sailing
8 destroyers on our fuel. And next summer, in collaboration
9 with Dynamic Fuels, the Navy will sail an entire aircraft
10 carrier group in Hawaii on our fuel. This is coming from
11 a 30 million gallon a year facility that Dynamic owns in
12 Louisiana that makes drop-in hydrocarbon fuels.

13 Our cost of production, we announced over a year
14 ago at full commercial scale on biomass feedstocks dropped
15 below \$3.44 a gallon and we have made progress since then.

16 So, again, we're not talking about experimental
17 scale. We're not talking about high cost. We're talking
18 about drop-in hydrocarbon fuels, not ethanol, not
19 cellulosic ethanol -- hydrocarbon fuels available today.
20 And we are confident that they'll be available in the
21 volumes required by 2015. So the combination of the very
22 low carbon intensity of this oil and the LCFS means that
23 we will not just consider California as a market, we will
24 prioritize California as a market. And the fact that
25 these fuels are already in use today in large volumes

1 means that the contention that you're very likely to hear
2 today that we should scale back or get rid of the LCFS
3 because the fuels will not be available does not have a
4 basis in fact. Thank you.

5 CHAIRPERSON NICHOLS: Thank you.

6 Todd Campbell.

7 MR. CAMPBELL: Good morning, Madam Chair and
8 members of the Board.

9 My name is Todd Campbell. I represent Clean
10 Energy. And I think this is a very proud day for the Air
11 Resources Board.

12 Clean Energy is very proud to have made up 9
13 percent of the low carbon fuel standard market for the
14 first quarter, and we hope to continue on that kind of
15 progress. We just celebrated last night our Christmas
16 party, and we announced -- we're a Seal Beach, California,
17 company. We announced we have 1,019 employees at Clean
18 Energy.

19 Of course, we're a national company. But we're
20 going from about five -- station every five days and we're
21 hoping to get to station every two days, adding to our 257
22 stations nationwide.

23 And, of course, our target markets are heavy-duty
24 fuel use. So all the heavy-duty trucks that consume about
25 20 gasoline gallons per year. It's a lot of low carbon

1 fuel. Clean Energy is very proud that natural gas can
2 reduce greenhouses gas by about 23 percent.

3 We also have a renewable division that we also
4 launched. We're producing from one of our plants 40,000
5 gasoline gallons per day. That's an ultra low carbon
6 fuel, 90 percent reduction. We're going to be able to
7 blend that fuel with our customers. Our customers are
8 saving up to \$2 a gallon in fuel savings. So the low
9 carbon fuel standard is driving this kind of progress.

10 I want to commend staff, Mr. Fletcher, you've
11 done a great job. Mr. Corey and Mr. Vegara are wonderful
12 people to work with. You've done a great job, and you're
13 leaving the organization in great hands. I'm sure a lot
14 of that had to do with you.

15 I just want to say staff has been extremely
16 responsive. We've had several issues that we were able to
17 work out, sit down with staff. And I'm on the Advisory
18 Panel. I think that staff was very deliberative, did very
19 careful consideration of the targets. They looked at the
20 analysis. We're going to meet those goals in 2020. We
21 might do better than 10 percent.

22 So with that, I want to cut it short. I want to
23 extend my comments to the next item to spare you some
24 time.

25 But we strongly support low carbon fuel standard,

1 and we hope that it serves as a model not just for
2 California, but for the nation. Thank you.

3 CHAIRPERSON NICHOLS: Thank you very much.

4 Chris Hessler, followed by Will Barrett and Jim
5 Lyons.

6 MR. HESSLER: Madam Chair, members of the Board,
7 to succeed, the LCFS must create the most favorable
8 investment climate possible in California.

9 A flexible compliance mechanism or FCM would
10 significantly enhance investor interest in low carbon fuel
11 investments here in California by clarifying the rules of
12 operation for the program during tight markets. And that
13 clarity will accelerate investments and increase options
14 for compliance with the standard. Crafting an FCM should
15 be an urgent priority for this Board.

16 I had the privilege of serving on the Advisory
17 Panel. And it was an excellent forum for bringing forward
18 ideas to explore that would increase market certainty. It
19 was led by your fantastic staff, and this was a topic --
20 the flexible compliance mechanism was a topic that came
21 out. And it was -- in the words, it has been endorsed by
22 a number of groups sense it's been discussed as something
23 worthy of further explanation. A number of the speakers
24 immediately prior addressed it. The content of a letter
25 that you've already received that raises this issue, a

1 number of other letters have already been sent to you from
2 groups as diverse as Shell and the Advanced Ethanol
3 Council.

4 I think the central issue is this: As regards to
5 the flexible compliance mechanism, there are questions
6 around what would happen in a tight market. If a
7 regulated party comes to the end of the year, finds
8 themselves in a situation where they cannot buy the fuel
9 or the credits they need to comply at any price, because
10 the market happens to be tight for whatever reason at that
11 moment, there's an uncertainty what would happen. How
12 would that regulated party be treated? Would they be
13 fined for not buying what the market has -- will not offer
14 at any price? Or would they be allowed to comply with
15 some lesser standard? If that's the case, what signal
16 would that send to those parties that actually invested
17 and complied?

18 Addressing that uncertainty with clear,
19 predictable rules is necessary. And the sooner it
20 happens, the more quickly investment will flow. And the
21 more quickly the investment flows, the greater the chance
22 of succeeding the goals of the LCFS.

23 So I would urge you to direct staff to pursue
24 this with deliberate haste.

25 And I would also say that there are -- developing

1 mechanisms like this has -- it will be difficult. There
2 are some issues that have to be guarded against. This
3 can't turn into something that is a tax on regulated
4 parties or a tax on California motorists. And it has to
5 address the uncertainties. It can't introduce new
6 uncertainties. But everybody who's talking about this
7 seems to think that can be done and balances can be met.
8 We encourage the staff to develop a proposal for your
9 consideration.

10 CHAIRPERSON NICHOLS: Thank you.

11 Will Barrett.

12 MR. BARRETT: Good morning. My name is Will
13 Barrett with the American Lung Association of California.

14 I was happy to represent the American Lung
15 Association on the Advisory Panel as the public health
16 representative. We believe successful implementation of
17 the LCFS and AB 32 are vital to improving air quality and
18 public health in California. So we're very happy to be
19 part of the progress as it got off the ground.

20 We think staff should be commended for proposing,
21 adjusting, and carrying out a clear schedule for a
22 productive review of the LCFS in the first year. The
23 process offered a fair discussion among stakeholders,
24 sister agencies, and the public to probe the basic
25 structures and data needs that also will make the LCFS an

1 even more successful.

2 A reoccurring theme that you heard this morning
3 through the report is that the LCFS is successfully off
4 the ground. It's generating credits. And while there are
5 areas to monitor, no major changes are warranted at this
6 time. We agree with that assessment and think that the
7 review provided stakeholders the ability to delve into
8 important issues and set up your staff well to continue to
9 monitor and update you on progress to meeting the 10
10 percent reduction goal by 2020.

11 You have received written comments from the oil
12 industry today that the review is somehow inadequate and
13 that there should be an annual review process. This
14 review that we just went through was conducted on the
15 schedule required by the regulation which the industry
16 lobbied for. We'll have another chance to review the
17 program fully in two years. Adding the reviews into the
18 program is really nothing more than a way to slow down
19 progress and disrupt the market signal, especially when
20 considering that their letter is asking for an offramp to
21 be built into each annual review.

22 We think that nothing could be more damaging to
23 the success of the LCFS than an annual review process
24 designed essentially to disrupt that signal and kill the
25 program.

1 We believe that the compliance pathways laid out
2 by staff in the report are credible and show pathways to
3 success. We've heard that the advanced alternative fuels
4 industry is ready to scale up production to meet the
5 long-term goals of the program. And we also appreciate
6 the CEC taking the time this morning to correct the record
7 on their analysis and how it's been represented.

8 The first review shows that the program is off to
9 a good start, there is ongoing work to be done, but we can
10 meet the goal.

11 Later today, you'll consider amendments to
12 improve the program, and we urge you to improve the
13 program by strengthening the signal to commercialize the
14 cleanest fuels possible and not muddy that signal by
15 constructing these offramps as we go forward.

16 So thank you again for the opportunity to serve
17 on the panel. Congratulations to Bob and to Richard for
18 your new role. And happy holidays. Thank you.

19 CHAIRPERSON NICHOLS: Thank you.

20 Jim Lyons, and then Ralph Moran and Andrew
21 Barrera.

22 MR. LYONS: I have a couple of slides I'd like to
23 use. Good morning.

24 My name is Jim Lyons. I'm a senior partner at
25 Sierra Research. I'm here today to talk briefly about

1 some work we've done for WSPA regarding LCFS compliance
2 forecasts and compliance costs forecast. The current
3 draft version of our report is available on the WSPA
4 website. I understand it's been provided to the Board
5 members.

6 Next slide, please.

7 --o0o--

8 MR. LYONS: Starting with compliance, this slide
9 shows the cumulative credit forecast based on data from
10 the Federal Energy Information Administration, otherwise
11 known as EIA, that assumes as does the Energy Commission
12 in the most recent work I've seen on the website, that
13 California will get a share of total U.S. biofuel
14 production in response to the Federal Renewable Fuel
15 Standard Program that is proportional to its consumption
16 of total U.S. gasoline and diesel fuel.

17 As shown, this forecast indicates that credits
18 will be generated until 2013 under the LCFS, at which time
19 the forecast supply of low carbon intensity fuels can no
20 longer keep up with the increasingly aggressive LCFS
21 requirements. It also highlights how big that problem is
22 forecasts become over time relative to where the LCFS is
23 now. As you can see, the line really dives off there to
24 the right, compared to where we're at today in 2011.

25 I'd also like to point out that the one point

1 where we can compare this forecast to reality, 2011, the
2 forecast level of credits based on EIA data it was 951,000
3 metric tons. That's about 60 percent higher than the
4 approximately 600,000 metric tons reported by CARB staff,
5 but it's still in the same ballpark.

6 Next slide, please.

7 --o0o--

8 MR. LYONS: Facing the credits shortage shown on
9 the last slide, ARB staff prepared in a review report the
10 illustrative scenarios you've heard talked about today.
11 These include a number of optimistic assumptions,
12 including biofuel supply, that were required to show LCFS
13 compliance. What this slide shows is the cumulative
14 incremental cost for that assumption relative to the RFS
15 regarding using CARB staff's optimistic supply assumptions
16 and the most recent fuel cost forecast data released by
17 the Energy Commission.

18 I did again check their website today and then
19 data from November 14th, which is what we used in our
20 analysis is the most recent information available.

21 As shown, there is relatively little cost impact
22 until 2014 when compliance becomes much more challenging.
23 Beyond 2014, cumulative LCFS compliance cost is forecast
24 to start increasing in an almost exponential fashion,
25 reaching a total of about \$54 billion by 2020.

1 Thank you for the opportunity to testify and for
2 your time. I'd be happy to answer any questions you may
3 have about our work.

4 CHAIRPERSON NICHOLS: Thanks.

5 Ralph Moran.

6 MR. MORAN: Good morning. Ralph Moran with BP
7 America.

8 We also wanted to add our congratulations to you,
9 Bob. Working with you, it's been impossible not to like
10 you and enjoy working with you, even though you're often
11 telling us "no," but in a nice way. So enjoy yourself.
12 I'm jealous.

13 We participated also on the Advisory Panel, and
14 we very much appreciated the opportunity. We look forward
15 to future participation on the panel.

16 We knew from the outset this first go-around was
17 going to be challenging because very early stages of the
18 program. And we want to thank staff for all the effort
19 they expended focusing our conversations. I know it was
20 difficult.

21 We do have one item we'd like to highlight. And
22 that is this: We believe that there was a huge and
23 potential critical missed opportunity in this first
24 go-around. There were really robust discussions in the
25 panel around the feasibility of the regulation. And there

1 were concerns raised by many, including BP, that the
2 regulation may become infeasible as early as 2015. We
3 understand there is uncertainty as to when these fuels
4 will come around and how much they may cost. We
5 understand that at this early stage, reasonable people
6 could disagree. But we believe there is no doubt that the
7 assumptions upon which the low carbon fuel standard were
8 originally based two years ago do not match the reality of
9 the advancement of these technologies today.

10 It's clear that the necessary volumes of the
11 fuels are further off than assumed by staff, and it's not
12 at all clear that these fuels will cost less than
13 conventional fuels, as has been assumed by staff.

14 These are clear warning signals that should not
15 be ignored. Given the lack of progress in these fuels
16 being brought to the market, we have asked staff to put in
17 place provisions in the regulation that would make clear
18 to all how the regulation would be adapted, should these
19 fuels not be available. We don't believe staff should
20 wait until compliance challenges begin to occur before
21 these provisions are adopted.

22 So we're not asking staff to reduce the targets
23 now. We're simply asking them to provide transparency to
24 regulated parties, investors, and others, and to put in
25 place these provisions that would be triggered only in the

1 event of clear infeasibility. Doing this now will avoid
2 the type of abrupt and arbitrary changes to the program,
3 the prospect of which truly create uncertainty with
4 investors and regulated parties.

5 The time to consider and adopt these provisions
6 is now, before problems begin to occur, not after, so that
7 all stakeholders will be operating with the same
8 information.

9 So we request the Board direct staff to work with
10 the Advisory Panel in 2012, this upcoming year, to devise
11 amendments to the regulation to address how it would be
12 adopted in the event or adapted in the event of clear
13 infeasibility.

14 CHAIRPERSON NICHOLS: Thanks, Ralph.

15 Okay. I'm now making an announcement for
16 everybody who's in this room that we're going to cut off
17 sign-ups for this particular item in exactly two minutes,
18 because as this conversation gets interesting, more of you
19 seem to decide you'd like to come and share your thoughts
20 with us. I have a Board meeting to get through here today
21 with a couple of actual regulatory items. So since this
22 is not, in fact, a decision-making item, we're going to
23 cut it off. But we'll continue to leave everybody their
24 three minutes, at least for now. All though people that
25 use less get extra credit, we just won't tell you what it

1 is.

2 Andrew Barrera.

3 MR. BARRERA: Madam Chair and honorable members
4 of the CARB Board, my name is Andrew Barrera. I'm here
5 today representing the South Bay Latino Chambers of
6 Commerce. We are concerned on several levels about the
7 direction that the low carbon fuel standard implementation
8 is taking.

9 First, our members in our communities are already
10 suffering from the higher energy costs as a result of
11 other regulations, such as the renewable electrical
12 standard. Billions of dollars in higher fuel costs from
13 the lower carbon fuel standard will hit us hard at a time
14 when we can least afford it.

15 Secondly, oil refineries are a very important and
16 essential economic engine in the South Bay area and down
17 in Southern California. They provide jobs, tax revenues,
18 and support for local community programs that are
19 suffering right now during the economy. While some may
20 assume that the oil companies can afford billions of
21 dollars in lower carbon fuel standard costs, those costs
22 will most certainly be offset at the expense of the local
23 communities, at the expense of jobs, economic activity,
24 and direct support for our community. We simply cannot
25 afford it.

1 It is also doubtful that new biofuel facilities
2 will spring up over night in our neighborhoods to make up
3 for the economic losses in the region. We have no problem
4 with the goals of the lower carbon fuel standard. Our
5 problem is with its implementation.

6 The reality is how the rule is currently
7 structured. It is likely to achieve carbon reductions by
8 putting local businesses out of business by limiting
9 consumer mobility through higher fuel costs.

10 We urge the Board here to take serious the
11 California Energy Commission's projections about the costs
12 and feasibility of this rule and take the appropriate
13 action to minimize the negative impact on jobs and impact
14 on our local communities.

15 Thank you very much.

16 CHAIRPERSON NICHOLS: Thank you.

17 Chris Shimoda and then Betsy Reifsnider.

18 MR. SHIMODA: Thank you, Chairman Nichols and
19 members of the Board.

20 My name is Chris Shimoda. I'm Manager of
21 Environmental Affairs for the California Trucking
22 Association.

23 I'd like to start by stating that our association
24 is not opposed to the development and introduction of
25 alternative fuels or the concept behind the low carbon

1 fuel standard. However, we have some major concerns with
2 the practical implementation of this program.

3 First, the issues associated with exceeding five
4 percent blends of biodiesel have been completely glossed
5 over. Staff's illustrative scenarios show B5 introduced
6 as early as 2013, despite the fact there will be hundreds
7 of thousands of trucks on the road that are not designed
8 or warranted to work with blends over five percent.

9 For instance, Cummins recent guidance for B20
10 contain the explicit statement that blends above B5 should
11 not be used in engines older than 2002. Detroit Diesel is
12 as of now still under testing phase, meaning it's not just
13 only model year trucks. There are trucks being sold today
14 that are not warranted above B5. Almost all warranties
15 require B100 blend stock to meet ASTM specifications and
16 for the provider to be biodiesel Board accredited. Yet, a
17 2005 national renewable energy laboratory survey found
18 that 50 percent of blend stock they sampled did not meet
19 the specifications, and currently only 80 percent of the
20 producers out there are national biodiesel Board
21 accredited.

22 These basic issues of fuel quality and
23 compatibility are part of the reason Portland backed off
24 the ten percent biodiesel requirement last year. And yet,
25 this program review does not address how California plans

1 to deal with these same fundamental obstacles by 2013. We
2 also have major concerns surrounding the wildly optimistic
3 assumptions staff has made about advanced biofuel
4 availability and the overall cost of the program.

5 CTA has prepared additional detailed written
6 comments that we have submitted to the Clerk of the Board
7 and we ask that the Board please do their due diligence in
8 assessing the cost and viability of this hugely important
9 program for the ultimate end users of low carbon fuels,
10 the people, and businesses of California.

11 This is a matter of sound policy design, not
12 politics. Thank you.

13 CHAIRPERSON NICHOLS: Thank you.

14 Betsy.

15 MS. REIFSNIDER: Good morning. My name is Betsy
16 Reifsnider. I'm representing both California Interfaith
17 Power and Light and Catholic Charities in the Stockton
18 Diocese.

19 We strongly support the low carbon fuel standard,
20 and we urge you to reject any attempts to weaken here.
21 Here's why.

22 A strong standard could help reduce asthma
23 attacks, heart, lung, and other diseases, reduce the
24 thousands of premature deaths and premature births
25 annually, and can cut billions of dollars in health care

1 costs that are associated with air pollution.

2 At a recent symposium sponsored by Catholic
3 Health Care West, one of the speakers, a public health
4 nurse, had this to say. "Climate change is both a moral
5 and a health issue. This discriminatory impact that
6 climate change will have on vulnerable populations makes
7 climate change one of the most significant environmental
8 justice issues of our time."

9 And at the climate talks in Durban, South Africa,
10 the Catholic Cardinal of Honduras actually compared the
11 lack of progress on climate and environmental policies to
12 Apartheid. And he asked, "How long will countless people
13 have to go on dying before adequate decisions are made?"
14 And fortunately for us in California, our Air Resources
15 Board does have the courage and does make these decisions.
16 And for that, we're very grateful to you.

17 And then in conclusion, I'd just like to
18 highlight a recent report by the U.C. Davis Center for
19 Regional Change called, "Land of Risk, Land of
20 Opportunity," in which they documented how more than one
21 million people in the San Joaquin Valley are at higher
22 risk for illness and shortened life span because of
23 polluted air and water, low incomes, and lack of access to
24 health care.

25 So these are the costs in human lives and health

1 that we ask the Air Resources Board to consider paramount
2 as you make your decision on the low carbon fuel standard
3 today. And I thank you. And happy holidays to each and
4 every one of you. Thank you.

5 CHAIRPERSON NICHOLS: Thank you.

6 Paul Kamp and then Steve Douglas.

7 MR. KAMP: Good morning, Chairman and Board.

8 My name is Paul Kamp. I'm with Inbicon. We're a
9 Danish company, a division of DONG Energy. Inbicon has
10 designed and built and owns and operates the world's
11 largest cellulosic ethanol plant. That fuel is for sale
12 in Denmark to consumers right now at a five percent blend.
13 It enhances the acting and improves the overall emissions
14 profile of that conventional fuel blend.

15 DONG Energy is in power and heat, oil and gas,
16 cellulosic ethanol, and other renewable energies. They
17 have a very ambitious target of 85 percent reduction
18 voluntarily of the carbon emissions from their operations
19 in Denmark and northern Europe.

20 In Denmark and Kahlenberg where our plant is, we
21 purchased wheat straw from Danish farmers. We convert
22 that into ultra low carbon cellulosic ethanol and clean
23 burning lignin, which is sold in commercial terms for
24 power generation.

25 And we also work in industry symbiosis there. We

1 run on shared steam from the power plant. And there is
2 also an oil refine across the street that runs on the
3 shared -- the same shared steam pipe. So there is good
4 symbiosis and integration there. We are here because of
5 LCFS and because of our partnership with Pacific Ethanol
6 and other west coast ethanol companies that we are in
7 discussions with.

8 Denmark and California have similarities, mostly
9 people live on the coasts. And inland, you've got rich
10 and diverse and productive agriculture. But you do have
11 to make the most of your land and farm resources there.
12 So what we've done now is put together a way that we can
13 build a replicable platform where we are using regional
14 feed stocks with an existing grain ethanol plant on the
15 west coast. We can do this in all of the grain ethanol
16 plants on the west coast and the ones in Nebraska and in
17 the corn belt that provide California with their fuel.
18 We see purpose-grown crops as one of the key things in
19 developing that in California where there is a higher
20 value for the land.

21 What we do is take the excess steam and power
22 that we generate from the cellulosic ethanol process,
23 through lignin CHP, we share that steam and power with the
24 grain ethanol plant. We reduce their energy costs.
25 Reduce substantially the carbon intensity of the grain

1 ethanol production. We can do that right here in
2 California first. In fact, we think this is probably the
3 best place to do it.

4 So we're talking about creating jobs, creating
5 supply chain activities, making ultra low and low carbon
6 fuel at lower costs than conventional gasoline.

7 CHAIRPERSON NICHOLS: Thank you. It was very
8 interesting. Your time is up.

9 Mr. Douglas.

10 MR. DOUGLAS: Thank you, Chairman Nichols and
11 members of the Board.

12 I'm Steve Douglas with the Alliance of Automobile
13 Manufacturers. The Alliance is a trade association of
14 twelve car and light truck manufacturers representing
15 about three-fourths of the new vehicle market.

16 I'm here today because the Alliance and our
17 member companies support the low carbon fuel standard.
18 Achieving an 80 percent reduction in greenhouse gas
19 emissions by 2050 will require not only the reduction --
20 not only the efforts of automobile manufacturers, but also
21 a reduction in the carbon intensity of fuel.

22 As always, our primary focus is to make this
23 program as effective as possible. And we appreciate the
24 efforts of the staff to expand opt-in provisions, add fuel
25 pathways, and update the life cycle assessments to reflect

1 the real world markets. We applaud California's efforts
2 and the leadership that you're providing for low carbon
3 fuels. However, the most efficient and cost effective
4 approach is a single integrated national program. And we
5 would urge the Board to work with your federal counterpart
6 in that light.

7 Finally, we strongly support the findings of the
8 Low Carbon Fuel Standard Advisory Committee, and
9 specifically that at this time it's premature to adjust
10 the compliance schedule and that such adjustments would be
11 harmful to the development of markets for low carbon
12 fuels. Thank you.

13 CHAIRPERSON NICHOLS: Thank you.

14 MR. ROMASKO: Madam Chair, members of the Board,
15 my name is Dan Romasko, Executive Vice President of
16 Operations for Tesoro Corporation, with responsibility for
17 our refining, marketing, logistics, and marine facilities.

18 Within the state of California, Tesoro owns and
19 operates two refineries, representing approximately 40
20 percent of our refining capacity in the U.S. So I'm
21 grateful for the opportunity to speak on this important
22 regulation.

23 As a member of the Western States Petroleum
24 Association, we were both part of and support the comments
25 that are made by WSPA. Tesoro has serious concerns about

1 the LCFS Program, which I'll comment on within two general
2 areas.

3 The first is what we believe to be the near term
4 program and feasibility. While low carbon intensity
5 materials such as cellulosic ethanol, are expected to
6 become commercially available as early as 2012 and 2013,
7 we think that the production levels will be insufficient
8 to meet demand as early as 2014 to 2015. This pace of
9 production problem is not restricted to California, but
10 also extends to the federal level and is restricting our
11 industry's ability to meet federal RFS2 blending.
12 Fortunately at the federal level, an annual process exists
13 to evaluate both national and global conditions and make
14 an adjustment to allow blend target adjustments, which
15 brings me really to the second area I'd like to comment
16 on, which is unintended consequences of California's low
17 carbon fuel standard.

18 Significant quantities of Brazilian ethanol will
19 be required to comply with LCFS by the year 2013. This
20 Brazilian ethanol is of lower carbon intensity and will be
21 shipped to the U.S. from Brazil. At the same time, U.S.
22 based produced corn ethanol will be shipped to Brazil.
23 The result will be an increase in CO2 emissions generated
24 from the energy consumption of the transportation.

25 Further, there is an inadequate infrastructure to

1 accommodate the required input of the Brazilian ethanol
2 into the state of California. That's going to require our
3 industry to construct new facilities, which will
4 subsequently be idled once the sufficient levels of
5 cellulosic ethanol do become commercially available.

6 On a global level, we learned there is a pitfall
7 in driving rapid conversion to renewable fuels before we
8 fully understand the unintended consequences. These
9 lessons include Europe's experience with biodiesels
10 derived from palm oil, deforestation, and shifting of land
11 from food-based crops to energy-based crops.

12 We do urge CARB to conduct annual reviews of the
13 low carbon fuel standard program and the targets as we
14 believe adjustments are and will continue to be necessary.

15 CHAIRPERSON NICHOLS: Okay. Thank you.

16 Stephanie.

17 MS. BATCHELOR: Good morning, Chairwoman Nichols
18 and members of the Board.

19 On behalf of the Biotechnology Industry
20 Organization, I'm pleased to participate with CARB staff
21 as a member of the LCFS Advisory Panel.

22 BIO is the world's largest biotechnology
23 organization, providing advocacy, business development,
24 and communication services to more than 1100 member
25 companies worldwide.

1 BIO's industrial and environmental section
2 includes more than 85 member companies. California is
3 home to nearly one-third of these members, including many
4 of the world's leading advanced biofuels developers and
5 their partner technology providers.

6 Nationally, at least 15 commercial advanced
7 biofuels projects representing nearly 200 million gallons
8 of production a year are now under construction and
9 scheduled to come online by 2014. In other words, the
10 advanced biofuels market stands poised and ready to
11 deliver fuel to the California market and elsewhere in the
12 near term.

13 The industry is also growing in ways we never
14 considered, such as the recent strong interest in advanced
15 biofuels from U.S. military. Algal and sugar-based
16 biofuels are being researched and developed in California
17 by companies such as Solazyme, Sapphire Energy, and Amyris
18 with assistance from federal programs. And since
19 California is home to many military installations, this
20 national effort will benefit the State.

21 CARB should, thus, take care to ensure pathway
22 availability for new and innovative technologies, such as
23 military biofuels.

24 BIO's involvement in the Advisory Panel sought to
25 help the LCFS program better incentivize investment in

1 advanced biofuels as part of the solution to a low carbon
2 economy. BIO and its members believe there are several
3 things that CARB can do to assist in making the market
4 signal clearer and to enable the program construction to
5 drive investment in advanced biofuels. For example,
6 conduct a more comprehensive economic analysis in 2012,
7 ensure that the anticipated pricing mechanism is defined
8 in a way that educates market players as to how carbon
9 intensity values will create a differential value, include
10 cellulosic numbers that have numbers that are greater than
11 EIA values.

12 The nascent compliance market is not yet sending
13 a meaningful signal to investors. Create a price
14 transparent credit trading system that presents market
15 information in a way that protects specific transactions,
16 but is transparent about market level trends in real time.
17 Quarterly information is not sufficient. Create an
18 alternative compliance mechanism that directly
19 incentivizes investments into low carbon fuel technologies
20 that once constructed will create compliance credits. And
21 do not lower the ten percent reduction targets.

22 We look forward to working with CARB to continue
23 to evolve the LCFS into a leading driver of advanced
24 biofuel investment in California and throughout the
25 United States.

1 We hope the ideas we shared here today in
2 combination with BIO's formal comments over the past
3 several months have been helpful towards that goal.

4 BOARD MEMBER RIORDAN: Thank you very much for
5 your testimony.

6 The next speaker is Lawson Stuart.

7 MR. STUART: Thank you for the opportunity to
8 talk about the importance of low carbon fuel standards.

9 My name is Lawson Stuart. I want to relate to
10 you an experience I lived through during my service in the
11 U.S. Air Force as an enlisted firefighter.

12 When I first became a member of the fire
13 department at Beale Air Force Base, an engine company
14 would respond to every medical emergency that was
15 dispatched. This is consistent with civilian
16 municipalities when they respond to 911 medical
17 emergencies in their jurisdictions.

18 After serving with the department for about a
19 year, the Air Force begin making significant budget cuts.
20 I was shocked by some of the changes that were made and
21 the cut that really made me concerned was when we stopped
22 automatically sending engines to the medical emergencies
23 and instead could only respond when ambulance personnel
24 requested us.

25 Why was this change made? The high cost of fuel.

1 Up to that point, mainly due to the response-ready state
2 we maintained at the department, our engine company
3 consistently beat the ambulance to medical scenes.
4 Statistics support that the first ten minutes of someone
5 experiencing a trauma or medical emergency are the most
6 critical when treating potentially fatal injuries and
7 illnesses. The National Academies of Dispatch have
8 established a maximum of twelve minutes for general and
9 six to eight minutes for more serious response is the
10 acceptable standard. Due to those cuts, we were no longer
11 responding to calls within that acceptable time frame.

12 I tell you this because it was a perfect example
13 of the men and women who had already sacrificed so much in
14 the wars, receiving less care within the gates of their
15 military base than they would outside of those gates, all
16 because the price of the fuels used to power the emergency
17 vehicles had gone too high for them to respond to all
18 dispatches. Part of keeping troops' minds at ease during
19 the fulfillment of their duty is to afford them and their
20 families the best care we can. Those families become the
21 nation's responsibility. This particular budget cut put
22 the lives of our men and women in uniform and their
23 families at risk.

24 Investing in clean and renewable sources of
25 energy is vital to our national security. When the

1 acceptable standard of care for emergency responses on our
2 military basis is compromised, we do have a national
3 security problem. This program goes even deeper. Our
4 addiction to oil is costing lives. According to a report
5 by the U.S. Army, one in 24 casualties in Afghanistan
6 happened while escorting fuel convoys. That's one reason
7 why solar panels on generators, biofuels, and other
8 renewable technologies are currently being used by our
9 military in Afghanistan to save lives and make us
10 stronger.

11 The cost of doing nothing is too high. In light
12 of the families of those who serve and their many, many
13 sacrifices, I charge that we cannot afford to overlook the
14 threat that our addiction to oil poses. I strongly urge
15 you to continue to invest in a robust, low carbon fuel
16 standard. Thank you.

17 BOARD MEMBER RIORDAN: Thank you, Mr. Stuart.

18 Elizabeth Perez.

19 MS. PEREZ: Good morning. My name is Elizabeth
20 Perez. I'm the owner and founder of GC Green.

21 It's an honor and privilege to be here this
22 morning and be able to share my story.

23 My military service began here in Sacramento when
24 I enlisted in the United States Navy 15 years ago. And on
25 my journey, I met Seaman Palmer, San Diego native. I

1 connected with her instantly. We're both from California
2 with similar backgrounds. We both had the drive to
3 succeed and find better opportunities.

4 Shortly after training, we learned we were going
5 to be deployed in several different regions. I was
6 deployed to the 5th and 6th fleet, and Seaman Palmer was
7 assigned to the USS Harry Truman and then later assigned
8 to USS Cole.

9 While I was on deployment, I got news the USS
10 Cole was attacked by terrorists. This news changed my
11 life forever. I had lost my father during the first Gulf
12 War. And now my friend, my shipmate, Seaman Palmer.

13 You can imagine the frustration that I had and so
14 many others had felt when we learned our addition to oil
15 was helping fund the very same terrorist organization that
16 attacked the USS Cole.

17 Last month, I was invited to speak at the
18 statewide Texas Growing Green Communities event. I
19 believe it was November 15th. It was a month from now.
20 And I also had the privilege to hear Senator Ogden speak
21 in regards to our addiction to oil. And he did state in
22 2003 when we invaded Iraq, it was for oil. And I also
23 learned he's also a Navy veteran and his son is currently
24 serving in the Middle East.

25 We need a solution to this serious threat. And a

1 low carbon fuel standard is part of this solution. That
2 is why I and other veterans across the country have joined
3 the energy security campaign called Operation Free to help
4 our country create a solution for our dependence on oil.
5 And this is also why I started GC Green, which trains and
6 employs veterans throughout the state of California in
7 clean energy jobs: To create a solution. By helping
8 reduce our oil dependence, energy policies like
9 California's low carbon fuel standard will help keep
10 America safe.

11 And I want to add one more thing. While I was in
12 Texas, it was mentioned many numerous times that
13 California is a leader in sustainability and adopting
14 policies that protect our environment and also protecting
15 America. So I urge you today to take that stance moving
16 forward. Thank you very much.

17 BOARD MEMBER RIORDAN: Thank you very much for
18 your testimony. Jim Levine.

19 MR. LEVINE: Thank you, Madam Chairman and
20 members of the Board.

21 First, I want to acknowledge your leadership in
22 tackling a huge challenge. And I know how hard that is.
23 One of our companies, R Power Biofuels, is a new producer
24 in California. Over the last three years, we invented a
25 biodiesel production technology that I think deals with a

1 lot of the quality issues and reliability issues that the
2 industry has faced. And we are about to expand our
3 production technology -- our production plant to a
4 thousand barrels a day. By midyear, probably 2,000
5 barrels a day by the end of the year.

6 So I think in the short term, there's likely to
7 be particularly with what you hear from some of the other
8 speakers here, there might be excess capacity in the short
9 term. And one of the things I would like to encourage is
10 that you really firm up and expand the credit market. And
11 I know your regulations say that credits from the LCFS
12 will be applicable to other AB 32 programs, but I'm not
13 really so sure your staff -- well, your staff told me you
14 could not use it in other programs. I think that's an
15 where I think if it was usable in other programs, we
16 encourage you to make this happen.

17 I think that unleashing creativity and the
18 capital that's partly represented here today, I think
19 there's opportunity to really satisfy some of the other
20 carbon reduction targets, buy more low carbon fuels,
21 particularly biodiesel.

22 In that regard, I'll also say that with the super
23 high quality of biodiesel that could be made now that
24 wasn't available six months ago, we think -- and we've
25 seen now people have been able to successfully use

1 biodiesel in very high blends, upwards would be 30. But
2 it's going to take CARB's help in working with the
3 manufacturers to deal with the warrantee problems that the
4 manufacturers are currently living with. They're based on
5 old data, old technology. But it's going to take your
6 help. A company like ours can't do that ourselves.

7 Last, I want to say that we got a new pathway
8 approved through your process with your staff. When I
9 first looked at that procedure, I thought it was going to
10 be extremely difficult. It actually was very straight
11 forward, and your staff did a really great job of getting
12 this done with us. So we now have a trail to biodiesel
13 pathway in California with a very low carbon intensity.

14 Last thing I want to say, I know you guys are
15 looking at sustainability certifications and all that. I
16 just want to caution you not to impose too many extra
17 requirements on companies that make biofuels, as long as
18 we're living within the law and complying with
19 environmental laws and so forth. In the quest from going
20 to extremely good to perfect, you can really cut down the
21 availability of supply. So I would just encourage you not
22 to load up too many other things on top of us as it is
23 now. Thank you very much.

24 CHAIRPERSON NICHOLS: Thanks.

25 Yadira Carrasquillo.

1 MS. CARRASQUILLO: Good morning ladies and
2 gentlemen of the Board and guests.

3 My name is Yadira Carrasquillo. I proudly served
4 the U.S. Army for 11 years as a public affairs officer.
5 I'm a lucky individual since I have two countries that I
6 love and I will defend to the death is United States and
7 Puerto Rico. I call home and deploying support of
8 Operation Iraqi freedom. And after I came back, I moved
9 to California. I loved it and started working in energy
10 sustainability industry. I always knew the military
11 consumed a lot of fossil fuels, but it wasn't until I
12 deployed that it was good reality check.

13 It was scary, but the part that was really scary,
14 it was how dangerous it was. Working in the media
15 operation center, we get notifications of every situation
16 and incident that happens. And most of this IEDs and loss
17 of lives of military and contractors that people don't
18 talk about that we have over there, most of the units that
19 were hit were supporting units. Meaning like, supporting
20 units, like fueling, like fuel units.

21 As a veteran and grassroot American, I'm
22 concerned. Concerned that our country has so much
23 dependence in other countries, countries that can
24 manipulate, taunt us, and control us every time they want,
25 by just adjusting the price of fossil fuels. Every time

1 we purchase oil, we are strengthening countries that wants
2 to hurt us. And we are weakening our national security.
3 I have a problem with this and so does my comrades and
4 other grassroots Americans. We cannot defend our country
5 and democracy so that other countries could control us.
6 We defend this country so we could see our future
7 generations happy, healthy, but most of all, free.

8 Ladies and gentlemen, you have the power to
9 defend this country, too. It's in your policies, in your
10 actions from today on. It's in your -- today, we can
11 adopt all sorts of clean and safe energies without
12 exposing the lives of those who defend this country.

13 The cost of fossil fuels have been paid
14 unfortunately in blood. And no country should expose
15 their citizens and future generations to this. We have
16 the power to change this. You have the power. I believe
17 that in order for our country to be completely independent
18 from international bullying is to have control of our
19 energy. And our future depends on you. Thank you.

20 CHAIRPERSON NICHOLS: Thank you for coming.

21 Neil Koehler.

22 MR. KOEHLER: Madam Chair, Board members, my name
23 is Neil Koehler. I'm the CEO of Pacific Ethanol. I'm
24 here today representing California's ethanol production
25 industry. We are very strong supporters of LCFS. Have

1 been from actually before the program was finally adopted
2 and continue to be so.

3 The program is working. As was presented in the
4 prepared remarks from your staff, it is sending the right
5 signals to companies like ours. We are investing in lower
6 carbon technology across the country to meet these
7 requirements. Many thought that the kind of commercial
8 and economic investment required would not be made. It is
9 being made. We are seeing it in California. We are
10 seeing it all over the country, which is why we are seeing
11 excess credits generated in the early years. It is
12 working.

13 In California, it did provide the incentive to
14 restart ethanol production facilities that were idle.
15 It's critical not only for meeting the environmental goals
16 of the state, but a wonderful example of how it is
17 providing a signal to bring jobs and economic development
18 back to the state of California.

19 Today's ethanol companies, California ethanol
20 companies are producing on an annual basis 160 million
21 gallons a year of the lowest carbon ethanol commercially
22 available in the United States, right here in the state of
23 California. With the incentives that are provided by the
24 low carbon fuel standard, we are driving those numbers
25 down further. You heard from Imbicon on how we are

1 working with them to integrate the advanced biofuels into
2 our current production technologies. And that is
3 critical.

4 It's often not appreciated that not only is the
5 current generation -- the first generation of ethanol
6 companies and processes is the bridge to advanced
7 biofuels, particularly cellulose ethanol, which have so
8 much promise and why all of the companies in California
9 are working diligently to integrate that technology into
10 their plants and further lower their carbon score.

11 Going forward, it is regulatory certainty which
12 you've heard a lot about. Can't over emphasize that. It
13 is absolutely critical to drive the continued investment
14 that we need to leverage the very substantial capital and
15 strategic commitments necessary to realize these ambitious
16 goals.

17 On the science, it's important to get the science
18 right. I know there is a tremendous amount of effort
19 going into this and applaud staff's efforts to do that.
20 When it relates to CI scores, indirect land use, there
21 obviously is more work to be done. And in terms of
22 credibility and certainty, that's important.

23 We also need market access so that this can be
24 good for consumer choice and flexibility. E15, E20 trying
25 to get more ethanol, flex fuel engines. Those are

1 rule-makings that need to begin now to make sure there is
2 the market opportunity to recognize these goals. And to
3 make sure that we continue to recognize the opportunities,
4 both economic and environmental.

5 Thank you very much. Keep up the good work. I
6 guess I didn't get any extra credit.

7 CHAIRPERSON NICHOLS: Thanks. Okay.
8 Cathy.

9 MS. REHEIS-BOYD: Good morning, Madam Chair and
10 members of the Board.

11 My name is Cathy Reheis-Boyd. And I'm President
12 of the Western States Petroleum Association. Our members
13 collectively produce the majority of transportation fuels
14 used in California, which makes me really popular today.

15 I appreciate being a member of the Low Carbon
16 Fuel Standard Advisory Panel.

17 We have not opposed the goals of the low carbon
18 fuel standard, and we are not asking CARB to abandon it.
19 We are asking CARB to take a few reasonable steps to
20 ensure a well-intentioned program does not unduly disrupt
21 the transportation fuels market and negatively impact
22 fuels providers or injure the California economy.

23 The success of this program is dependant on many
24 fuels and energy sources that have not been invented and
25 are not yet available at commercial scale.

1 I get the importance of innovation, I do. What I
2 don't get is why we continue to put compliance scenarios
3 in play that aren't realistic. And rather than putting
4 what I think should be realistic cases together and
5 spending our time finding ways to enhance their chance of
6 success, we really need realistic assumptions about the
7 fuels, about the vehicles, about the infrastructure and
8 the timing so that the program doesn't fail. We're all
9 about trying to make the program succeed, but it has to
10 succeed in a way that makes sense.

11 Rule design coupled with the realities of the
12 alternative fuels market have led us to conclude that this
13 policy will likely become infeasible and unworkable well
14 before the 2020 compliance date. I do appreciate the
15 uncertainty and the recognition of that by James Goldstene
16 in the opening comments.

17 California's jobless rate is second highest in
18 the nation. Higher fuel costs translate as we know to
19 loss of jobs, which of concern given 11.7 percent
20 unemployment in California. I know this Board is
21 sensitive to that fact. I know you care about that fact.
22 Sierra Research discussed why the program is likely to
23 become infeasible in 2015 time frame and discuss the
24 potential cost between now and 2020, which are
25 significant. And we have submitted that important detail

1 to you.

2 So it is important that you send a message that
3 recognizes the uncertainty, that avoids the setbacks, and
4 it creates a regulatory framework in which the LCFS can
5 have the best chance of success.

6 These are modest and prudent requests in my
7 opinion. I noted them to the Advisory Panel during the
8 process. And they are:

9 Conduct annual reviews with the CEC on program
10 feasibility and costs. If the program is going well, an
11 annual review will strengthen the signal, not weaken it.

12 Develop appropriate triggers to identify market
13 disruption so we can make adjustments. These are not
14 offramps. These are reasonable governance.

15 We should look at alternatives to this approach,
16 because we don't have the corner on wisdom on any given
17 day.

18 And we need a thorough of analysis of the impacts
19 to the refining industry in the state of California with
20 all the regs coming at them at one. The key to success in
21 any endeavor is how we're going to adjust and look at this
22 as with go forward. And I thank you for taking the time
23 and I thank you for having the LCFS Advisory Panel.

24 CHAIRPERSON NICHOLS: Thank you. Thanks for all
25 your work on the Advisory Committee.

1 Just say concerning the representation from the
2 Committee here today, we have gotten an incredible amount
3 of work out of you people. I don't think we pay you
4 anything either. It was really a good deal for the State
5 of California. Thank you.

6 Dorothy Rothrock. And Dorothy is followed by
7 Chris Dettore and Simon Mui.

8 MS. ROTHROCK: Sorry I wasn't right standing
9 there.

10 My name is Dorothy Rothrock. I'm with the
11 California Manufacturers and Technology Association. I
12 also Chair the AB 32 Implementation Group, which is a
13 broader coalition of business association and taxpayer
14 groups.

15 The IG has committed written comments. I'm here
16 for the manufacturers this morning.

17 As you know, manufacturing investment creates
18 high jobs and is the biggest wealth creator of all
19 economic sectors. We believe the cumulative impact of
20 this LCFS regulation and other climate policies will, in
21 fact, impose significant new costs on manufacturers, which
22 will add to the weakness we already suffer in the sector.
23 We have data tracking the rate of manufacturing investment
24 in California since 1977. Between '77 and the year 2000,
25 we attracted 5.6 percent of U.S. manufacturing investment.

1 Since 2001, California has been receiving only 1.9 percent
2 of U.S. manufacturing investment. The decline means that
3 aging and deprecating facilities and equipment are not
4 being renewed at a sustainable rate.

5 In environmental terms, California manufacturing
6 is an endangered species. And if this low rate of
7 investment continues is heading to extinction. It's
8 important to note that this data is a comparison of
9 California with other states. It does not take into
10 account the shift of manufacturing from the U.S. to other
11 nations.

12 We believe California's energy costs are a big
13 factor. A manufacturer deciding to deploy millions of new
14 capital looks at least ten years down the road to estimate
15 costs. In California, they see high costs from low carbon
16 fuel standard, as well as 33 percent renewable portfolio
17 standard and cap and trade. This can be avoided in other
18 states, and they are not likely to choose California as
19 the data is already showing.

20 So regulators should be paying attention to the
21 cumulative impacts of all of our energy policies. If we
22 value manufacturing, we need to be flexible and adaptable
23 enough to shift time lines and take new directions to
24 avoid serious harm to the economy. I urge you to adopt
25 the recommendations that Cathy Reheis-Body has described

1 from WSPA and the AB 32 IG to lower the costs of the LCFS.
2 Thank you.

3 CHAIRPERSON NICHOLS: Okay. Thanks?

4 Chris Dettore and Simon Mui.

5 MR. DETTORE: Good morning. And thank you.

6 Just a brief comment. I'm Chris Dettore from
7 DuPont Environmental Sciences. We'll make up some time
8 here.

9 DuPont supports maintaining the existing
10 greenhouse gas reduction targets within the low carbon
11 fuel standard regulation to support near-term investment
12 in advanced biofuel facilities. Change or uncertainty in
13 government policies would be counterproductive at a
14 critical time at the development of this industry. DuPont
15 cellulosic ethanol is planning to start construction on
16 its first commercial facility in 2012.

17 Thank you very much.

18 CHAIRPERSON NICHOLS: Good work, thank you.

19 Simon.

20 MR. MUI: Hi. Simon Mui. I'm a scientist with
21 the Natural Resources Defense Council.

22 First want to thank Bob Fletcher for his years of
23 work. I've spent about three years working with him on
24 the LCFS. It's been a pleasure every time. And I know
25 this isn't a goodbye, because based on your predecessors.

1 But in the mean time, we'll see you on the golf course.

2 As a member of the Advisory Panel, you know, my
3 impression is that ARB's conducted a very thorough open
4 review process: Nine full days of 39 people meeting
5 together going through 13 different issues.

6 I want to highlight just three main take-home
7 messages that I got from the Advisory Panel. The first
8 one you've heard a lot today, let's make the pro increase
9 the certainty of the program, and not weaken it by
10 creating uncertainty. Investors need a signal -- a stable
11 signal that the LCFS program will continue. If investors
12 don't have that signal, it becomes a self-fulfilling
13 prophecy they don't invest and there can't be compliance
14 with the LCFS.

15 Second, I just want to recommend that there are
16 actually based on our analysis that the LCFS's targets can
17 actually be achieved with sufficient investments in
18 regulatory certainty. Heard this from many of the biofuel
19 producers on the Advisory Panel. This is what utilities,
20 natural gas, other fuel providers are saying we can
21 actually bring these fuels to the market, given the right
22 investment climate, the right regulatory certainty.

23 And finally, I'd just like to say that in the
24 next slide, there's been a lot of discussion, a lot of
25 criticism about ARB's economic analysis. And we've looked

1 at some of the work that the oil companies have presented
2 back in the Sierra Research report. And it's frankly let
3 me trying -- scratching my head to figure out where these
4 cost estimates compare and fall and were developed.

5 In terms of the peer review literature, in terms
6 of cost numbers that we see, I'm just going to show one
7 example for cellulosic ethanol. The straight line going
8 up is the estimates from Sierra Research showing actual
9 increase in cellulosic cost going seven times higher than
10 the peer reviewed literature from agencies such as U.S.
11 DOE, U.S. EPA, International Energy Agency, the National
12 Academies of Sciences.

13 So I want to make sure that as we go forward the
14 economic analysis is done in a manner that is peer
15 reviewed, is done in a manner that takes into account
16 input from peer reviewed sources. Let's ensure that we
17 can go forward in a manner that is reasonable and peer
18 reviewed and based on sound science. Thank you.

19 CHAIRPERSON NICHOLS: Thank you.

20 Chris Malins and then John Shears.

21 MR. MALINS: Good morning. I'm Chris Malins. I
22 lead the International Fuel Council on Clean
23 Transportation. And I had the privilege of serving on the
24 Advisory Panel for the low carbon fuel standard.

25 In an earlier role, I wrote much of the staff

1 review of the first year of the British renewable
2 transport fuel obligation. Coming from that background, I
3 can honestly say I've been impressed at every stage with
4 the quality of the staff review project for the LCFS in
5 California and with the commitment of the staff. And I
6 believe that the report which has come out of this is an
7 excellent report and an example to all other programs in
8 this field.

9 The LCFS, as I understand it, aims to be a
10 transformative program. I think the staff report says
11 that the staff believe this is possible.

12 We have also heard Sierra Research report
13 opinions against this. I find the Sierra Research
14 analysis unconvincing and in some ways uninteresting. I
15 think it tells us that if no transformation occurs, then
16 the program will not succeed. And I don't think that that
17 is news to anyone. We believe that a transformation is
18 possible.

19 Success will require investment in innovative
20 alternative fuels. I think the LCFS has the potential to
21 be an important driver of that investment. At the same
22 time, one hears again and again that one of the barriers
23 to the LCFS becoming a more effective driver is the
24 perception of uncertainty. In that context, I agree that
25 unduly increasing the regularity of review would send the

1 wrong signal. I also support and was involved in work on
2 flexible compliance mechanisms.

3 Over the next decade, the LCFS in California is
4 going to be an exemplar to programs also in the
5 United States, as it already has been, to programs such as
6 the British Columbian low carbon fuel regulation, and to
7 programs across Europe, as 27 European member states look
8 to implement the fuel quality directive in Europe over the
9 next five years or so.

10 I believe that standing by this program will make
11 it a transformative program, not just for California but
12 for the rest of the world. And again, I thank the staff
13 for their commitment and for the excellent work which has
14 gone into the first review. Thank you very much.

15 CHAIRPERSON NICHOLS: Thank you.

16 John Shears.

17 MR. SHEARS: Good morning, Chairman Nichols and
18 members of the Board. And welcome to Dr. Sherriffs on his
19 first Board hearing. Not an easy topic for your review
20 today.

21 I'm just here to speak in support of the
22 standard. And as one of the several Advisory Panel
23 members, to offer kudos to the staff for an excellent and
24 balanced report.

25 If I had known the RPS was going to be brought up

1 today, I would have brought along some research that our
2 organization, the Center for Energy Efficiency and
3 Renewable Technology has done to show how, in fact, the
4 RPS is leading to more green jobs in California. So we do
5 have research on that. I'm not sure what data the lady
6 earlier was referring to, but we have data showing that
7 the RPS is beginning to lead to green jobs in California.

8 I'd like to highlight Chris Malins, a colleague
9 from the Advisory Panel, who mentioned these other sibling
10 regulations that are being developed throughout the US,
11 Canada, and Europe. Fuel quality directive is still up
12 for consideration at the European Commission and will be
13 discussed at a meeting on January 19th. My understanding
14 is there won't be a decision necessarily made at that
15 meeting, but going forward they're also looking to see
16 what California does together. These regulations can
17 produce considerable market for low carbon fuels through
18 the world.

19 With respect to high intensity crudes, I'd just
20 like to make note of the fact that Canada -- I'm from
21 Canada, so my home country pulled out of the Kyoto
22 Protocol and the Kyoto Compact earlier this week. I
23 understand Canada has been making assurances to the
24 California Air Resource Board that they'll be doing all
25 sorts of things doing their best to improve the

1 performance of Tarsand's syncrude, but it may call into
2 question Canada's commitment going forward on climate
3 policy, given Tarsand's are expected to account 15 percent
4 in coming years of Canada's overall all greenhouse gas
5 emissions.

6 At the same time, Quebec just adopted its cap and
7 trade program, so I'd like to just put it into the broader
8 context that this regulation is part of an overall global
9 climate strategy that we need to remain focused on. And I
10 think it's also important for moving forward new economic
11 and -- new economic opportunities and new job development
12 within California. Thanks a lot.

13 CHAIRPERSON NICHOLS: Thanks.

14 Mike Williams and Edwin Lombard.

15 MR. WILLIAMS: Good morning, Madam Chairman and
16 members of the Board.

17 I want to thank you for the opportunity to
18 testify today.

19 My name is Mike Williams. I'm here today on
20 behalf of the IWLA, the International Warehouse Logistics
21 Association. We are an association of over 500 member
22 companies throughout the United States and Canada who
23 represent the third party logistic carriers, many of whom
24 employ over 1,000 workers.

25 We move products efficiently and safely

1 throughout North America with ships, trains, planes, and
2 trucks and provide additional third-party logistics
3 services and thousands of warehouses.

4 I'm here today to ask that you suspend the diesel
5 requirement of the LCFS, the low carbon fuel standard, of
6 course. In 2009, the IWLA submitted comments to the Board
7 asking that you complete the rulemaking process, adhere to
8 the Administrative Procedures Act and remove diesel fuel
9 from the LCFS until such time that a fuel recipe could be
10 tested and an economic analysis completed.

11 Today, there is not an adequate economic analysis
12 of how fuel providers will comply. We have many concerns
13 that we feel need to be addressed before CARB continues on
14 the path of the California-only diesel LCFS. These
15 concerns are:

16 Biodiesel fuels are more expensive than diesel
17 fuel. How can you add something more expensive to current
18 fuel and come up with a less expensive product?

19 IWLA believes CARB has failed to accurately
20 assess the actual cost impacts of the LCFS. According to
21 forecasted fuel cost data currently being analyzed by a
22 group of end users of diesel fuel, diesel fuel market
23 prices will significantly be higher than diesel fuel
24 purchase in and around competing ports in Washington,
25 Canada, and the Panama Cannal gateways.

1 Adequacy, reliability, and affordability of
2 transportation fuels are essential to the success of this
3 complex program. In 2010, as part of the larger coalition
4 called the Western States Goods Movement Alliance, IWLA
5 asked the Board to eliminate diesel fuel from the low
6 carbon fuel standard as it applies to diesel fuel.

7 We are quickly approaching 2012 and the
8 compliance path is not evident. California continues to
9 suffer from the highest unemployment rate in recent
10 history. Its recovery depends on creating new and
11 permanent jobs. Simple economics dictate that any
12 increase in the cost of transportation fuels will only
13 worsen California's already anemic economy. Jobs are
14 painfully scarce and consumers have suffered enough.
15 Thank you.

16 CHAIRPERSON NICHOLS: Thanks.

17 Edwin Lombard and then Jay McKeeman and Jamie
18 Knapp.

19 MR. LOMBARD: Good morning, Madam Chair, members
20 of the Board. My name is Edwin Lombard. I'm here today
21 on behalf of the California Black Chambers of Commerce.

22 We are generally supportive of the goals of the
23 low carbon fuel standard. But we are concerned that you
24 are moving ahead with implementation based on faulty and
25 insufficient analysis.

1 This is very likely to result in higher fuel
2 costs and possible fuel supply issues which will have
3 serious consequences on businesses and consumers and could
4 also put the program itself at risk for failure.

5 We have been here before raising concerns about
6 the cost of LCFS and other CARB policies. And our
7 experience has been that CARB staff consistently downplays
8 these costs, insisting that even the most ambitious
9 policies including all of AB 32 would be virtually cost
10 free.

11 On the other hand, the Chair of this Board has
12 publicly stated on numerous occasions that in order to
13 achieve the goals of AB 32, it will be necessary to put a
14 price on carbon. With all due respect, we can't have it
15 both ways. Both the reduction in carbon intensity of
16 conventional fuels and the development, manufacturer, and
17 distribution of biofuels will require intensive
18 investments that fuel providers will, of necessity, pass
19 along to consumers. This would appear to constitute a
20 price on carbon and a steep price at that.

21 Before moving forward, further with the planned
22 implementation of LCFS, we would appreciate hearing from
23 CARB a realistic assessment of what this price on CARB
24 will be -- of carbon will be, a realistic cost benefit
25 analysis of the program. At the very least, we believe

1 the process of the LCFS should be carefully monitored with
2 annual reviews employing independent analysis by the CEC
3 and a means of modifying or suspending the policy, should
4 the cost provide prohibitive or the hoped-for biofuels
5 market not develop at the rate projected.

6 Thank you very much.

7 CHAIRPERSON NICHOLS: Thanks.

8 Jay McKeeman and Jamie Knapp.

9 MR. MCKEEMAN: Good morning, Madam Chair and
10 Board members.

11 You have a difficult job. So what's new?

12 The problem as I listen to various witnesses
13 testify this morning is whether you provide a security for
14 the investment community or whether you provide security
15 for California motorists.

16 To this point in time, there's been no accurate
17 estimate of what the California motorist is going to have
18 to pay for the low carbon fuel standard. Until such time
19 that CARB can give that accurate assessment done in a
20 collaborative manner, peer reviewed, we believe this
21 regulation needs to be taken off the shelf or put on the
22 shelf, however you want to state it.

23 We have provided testimony in our written
24 comments about a variety of technical issues with the low
25 carbon fuel standard. There are issues about how fuel

1 distributors can distribute these new fuels and how they
2 are vetted for the marketplace and whether marketers and
3 distributors incur a lot of extra liability for fuels that
4 haven't been certified for a variety of transportation
5 aspects. This is not covered under the fuels LCFS. This
6 is, we hope somebody will take these steps and make them
7 come to pass. There is no certainty.

8 And until the low carbon fuel standard addresses
9 these issues, it creates more confusion and uncertainty,
10 not only for marketers but for California motorists. Your
11 obligation, in our opinion, is to consider the impact of
12 the California motorist. Until you can adequately and
13 accurately assess the impact of the motorist, you need to
14 pull this off the regulatory agenda. Thank you.

15 CHAIRPERSON SAWYER: Jamie Knapp and then
16 Michelle Passero.

17 MS. KNAPP: Good morning, Madam Chair, members of
18 the Board.

19 I'm Jamie Knapp, J. Knapp Communications.

20 First, I'd like to congratulate Mr. Fletcher on
21 many, many years of service and Richard Corey for taking
22 over big shoes. We appreciate all the staff's work over
23 the last few years.

24 I'm here presenting a letter today signed by more
25 than 40 State, national, and international organizations,

1 environmental health groups, environmental groups, and
2 public interest organizations. This is an updated version
3 of the version this was submitted earlier online.

4 These trusted organizations are groups that you
5 know well and have heard from already today and will hear
6 from later this afternoon as well. They're groups like
7 the American Lung Association of California, Coalition for
8 Clean Air, Natural Resources Defense Council, and
9 Environmental Defense Fund.

10 Some of these organizations you may not know, but
11 they're watching and they're watching from afar. They're
12 groups like Friends of the Earth Europe, the Focus
13 Association for Sustainable Development in Slovenia. So
14 groups from the around the world are watching what you're
15 doing today. They know the low carbon fuel standard will
16 protect public health, cut our dangerous addiction to oil,
17 and job producing next generation clean fuels, fuels that
18 help meet our long-term climate goals. It's a win-win for
19 the environment and for the economy.

20 So I'm going to stick to a couple of key high
21 points from this letter and let most of the colleagues
22 from the other organization who are here identify some of
23 the more details they will talk to you about.

24 A few could points. Please reject oil industry
25 attempts to weaken the standard; strengthen the proposed

1 dirty fuels provision; and stay the course on
2 implementation.

3 Direct staff to continue implementing the rule on
4 the schedule that you established. You established this
5 rule back in 2009. Continue that process, that forward
6 momentum staff is keeping you moving forward on, and we
7 hope you will continue to do that.

8 Today, your action is sending important signals
9 to industry about investment. We're hearing a lot about
10 that this morning to other states, nations that are all
11 considering very similar policies.

12 The letter urges you to continue in your
13 leadership role of adopting and implementing strong
14 policies that advance next generation fuels. The world is
15 watching. Thank you.

16 CHAIRPERSON NICHOLS: Thanks.

17 Michelle and then Julian Canete and Tim Martinez.

18 MS. PASSERO: Good morning.

19 I'm Michelle Passero with the Nature Conservancy.
20 The Nature Conservancy strongly supports the low carbon
21 fuel standard and its timely and ongoing implementation to
22 help California meet its greenhouse gas reduction goals.

23 We've appreciated being part of the LCFS Advisory
24 Panel and continue to participate in ARB's sustainability
25 working group for the LCFS program. We commend staff for

1 all its hard work on both these fronts.

2 We do urge the Board to continue supporting the
3 timely development and incorporation of sustainability
4 standards into the LCFS and recommend a clear time frame
5 be set to actually complete these standards.

6 I spent the past two weeks in Durban at the
7 climate negotiations and it really emphasized the
8 importance of local, state, and regional actions through
9 greenhouse gas emissions and also really highlighted all
10 the great work that California is doing and how important
11 it is as a precedent and a model.

12 It also reminded me firsthand about how important
13 sustainability criteria are and how they will be for the
14 LCFS program. They do represent a wise up-front
15 investment that will pay ongoing dividends in the future
16 in the form of minimizing risk and ensuring the long-term
17 supply of renewable fuels by protecting our natural
18 infrastructure and the communities that enable their
19 supply and production in the first place.

20 It is especially important also as other states
21 and regions, as we've heard a few times now, are clearly
22 looking to California as a model as they develop their own
23 LCFS programs. So we do ask that ARB stay the course on
24 LCFS implementation and continue to pursue a meaningful
25 way to include sustainability standards into the program.

1 And as always, we're happy to remain a resource
2 in this effort. Thank you.

3 CHAIRPERSON NICHOLS: Thank you.

4 Julian and then Tim Martinez.

5 MR. CANETE: Thank you, Chairman Nichols, Board
6 members. Good morning. And thank you for this
7 opportunity to address you.

8 My name is Julian Canete, and I'm president and
9 CEO of the California Hispanic Chambers of Commerce. I'm
10 here today to share with you our concerns about the likely
11 impacts the implementation of the low carbon fuel standard
12 will have on our members, their families, and the
13 communities. It appears that the cost of feasibility of
14 the LCFS have been significantly under-estimated. The
15 California Energy Commission has expressed concern over
16 the plausibility of CARB staff's assumptions and has
17 projected the rule will cost fuel providers billions of
18 dollars over the next few years. Those costs will
19 undoubtedly be passed along to the consumers and small
20 business owners. When you consider the sharp increases in
21 energy costs, we are already facing as a result of other
22 regulations, such as cap and trade and the renewable
23 portfolio standard, this is an added burden to our members
24 and the economy at large cannot afford.

25 Madam Chairman, you have often stated that

1 California needs to put a price on carbon. Our question
2 is just how high do we believe our energy costs need to go
3 in order for the policies to succeed? We feel strongly
4 that the public deserves an honest answer to that question
5 as well as objective, thoroughly researched and realistic
6 cost of specific programs, such as LCFS, before we are
7 presented with these bills. With that goal in mind, we
8 urge you to avail yourselves to the expertise of the
9 Energy Commission to obtain independent analysis of the
10 costs and feasibility of the LCFS.

11 We also request that you establish a requirement
12 for annual review of the program that will allow for
13 immediate adjustments should it be determined that the
14 costs are excessive or that carbon reduction requirements
15 are not attainable based on current conditions. I thank
16 you for the opportunity. Thank you.

17 MR. MARTINEZ: My name is Tim Martinez, and I'm
18 here representing the San Joaquin County Hispanic Chamber
19 of Commerce.

20 Coming from a county where the unemployment rate
21 is 15.7 percent, that's a third higher than the state
22 average. We're extremely sensitive to the things that
23 could negatively impact our businesses and jobs in San
24 Joaquin County.

25 One of those things is the low carbon fuel

1 standard. CEC has estimated that the LCFS will cost fuel
2 providers billions of dollars. Those cost increases will
3 be passed along to businesses and consumers, not only at
4 the pump, but in the form of higher prices for fuel
5 dependent goods and services.

6 Our businesses can't afford those higher fuel
7 costs and maintain payroll at their current levels. That
8 means more layoffs, less tax revenue for our county and
9 our communities, and even greater strain on public
10 services.

11 The CEC has also questioned the availability of
12 sufficient quantities of biofuels to meet the LCFS's
13 carbon reduction requirements. That could cause supply
14 shortages, which would tend to drive fuel prices even
15 higher.

16 We understand your agency has been charged with
17 reducing greenhouse gas emissions, and we support that
18 goal. But we cannot support putting small businesses and
19 jobs at risk in order to achieve this. We urge you to
20 consider adjustments to the rule that take into account
21 the cost and feasibility issues raised by the Energy
22 Commission and to consider possible alternatives to the
23 LCFS that might be a more cost effective way to go. Thank
24 you for your consideration.

25 CHAIRPERSON NICHOLS: Eileen Tutt.

1 MS. TUTT: Good morning, Madam Chair and members
2 of the Board.

3 My name is Eileen Tutt. I'm the Executive
4 Director of the California Electric Transportation
5 Coalition. Our members include both publicly and investor
6 owned utilities, as well as auto makers.

7 I want to first congratulate my friend, Bob
8 Fletcher and Bob Jenne, wherever he is out in the ether,
9 if you are retiring in a matter of Mike Scheible, I will
10 look forward to seeing you around quite a bit.

11 I really do appreciate the opportunity to testify
12 today, because CalETC and every one of our members fully
13 supports the low carbon fuel standard regulation. We
14 believe that it is absolutely essential that this state
15 move away from a total dependence on a single fuel in the
16 transportation sector. And we see the low carbon fuel
17 standard regulation as a key policy driver. We are
18 hopeful that this policy will be replicated at the
19 national level and even the international level.

20 I want to point out that on Wednesday of this
21 week, there was an advertisement that ran in the Capitol
22 Weekly, I believe. It was signed by auto makers, by
23 utilities, by natural gas providers, by associations like
24 ours, the Natural Gas Vehicle Association, the California
25 Municipal Utility Association, in support of the low

1 carbon fuel standard regulation and our need to diversify
2 the transportation fuel sector.

3 There was also an op-ed signed by Sacramento
4 Municipal Utility District and the San Diego Gas and
5 Electric Company as well as SoCal Gas supporting the low
6 carbon fuel standard, and that ran in the Sacramento Bee
7 and it supported the amendments you'll hear later today.

8 I'm going to conclude and cede my time to the
9 Board by saying that your leadership on the low carbon
10 fuel standard is critical. At both the national and the
11 international level, the European Commission is
12 considering making amendments -- a decision on high carbon
13 fuels, and they're watching what this Board does today.
14 You can take us one giant step forward to a more
15 sustainable and diverse transportation fuels market. And
16 I ask that you please not scale back on this regulation
17 and that your current review schedule is sufficient and it
18 helps provide some market stability.

19 Thank you for your time and consideration.

20 CHAIRPERSON NICHOLS: Thank you.

21 Susan Frank and Paul Monroe.

22 MS. FRANK: Thank you, Chair Nichols, Board
23 members and staff.

24 My name is Susan Frank. I am here today as the
25 Director of the California Business Alliance for a Green

1 Economy. We are a network of 1200 mostly small and
2 mainstream businesses across the state who support
3 California clean energy policies.

4 Our members strongly support the low carbon fuel
5 standard as it is a policy that will enhance our energy
6 independence and also strengthen our economy.

7 It's important to note that California residents
8 and businesses are spending \$65 billion at the pump
9 annually and the majority of that money is leaving the
10 state. That does not benefit the business community.

11 And I respectfully disagree with my colleagues in
12 the Chamber of Commerce business. I spent ten years in
13 the Chamber of Commerce business. While I respect their
14 opinions, this is one place where we do disagree.

15 Eileen mentioned the advertisement that was
16 placed in the Sacramento Bee. Our Alliance helps sponsor
17 that ad. We're really pleased with the businesses and
18 utilities and auto makers that signed on. We have big
19 business associations like Small Business California,
20 Silicon Valley Leadership Group, Clean Tech San Diego,
21 Sierra Business Council; and regular businesses, big ones
22 like Levi Strauss; and a small one like Ross Moore
23 pastries down in Signal Hill that actually cosigned. They
24 cosigned an op-ed that was printed in today's paper in the
25 L.A. Daily News. Ross Moore has transitioned its fleet to

1 natural gas. And this is a small company that gets this
2 is a good thing for California.

3 So you're going to hear from more folks today,
4 from the Latin Business Association. You have comments in
5 your packet from Small Business Majority. All of these
6 companies who employ tens of thousands of Californians,
7 support the work to strengthen the low carbon fuel
8 standard believe it is a positive step for the business
9 community and good for California. Thank you.

10 CHAIRPERSON NICHOLS: Thank you, Susan.

11 Paul Monroe and then Michael Saragosa.

12 MR. MONROE: Thank you, Madam Chair and Board
13 members.

14 My name is Major General Paul Monroe, retired. I
15 was a former Major General of the National Guard.

16 I wish to express my appreciation for being able
17 to address you on this important topic.

18 I've listened to many presentations. You have a
19 lot of good recommendations. Not all agree with each
20 other. And I don't envy your job in sorting them all out.

21 I served over 46 years in the United States Army
22 and the California National Guard. During that period,
23 I've dealt with national impact of our addiction to fossil
24 fuels. For some time, like most, I felt that fuel was
25 just something you put in your vehicles, aircraft, and

1 generator to make them run, without regard to anything
2 out.

3 However, about 25 years ago, I discovered that
4 even though the National Guard is mostly funded by the
5 Feds and we have to follow federal regulations, when using
6 State roads and highways, we also have to follow State
7 regulations and State emissions standards, which are much
8 more -- I was going to say severe. But they're not
9 severe.

10 It was a shock to me as Battalion Commander at
11 that time and in my organization I had 250 Humvees that is
12 they run on not very good gas mileage and neither
13 fuel-consuming equipment.

14 Initially, our dependence on fossil fuels only
15 impacted the level of our training. Do we have enough
16 fuel to train or not. But since the Gulf Wars one and
17 two, the National Guard in particular reserve components
18 overall have become an operational force. And what goes
19 on with fuel now impacts lives.

20 I'm sure many of you have seen the news where
21 Pakistan is upset with us again. They hold up our fuel
22 convoys and then they allow them to be ambushed. And this
23 costs lives of Americans that are trying to help in
24 Afghanistan.

25 All American national security leaders, the

1 Pentagon, Department of Defense, Department of State, they
2 all agree that we need this low carbon fuel standard.

3 And I need to cut to the chase because this clock
4 runs faster than when you sit over there.

5 But California has led the nation when it comes
6 to clean energy. We strongly encourage you to continue
7 the tradition of leadership and re-authorize a robust
8 public interest energy investment program. These programs
9 have and will continue to play a vital role in reducing
10 California's consumption of oil and contribute to clean
11 energy development.

12 In the words of Retired Marine Corps General
13 Anthony Zenini and Commander in Chief of U.S. Central
14 Command, "We will pay for this one way or another. We'll
15 pay to reduce greenhouse gas emissions today or we'll pay
16 for them later in military terms and that will cost human
17 lives."

18 Thank you.

19 CHAIRPERSON NICHOLS: Thank you. You know, I
20 probably should have told you this before, I never cut off
21 anybody who has access to tanks or weapons, just a matter
22 of principle. Thank you. Appreciate it.

23 All right. Mr. Saragosa followed by Stephen
24 Maxwell. And our final witness of the day is Terry Davis.

25 MR. SARAGOSA: Good morning, Madam Chair,

1 members.

2 First off, I'd like to thank you for all the hard
3 work on the LCFS. I know lots of hours and time has been
4 put in on behalf of both the Board, as well as all of the
5 stakeholders involved.

6 Again, my name is Michael Saragosa on behalf of
7 the Latin Business Association and its 3,000 members
8 statewide. We're here today to support the LCFS. We
9 believe the economic analysis shows there will be a net
10 savings on gasoline prices.

11 We've all seen the wild fluctuations that happens
12 in gas prices throughout the state. And while we're on
13 the downside of that right now, thankfully, we know that
14 ultimately those base line prices always increase. And so
15 we believe the LCFS will lead not only to lower prices,
16 but more sustainable prices with really next generation --
17 with next generation investment in California grown
18 technologies. And that money will stay here in
19 California. It will help grow small businesses as well as
20 large business. That's why Latin Business Association
21 strongly supports the LCFS.

22 And lastly, you know, we do represent many ethnic
23 businesses. And we work with lots of different groups
24 throughout the state. We see this as also a social
25 justice issue in that we represent some of the most

1 economically depressed and environmentally challenged
2 areas and communities. We believe LCFS will lead to a
3 better economic standard, better environmental standard,
4 and a better quality of life for many people. So thank
5 you for your time.

6 CHAIRPERSON NICHOLS: Thank you.

7 Steve Maxwell.

8 MR. MAXWELL: Thank you, Chairman Nichols.

9 My name is Steven Maxwell. I'm a thoracic
10 surgeon and member of the American Lung Association and
11 California's Leadership Board here in Sacramento.

12 As a lung surgeon, I know the damage caused by
13 the polluting nature of petroleum fuels. Every day, I see
14 in our hospitals and emergency rooms the old, the young,
15 and everyone in between struggling to breathe, innocent
16 victims of California's air pollution problems.

17 Across the state health and medical
18 organizations, community activists, and others are keenly
19 aware of the damages caused by petroleum extraction,
20 transportation, refining, and consumption. Petroleum use
21 is a contributor to our severe air quality problems and
22 related public health emergencies, including asthma
23 attacks, chronic lung illnesses, and premature deaths.

24 When the LCFS was adopted in 2009, you received
25 letters and petitions from leading State and local health

1 organizations, as well as over 100 doctors, nurses,
2 respiratory therapists and other medical professionals who
3 wanted to support your efforts to adopt a true clean fuel
4 standard for California.

5 We know that the LCFS can play a big role in
6 promoting improved air quality and public health and is
7 essential to meeting our AB 32 greenhouse gas reduction
8 goals.

9 We support strong ongoing implementation of the
10 program as a key strategy for bringing about clean fuels,
11 clean cars, and clean air in California and beyond.

12 As we saw with the defeat of Proposition 23,
13 Californians consistently support clean air programs and
14 want policy makers to reject oil industry efforts to get
15 away with causing more harmful pollution.

16 In your packets for today's meeting, you will see
17 letters from over 600 clean air supporters urging you to
18 stand firm and maintain a strong program.

19 I'm also here to deliver a letter from
20 California's public health and medical community,
21 including groups from all over the state. To name a few,
22 the American Lung Association of California, the American
23 Heart Association, the American Academy of Family
24 Physicians, California Thoracic Society, and Catholic
25 Health Care West, and others.

1 Our organizations recognize the importance of
2 moving beyond today's petroleum fuels in California and
3 maintaining a strong performance-based clean fuels
4 standard. We don't want to see the standard weakened in
5 any way to allow dirty fuels in California.

6 We strongly support proper accounting for dirtier
7 fuels and think that the proposal from staff is a good
8 start. This is one of the largest rules adopted under AB
9 32 and we can't afford to let it drift backwards.

10 We urge you to reject the industry's claims that
11 we need more time, that we need to weaken the standard and
12 allow dirty fuels here in California. Please do not give
13 oil companies a pass in California to continue business as
14 usual. Instead, we ask you to continue to implement the
15 LCFS on schedule to ensure its successful program. Thank
16 you for supporting clean air and a strong clean fuel
17 program.

18 CHAIRPERSON NICHOLS: Thank you very much.

19 The last witness, who apparently had needed to
20 transform over from the other item, Terry Davis.

21 MR. DAVIS: Thank you, Madam Chair, for adding me
22 in.

23 Terry Davis on behalf of the Sierra Club. We
24 just wanted to recognize and register our strong support
25 for California's low carbon fuel standard. With the

1 passage of AB 32 and SB 375 and the fuel standard
2 California's, clearly recognized nationally and
3 internationally as the leader in fighting climate change.

4 This standard is driving the next generation of
5 non-petroleum fuels, fuels that are needed for the
6 planet's long-term climate stability.

7 We're all familiar with the controversy around
8 the Tarsand's oil and the Keystone pipeline. We can't be
9 certain how the pipeline is going to play out, but we can
10 be certain that the Tarsands are the source of an oil that
11 is among the dirtiest on the planet.

12 It is important that California sends a message
13 that we will not be expanding our reliance on the most
14 carbon intensive fuels. California's low carbon fuel
15 standard will help keep this dirty oil out of our state
16 and disincentivize the additional infrastructure to
17 deliver it here.

18 California has a unique role as a leader in the
19 fight against climate change. Many will be watching what
20 you do here today. Please keep the low carbon fuel
21 standard strong. Thank you.

22 CHAIRPERSON NICHOLS: Thank you, Terry.

23 That concludes the list of witnesses, and so I'm
24 just going to make a couple of closing comments, if nobody
25 minds, and then bring this item to a close.

1 I do want do say a word about the schedule, which
2 is that it's now 20 of 12:00. And I think, if others
3 agree, that probably the best thing to do would be to have
4 the staff do their presentation for the next item, which
5 is the regulatory item and then break for lunch before we
6 begin the list of witnesses and move to a close on that.
7 So just for people's planning sake, I think we will finish
8 up this report. We will hear the staff report on the next
9 low carbon fuel standard item, which is the proposed staff
10 changes to the rule itself and then break for lunch.

11 (Whereupon Dr. Sherriff's exited the
12 proceedings.)

13 CHAIRPERSON NICHOLS: So when we first began this
14 hearing, I thought we were going to hear complete
15 unanimity of everybody supporting the low carbon fuel
16 standard but wanting to perhaps make a few tweaks. But I
17 was disappointed. It didn't work out that way. But as it
18 turns out, we do have some disagreements about whether
19 this is something that is worth doing at all.

20 But I want to make it clear that there is no
21 question on this Board's mind and no issue on our agenda
22 in terms of turning back on the low carbon fuel standard.
23 We are moving forward. We're committed to its successful
24 and timely implementation.

25 Obviously, there are challenges and

1 uncertainties. But we are committed to the basic concept
2 of the low carbon fuel standard, which is intended to be
3 transformational of the fuels that we use here in the
4 state of California.

5 We recognize that we don't have presently at the
6 moment in the marketplace all of the kinds of low carbon
7 fuels that we need to see. That's the purpose of this
8 rule and moving forward is to help make that happen. But
9 it's not here yet. And we recognize that there needs to
10 be more in the marketplace to make this work the way that
11 we hope it will as we begin to require greater quantities.
12 However, it's an issue of timing and of sending the right
13 signals to the market.

14 It's important for the Board to keep monitoring
15 the implementation of the standard and not just to assume
16 that our work is done. I think that the staff's
17 commitment to brief us annually will take care of that
18 issue.

19 And I also am very encouraged by the commitment
20 to continue working closely with the California Energy
21 Commission, which has an independent role here in
22 monitoring transportation fuel supplies.

23 And, of course, we share common stakeholders who
24 will also be helping us to design a more comprehensive
25 economic analysis and further evaluation of a flexible

1 compliance mechanism.

2 These kind of analyses are critical before we
3 make any changes to the rule and are needed to inform our
4 ongoing implementation efforts.

5 I want to say one other thing, because it's come
6 up several times in different people's testimony. I got
7 back only two days ago from South Africa. I was
8 privileged to represent California at the UN climate
9 talks. And I couldn't have been prouder to be from
10 California. It was an exhausting experience because there
11 was so much interest and demand for California's
12 experiences.

13 But it was very encouraging to meet with many
14 people from around the globe who were there to talk about
15 what they're doing on these issues. So I think sometimes
16 it's easy to exaggerate the extent to which we are alone.
17 We may be the only state in the United States that has a
18 comprehensive climate program, but we are far from being
19 the only place in the world that has such a program. And
20 what makes us special is that people do look to us for our
21 technical leadership and for our competence when it comes
22 to designing regulatory tools that can survive all the
23 challenges, both economic and political, whenever we try
24 to make change happen. But also can be adjusted as needed
25 to take account of reality out there.

1 And so I had more than enough opportunities to
2 address various different forums of international bodies
3 that were there. But I really felt at the end of the day
4 that it's a two-way street, that our staff has not only
5 created regulations, which are looked to as models, but
6 they've also listened and taken some of the best ideas
7 that have been generated here and elsewhere in the world
8 in order to put these regulations together.

9 And I just share that because I think it should
10 add some further degree of comfort to the Board that this
11 is not something that we are just doing here alone in
12 Sacramento. We are very much part of an international
13 movement that's going on here. But we are also playing an
14 important role in helping to guide and shape that
15 movement, a great position to be in.

16 Yes, Dr. Sperling. As one of the authors of this
17 proposal, you get a few words here.

18 BOARD MEMBER SPERLING: Thank you.

19 I just want to refine something -- the beginning
20 comments that you made where you said you had been hoping
21 for a unanimous support.

22 I did -- as a professor, I did a statistical
23 analysis of all of the comments that were presented here.
24 And there were only 2.5 people representing six percent of
25 the total that question the targets and the goals of the

1 LCFS.

2 Now, in any world I've been in, that's as close
3 to unanimous as I've ever come across. So perhaps you
4 might want to qualify that.

5 CHAIRPERSON NICHOLS: I'll amend my remarks.
6 Thank you. That's very helpful.

7 I think on that note, we will thank everyone for
8 their testimony and look forward to continuing to work
9 with you as we continue to implement this program. Thank
10 you all very much.

11 And we will now turn -- I don't think we have to
12 do much shifting of staff, same people, and roll into the
13 next item on our agenda.

14 Mr. Goldstene, do you have any opening comments
15 here?

16 EXECUTIVE OFFICER GOLDSTENE: I do. Thank you,
17 Chairman Nichols.

18 The low carbon fuel standard is based on
19 extensive technical evaluation that advanced the science
20 of life cycle analysis to account for various fuels'
21 greenhouse gases from all stages of production and use.
22 The result is a regulation that provides the policy
23 framework and technical elements needed to implement the
24 world's first low carbon fuel standard.

25 As discussed in the previous agenda item, the

1 regulation is designed to harness market forces and
2 encourage innovation to cut greenhouse gases and set
3 California on the track to use an increasingly large and
4 diverse set of lower carbon transportation fuels.

5 You heard from the earlier presentation that, at
6 this early stage, staff believes the program is working as
7 designed. However, with over a year of implementation
8 experience and with the Board's directive to refine
9 certain elements of the regulation, staff has identified
10 several enhancements to the program. We expect that these
11 improvements will increase participation, clarify the
12 regulation, and provide additional flexibility.

13 I'll now ask Aubrey Sideco of our Stationary
14 Source Division to present the staff presentation.
15 Aubrey.

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

18 MS. SIDECO: Thank you, Mr. Goldstene. And good
19 morning, Chairman Nichols and members of the Board.

20 From the previous agenda item, you heard an
21 update on the low carbon fuel standard, which not only
22 emphasized the importance of the program towards AB 32
23 goals, but also concluded that the program is working as
24 designed at this early stage.

25 In today's presentation, I will present to you an

1 overview of the proposed amendments, which are intended to
2 clarify and strengthen and improve the LCFS.

3 --o0o--

4 MS. SIDECO: This slide provides the topic I will
5 be covering today. Of the amendments we are proposing,
6 the first two items are complex and warrant more
7 discussion.

8 Following these two items, I will describe the
9 remaining amendments.

10 --o0o--

11 MS. SIDECO: Staff certainly benefited from an
12 open public process during this rulemaking effort. The
13 proposed amendments reflect both the direction from the
14 Board and lessons learned from the first implementation
15 year of the program. Also, and just as important, the
16 proposal reflects the extensive amount of input gained
17 from stakeholders.

18 Moreover, this public process was supported by
19 input from the Advisory Panel in parallel with the LCFS
20 review.

21 --o0o--

22 MS. SIDECO: The first set of amendments are
23 changes to the crude oil provisions and how high carbon
24 intensity crude oils should be addressed in the
25 regulation.

1 To begin this discussion, I'd first like to point
2 out that some crude oils take substantially more energy to
3 produce than others. These crudes are referred to as high
4 carbon intensity cruel oil or HICO. A few examples are
5 crudes produced through steam injection and oil sand
6 mining.

7 As we will see in the next slide, the production
8 and transport of more energy intensive crude oil can
9 represent 20 percent of total life cycle emissions.

10 --o0o--

11 MS. SIDECO: As shown in this slide for gasoline,
12 carbon intensity values are based on a full accounting of
13 all life cycle GHG emissions, from production to use. The
14 circled area shows that the total life cycle emissions
15 include the carbon intensity associated with crude oil
16 production and transport.

17 Depending on the production methods used,
18 production carbon intensities, or CIs, can vary
19 significantly. In this illustration, oil production CI
20 varies from four to over 20 grams per megajoule.

21 --o0o--

22 MS. SIDECO: To address high intensity crudes,
23 the existing regulation grandfathers the 2006 crude slate,
24 including most high-CI crudes.

25 Under the regulation, fuel providers must account

1 for high CI crudes, which are not grandfathered in the
2 program.

3 Moreover, when non-grandfathered high CI crudes
4 are used, regulated parties generate additional deficits
5 that must be mitigated.

6 --o0o--

7 MS. SIDECO: There are a number of issues with
8 the current crude oil provisions. One of these issues
9 relates to the unanticipated change in the crude slate
10 between 2006 and 2009.

11 In 2006, we assumed that the CI would not change
12 substantially, but found that the use of non-grandfathered
13 high-CI crudes had increased.

14 Under the current regulation, even if the total
15 volume of high-CI crude remains unchanged, refiners may
16 incur large deficits.

17 Refiners must then offset the deficits generated.

18 --o0o--

19 MS. SIDECO: Given the broad array of potential
20 options in dealing with high intensity crudes, staff
21 relied on key principles to help guide our evaluations.

22 These include the aim to: Preserve program
23 benefits, ensure more equitable treatment of high-CI
24 crudes, improve the accounting of life cycle emissions
25 from the production and transport of crude oil, promote

1 innovation for emission reduction activities, and avoid or
2 limit incentives for crude shuffling.

3 --o0o--

4 MS. SIDECO: Staff considered these six options
5 for addressing crude oil, each with its own unique
6 approach. The current approach with modifications
7 basically keeps the status quo. The California average
8 approach treats industry as a whole and compares the
9 California average crude CI with the baseline average CI.

10 The company-specific approach sets up
11 company-specific compliance schedules.

12 The hybrid approach is a combination of the
13 California average and company-specific approach, in that
14 it keeps a single compliance schedule, but makes each
15 refinery responsible for its own crude slate.

16 The world-wide average approach bases the
17 compliance obligation on the world-wide average crude in
18 the base line year.

19 And finally, the no differentiation approach
20 assigns the same CI to all crudes, regardless of the
21 source.

22 --o0o--

23 MS. SIDECO: After careful consideration of the
24 options, staff's proposal is to use the California average
25 approach, which incents innovative methods that reduce

1 crude CI and calls for implementation to begin in 2013.

2 The California average approach recalculates the
3 industry-wide average CI each year for crudes refined in
4 California. If the average is no greater than the
5 baseline, no additional deficits would be added.

6 However, if the average is greater than the
7 baseline, additional deficits would be accrued, and would
8 require mitigation on an industry-wide basis.

9 --o0o--

10 MS. SIDECO: The California average approach
11 achieves many benefits. Along with properly accounting
12 for carbon emissions associated with high-CI crudes, this
13 approach maintains the full life cycle foundation of the
14 LCFS in a simple-to-use format. Also, it provides a level
15 playing field by applying the same accounting method to
16 all crudes.

17 The greatest benefit to fuel producers under this
18 option is additional flexibility in crude choice and the
19 manner in which they manage their crude slates.

20 We will now move on to discuss some of the
21 approaches supported by others.

22 --o0o--

23 MS. SIDECO: As you will hear from fuel providers
24 and oil companies today, some believe that there should be
25 no differentiation between crude oil CI. Oil companies

1 support the no differentiation approach, because they
2 assert that it eliminates crude shuffling attributed to
3 the program, simplifies an already complex regulation, and
4 re-focuses on the true intent of the LCFS program, which
5 is to encourage use of low carbon and innovative
6 alternative fuels.

7 We believe that this approach does not align with
8 the guiding principles to account for life cycle emissions
9 and promote innovation.

10 --o0o--

11 MS. SIDECO: Other stakeholders, including some
12 environmental groups, support the hybrid approach, which
13 compares each individual company's crude slate with their
14 own crude slate in the base line year, but uses the
15 California average compliance schedule. Proponents
16 believe that refiners should be responsible for their own
17 emissions and the deficits from the use of high-CI crudes.
18 In other words, the pay to pollute principle.

19 Proponents also note that this approach aligns
20 reduction responsibility with performance and would
21 further improve the overall equity of the program.

22 Staff believes this may be a viable option, but
23 this approach is more complicated and would require a more
24 comprehensive evaluation.

25 --o0o--

1 MS. SIDECO: In summary, the crude oil provisions
2 and the way the regulation addresses high-CI crudes need
3 to be improved. We established guiding principles and
4 carefully weighed the merits of each individual approach.
5 Staff concluded that the California average approach meets
6 program objectives in the simplest manner.

7 Now I will move onto the second set of a
8 amendments regarding the electricity regulated party
9 provisions.

10 --o0o--

11 MS. SIDECO: Because electricity already meets
12 2020 standards, it is considered an opt-in fuel.
13 Therefore, those eligible may opt into the program as a
14 regulated party and generate credits.

15 The current regulation has language that
16 designates regulated parties for electricity but
17 improvements are needed.

18 --o0o--

19 MS. SIDECO: We reviewed the current electricity
20 provisions and determined that changes are needed to
21 establish clear criteria and requirements for a regulated
22 party to earn credits, identify who is eligible to receive
23 credits in specific cases, and include fleet owners and
24 employers as potential regulated parties.

25 --o0o--

1 MS. SIDECO: Staff established overarching
2 principles to help their analysis of the amendment
3 options. An essential principle was to ensure that
4 electricity credits would be awarded to those taking
5 action to encourage further deployment of EVs.

6 The principles also recognize the importance to
7 ensure that all credit value is returned to EV customers,
8 maximize the number of credits captured in the program,
9 maintain simplicity so that it can be applied to various
10 business models and reward innovation.

11 --o0o--

12 MS. SIDECO: Staff considered the following
13 regulated party designations. Electric utilities as a
14 responsible party for all EV charging and EV service
15 providers for residences and public charging stations
16 served.

17 --o0o--

18 MS. SIDECO: For residential charging, we are
19 proposing that electric utilities be the regulated parties
20 because they have the ability and are in the best position
21 to return full credit value to EV customers through lower
22 electricity rates, offer rate options that encourage
23 off-peak charging, and provide public education on EV
24 benefits through outreach efforts.

25 --o0o--

1 MS. SIDECO: For public access charging, we
2 propose EV service providers to be the regulated parties
3 because they can best establish the public charging
4 network and advance innovation in EV charging.

5 This rewards service providers for establishing a
6 public charging network and advancing innovation in EV
7 charging.

8 --o0o--

9 MS. SIDECO: For fleet charging and private
10 access business charging, it is fleet owners and employers
11 who are taking action to encourage the deployment of EVs
12 and should therefore be the regulated parties. These
13 entities continue to foster EV market growth and under the
14 proposal will be eligible to receive credits.

15 --o0o--

16 MS. SIDECO: Among comments and concerns raised
17 by stakeholders, the most contested issue relates to who
18 would be awarded credits for residential charging. There
19 are differings views on who best serves EV customers.

20 --o0o--

21 MS. SIDECO: In summary, staff identified the
22 entities who are in the best position to provide benefits
23 and encourage electricity use. Electric utilities are in
24 the best position to return full credit value to customers
25 through lower electricity rates. EV service providers are

1 best positioned for public access charging. And employers
2 and fleet owners are best positioned for private and fleet
3 charging.

4 --o0o--

5 MS. SIDECO: The other remaining amendments are
6 listed in the next two slides.

7 Under CI determination, we propose to convert the
8 rulemaking approval process to a certification process,
9 which would streamline the overall approval process.
10 Also, as directed by the Board, staff updated a number of
11 energy economy ratios, which reflect various vehicle
12 efficiencies.

13 Additionally, new and revised credit trading
14 provisions, specify the process for acquiring,
15 transferring, and retiring credits, establish how credits
16 and deficits will be tracked, and provide transparency
17 through the release of key credit market information.

18 --o0o--

19 MS. SIDECO: Additionally, the applicability
20 amendments allow more fuel providers to participate in the
21 program and receive credits. These amendments revise
22 regulated party definitions and add specific opt-in and
23 opt-out provisions.

24 The proposal also simplifies a number of
25 reporting requirements.

1 Finally, other amendments include specifying
2 default CI values for use when CIs cannot be reasonably
3 determined and new and revised definitions.

4 --o0o--

5 MS. SIDECO: For the proposed amendments, staff
6 found no significant adverse environmental impacts. Most
7 of the proposed amendments are administrative revisions
8 and clarifications for the overall improvement of the
9 regulation.

10 Accordingly, we don't anticipate a substantive
11 change in GHG emission reductions.

12 --o0o--

13 MS. SIDECO: The proposed amendments will
14 generally have an overall positive economic impact on
15 regulated parties. This is largely due to the additional
16 credits expected in the LCFS credit market.

17 Clarifications, enhancements, and streamlining
18 are all expected to attract additional credits. More
19 credits in the LCFS market should help reduce compliance
20 costs.

21 Finally, no fiscal impacts on federal, State, or
22 legal governments are expected.

23 --o0o--

24 MS. SIDECO: The next two slides summarize
25 modifications to staff's original proposal, which are

1 shown in Attachment B of the resolution.

2 These modifications included updating the base
3 lines, compliance schedule targets, and crude CI values.

4 --o0o--

5 MS. SIDECO: The other proposed changes are
6 listed on this slide, including further refinements to
7 various provisions, fuel pathway updates, and
8 certification information.

9 In addition, staff intends to continue working
10 with the Western States Petroleum Association to address
11 their comments and may propose additional changes in a
12 15-day notice.

13 --o0o--

14 MS. SIDECO: As next steps, staff will work with
15 stakeholders on the proposed 15-day changes, continue the
16 indirect land use change analysis, evaluate credits for
17 electric mass transit, and explore provisions for low
18 energy use refineries.

19 We plan to return to the Board next year in a
20 separate rule-making with recommendations on these items.

21 --o0o--

22 MS. SIDECO: Staff recommends that the Board
23 approve the proposed amendments and modifications for
24 adoption.

25 This concludes my presentation. Thank you.

1 CHAIRPERSON NICHOLS: Okay. Thank you. Are
2 there any pressing questions anyone has right now from the
3 Board? Okay.

4 If not, then let's recess until 1:00, when we'll
5 come back and open this up for public testimony.

6 CHIEF COUNSEL PETER: Madam Chair, do you want to
7 ask the people to sign up before 1:00?

8 CHAIRPERSON NICHOLS: Oh, yes, please.

9 I have a preliminary list. And if it does not
10 include you and you intend to testify on this item, please
11 go talk to the Board Clerk prior to 1:00.

12 I would also ask you if you are on this list and
13 you're just neutral and/or you have general comments about
14 LCFS but not about this specific proposals that you
15 consider taking yourself off of the list. Okay. Thank
16 you.

17 (Whereupon a lunch recess was taken at
18 12:04 p.m.)

19
20
21
22
23
24
25

1 And also to congratulate your staff on their
2 willingness to engage with Government of Canada officials
3 during this LCFS amendment process.

4 As you know, we, in Canada, take a pretty active
5 interest in this regulation, given the importance of the
6 California/Canada energy relationship.

7 Canada -- first of all, I want to say that Canada
8 supports California's efforts to reduce GHG emissions.
9 And just to note that as a country, Canada shares the very
10 same target as the U.S. government on GHG emissions. And
11 we are active now in reducing our own emissions while
12 maintaining economic competitiveness.

13 On the LCFS, we've been encouraged to see a
14 number of improvements in the proposed amendments,
15 specifically the replacement of a two-basket approach the
16 baseline approach.

17 But we still have a number of questions about
18 implementation. So we would continue to urge the Board to
19 ensure that the LCFS applies equal scrutiny and
20 proportional treatment to all crude oil, irrespective of
21 source. And specifically Canada would like to see an
22 amended LCFS that is based on accurate accounting of life
23 cycle GHG emissions, that encourages transparency from all
24 crude oil producers, that gives credit to existing
25 regulatory measures in place, such as Alberta's carbon

1 reduction regulations, and undertakes a rigorous
2 collection and verification of carbon intensity data.

3 And we await clarification on what carbon
4 intensity values will be used until the life cycle
5 assessment tool is finalized and if a supplemental
6 regulatory advisory will be issued for the 2012 calendar
7 year.

8 We provided a letter to the Board that elaborates
9 on these points. Canada is encouraged by the efforts of
10 CARB on the development of the LCFS regulatory regime.
11 And, of course, as you would expect, we would continue to
12 follow this process to ensure that Canadian crude is
13 treated in a manner that is consistent with the
14 United States international trade obligations.

15 And we look forward to continuing our very
16 constructive dialogue with you, the Board and your staff.
17 And we wish you a very happy holidays. Thank you.

18 CHAIRPERSON NICHOLS: Thank you.

19 Dan Romasko.

20 MR. ROMASKO: Madam Chair, members of the Board,
21 I'm Dan Romasko, Executive Vice President of Operations
22 for Tesoro Corporation.

23 We believe the low carbon fuel standard
24 requirements become infeasible within the 2014 to '15 time
25 frame as we mentioned earlier. And incorporating the

1 crude oil carbon intensity further exaggerates this
2 problem.

3 Crude differentiation will lead to crude
4 shuffling. Canadian crude oil will not be disadvantaged
5 to the world markets because of this legislation. It will
6 be disadvantaged to one state because of this regulation,
7 and that will be California.

8 Essentially, the Canadian-type crudes will now
9 transport to foreign markets, and they'll be replaced in
10 California by foreign crudes that are imported into
11 markets, resulting in increased global CO2 emissions
12 associated with transportation.

13 Caution must be taken to avoid further
14 disadvantage to California industry relative to global
15 competition, competitors who import into our markets
16 without the effect of this legislation or regulations.

17 As background, I want to provide some information
18 on our industry. Global refinery capacity has grown in
19 excess of demand of about five million barrels a day since
20 2007. A majority of this capacity being added in
21 countries other than the United States. The refining
22 sector has managed this situation by decreasing
23 utilization by approximately five percent.

24 As a whole, the U.S. industry has been able to
25 compete with our global competitors supported by our

1 exceptional employees' engagement and productivity. But
2 recent announcements of refinery shutdowns and employee
3 layoffs on the east coast should serve as a reminder to us
4 about how sensitive regulation and industry and the care
5 we must take to ensure we remain competitive.

6 As the additional global capacity continues to
7 expand, we must not erode our competitive decision by
8 regulations that uniquely penalize the California refiners
9 with no impact on the rest of the USA or global importers.

10 Our ability to remain competitive is important to
11 our employees, your citizens, and the state of California.
12 Our industry directly employs 15,000 California workers
13 with average annual compensation of nearly \$100,000. The
14 combined direct and indirect employment is estimated to
15 exceed 125,000 employees with jobs in local communities
16 where we operate. These are good jobs, allowing our
17 employees to support families and contribute to local
18 communities.

19 This is a complex issue. It is too important not
20 to get it right. Any decision can have a lasting impact
21 on the State. I urge you to hold on this decision until
22 you fully understand the unintended consequences and the
23 impact to local jobs, our employees, your citizens, and
24 the state's economy. Thank you.

25 MS. REHEIS-BODY: Good afternoon, Madam Chair,

1 members of the Board.

2 My name is Cathy Reheis-Boyd, President of
3 Western States Petroleum Association.

4 Thank you for allowing me to share our concerns
5 on the proposed regulatory amendments. We have several
6 recommendations and we've submitted extensive comments.

7 Again, we are not asking CARB to abandon the
8 standard. But as you've heard in the first agenda item,
9 we are asking you to take some reasonable steps to really
10 ensure this program doesn't disrupt the transportation
11 fuels markets or injure the California economy.

12 I've mentioned those, the annual reviews, the
13 triggers, the alternative approaches, and looking at the
14 cumulative impacts on the refining industry in the state
15 of California and its impacts on the multiple greenhouse
16 gas regulations that are coming at them at once.

17 Our focus here is really the treatment of crude
18 oils within the low carbon fuel standard program. We
19 support a simple crude equivalency approach that doesn't
20 discriminate crude oils. And we've remained pretty strong
21 in that opinion in support of what we call crude is crude
22 since the adoption hearing in 2009. We hired a
23 contractor, Wood McKinsey, to investigate the impacts and
24 consequences of differentiation. And we made that
25 presentation to the Advisory Panel. And we've also

1 submitted that presentation as part of the record.

2 We believe a policy that penalizes and limits the
3 flexibility of crude choices for refiners will provide the
4 impetus to shuffle the distribution of crudes. This
5 results, in our opinion, in increased climate change
6 emissions, increased dependence on foreign imports,
7 creates potential supply constraints, and has negative
8 consequences on energy security.

9 It can likely force California to import low
10 carbon fuel compliant crude and export California crude
11 outside the state at an increased cost, not only in terms
12 of emissions, but also on the impact of in-state oil
13 production jobs.

14 No crude differentiation -- and the staff did a
15 very good job of summarizing what we felt about that.
16 Thank you, staff.

17 It does provide for equal treatment of all
18 refiners, including out of state and international
19 refineries. It simplifies an already complex regulation
20 and does provide some certainty to the standards that
21 you're trying to achieve and eliminates the need for
22 development and use of a real complex accounting system.

23 And it also provides, in our opinion, overall
24 certainty and stability to the marketplace and reduces the
25 cost of the regulations.

1 So in addition to the four asks I state earlier
2 in the testimony, WSPA would like the Board to consider to
3 adoption the option of no crude differentiation approach
4 and return at this time to a simpler, less impactful
5 approach that will be less disruptive to the cost of
6 transportation fuels.

7 And make no mistake, it does not in any way deter
8 from your compliance goal of ten percent reduction of
9 carbon intensity. It just makes it more difficult to
10 comply. We're not challenging that. This particular
11 provision has huge impacts. And I do support the previous
12 Dan's statement asking the Board to hold and look at this
13 further. Thank you.

14 CHAIRPERSON NICHOLS: Just a comment, if you
15 could stay for a question.

16 MS. REHEIS-BOYD: Absolutely.

17 BOARD MEMBER D'ADAMO: I understand your position
18 on in differentiation. Could you comment just focusing on
19 the California average as compared to the hybrid system
20 that would require an accounting on a facility by facility
21 basis?

22 MS. REHEIS-BOYD: Yeah. In my opinion, all the
23 options other than crude differentiation have winners and
24 losers. They all have what I'll call warts that need to
25 be discussed and fully vetted before we make any decisions

1 other than the crude, no crude differentiation.

2 So I really think each of them needs to be
3 analyzed further and their impacts really looked at as we
4 really go forward and decide which option this Board
5 decides to choose.

6 I don't think it's a simple answer. And I'm not
7 trying to be evasive. I do think it really does deserve
8 further analysis in the context of the whole picture. And
9 if we had enough time to continue doing that -- I know
10 we've been looking at it for a long time. I'm not saying
11 we haven't invested a long time looking at it. This Board
12 felt very important to look at it because you gave two
13 waivers. You didn't do that lightly. You did that
14 because you were concerned. And, of course, those waivers
15 end. We only can do contracts by the end of the year and
16 deliveries the end of March and that goes away.

17 So I really think both options, whether it's any
18 of the other options that are in there, you know,
19 California average, all those need to be looked at fully
20 in the context of what the impacts will be to the
21 transportation system as well.

22 I haven't seen a thorough analysis on this from
23 CARB or the Energy Commission. And I think we need one.
24 I'm happy to do it collectively, but I think it's that
25 important that it needs to be done.

1 BOARD MEMBER D'ADAMO: Thank you.

2 BOARD MEMBER BERG: I would like to ask a
3 question.

4 I'd like to ask staff first in just following
5 through on the analysis, do we have the information that
6 we need from the industry to conduct such analysis? And
7 have we tried to take a look at that? And if so, what has
8 your findings been?

9 Corresponding

10 STATIONARY SOURCE DIVISION CHIEF COREY: This is
11 Richard Corey.

12 As we developed the potential options, the five
13 that we talked about, this goes back about a year process
14 where it was a screening process looking at high carbon
15 crudes. And then as that process played itself out
16 concluded through the process that there were
17 opportunities to refine or improve the existing provision.

18 That led us to draft, in consultation with
19 stakeholders, potential options as well as survey
20 industry. We conducted two surveys. But for a series of
21 reasons that industry can comment on, that response was
22 very limited. And the data was so limited, it didn't
23 allow for an assessment, for instance, a detailed
24 assessment of the hybrid or finding specific approaches.
25 We believe we had sufficient data to get a sense of the

1 average-based approach. And we were convinced based on
2 that assessment that it represented an improvement over
3 the provision that's currently in the regulation.

4 BOARD MEMBER BERG: Is it fair to say that the
5 average industry approach was based on data that we could
6 get publicly that we didn't need from the refineries?

7 STATIONARY SOURCE DIVISION CHIEF COREY: That's a
8 fair characterization. Some of that was done in
9 consultation with CEC as well. That's a fair
10 characterization.

11 BOARD MEMBER BERG: It seems if industry is
12 willing to do such additional analysis, Cathy, are they
13 willing to provide the information?

14 MS. REHEIS-BOYD: Yes. I think one of the things
15 we recommended is that information be provided to the
16 Energy Commission under a PRA request. You can imagine
17 how competitive this marketplace is. All of these
18 refiners certainly have their own business plans and
19 cannot get together and discuss these issues. Through the
20 Energy Commission is the best way to keep that data
21 confidential, but make it available to the Air Resources
22 Board for any additional analysis.

23 BOARD MEMBER BERG: Just one additional minute.
24 We've spent a lot of time talking about where you feel
25 that the low carbon fuel standard is going to fall short

1 in biofuels and things like that. I find it interesting
2 we haven't spent very much time talking about the
3 investment that industry is making and how they're going
4 to ramp up their investment to, in fact, make the low
5 carbon fuel standard work. Could you just give us maybe
6 30 seconds on what the industry is doing? Because it does
7 kind of feel one way to me.

8 MS. REHEIS-BOYD: I'd be happy to. And maybe we
9 don't talk about this as much as we should. But, you
10 know, our industries are energy companies and they invest
11 in alternative renewable fuels more than the federal
12 government or any other private industry combined.

13 The American Petroleum Institute number 71
14 billion have been invested between 2000 and 2010. That's
15 38 percent of the 188 billion spent by all the other U.S.
16 industries. That's certainly not pittance.

17 And they're investing in all the technologies you
18 talked about today, and others that haven't even been
19 mentioned. And so you know, we understand we're
20 transitioning into a low carbon economy. These companies
21 are investing in those alternatives and renewables.

22 But you have to remember, in the interim, we
23 still have to provide adequate, reliable, affordable fuels
24 today, tomorrow, and the very near future for California
25 consumers. They have high expectations. They wake up

1 every day and expect to turn the lights on, heat and cool
2 their homes, and drive from A to B affordably. And we
3 have to do that, even as we're investing in other things.
4 We don't have the luxury in stopping our current
5 investments and investing everything into the future. We
6 have to invest in today and tomorrow and the future.

7 BOARD MEMBER BERG: But it would be fair to say
8 that we have to ramp up those investments. Even though
9 \$71 billion is serious money, as a percent of what the
10 total is, it appears that we do have to get more
11 investments out. Are you seeing that's going to take
12 place?

13 MS. REHEIS-BOYD: I mean, each of the companies
14 look at their future business models differently. But I
15 can you, you can visit each of those websites like I do,
16 and you will be impressed at the investments they're
17 making in the energy future and in the low carbon economy.

18 BOARD MEMBER BERG: Thank you very much.

19 CHAIRPERSON NICHOLS: It would also be helpful to
20 have a little bit more breakdown of where those numbers
21 are, the collective numbers, because they don't match up
22 with some of the other numbers that we've seen, even on
23 the industry side. So it would be helpful to have --

24 MS. REHEIS-BOYD: Happy to provide that.

25 CHAIRPERSON NICHOLS: Thank you.

1 Okay. Ron White. Roland Hwang.

2 MR. MUI: Even though I look like Roland Hwang,
3 I'm not Roland Hwang. He's actually taking my spot on
4 number 16.

5 Can I get the third slide up? Thank you.

6 MR. MUI: Good afternoon, Chairman Nichols. And
7 I'm Simon Mui with NRDC. Thank you for the opportunity to
8 testify.

9 We support the LCFS, which is attracting cleaner
10 fuel investments in companies to our state, reducing our
11 oil dependency, and helping cut our emissions. We ask the
12 Board to consider three ways to build upon the successful
13 start of the LCFS.

14 First, the Board should adopt the modifications
15 to the HICO provisions, but improve it in one critical
16 way.

17 We can't move one step forward if we are being
18 pushed back two steps by increased dirtier fuels.
19 Already, from 2006 to 2010, staff has shown that the
20 carbon intensity of our fuel pool actually increased by
21 one percent due to HICO. We need to account for them.

22 Our oil industry investments in Tarsands alone
23 are outpacing their renewable fuel investments by 50
24 times. That's 190 billion to Tarsands versus four billion
25 in renewable fuels globally over the past five years.

1 That four billion is obtained by Bloomberg data, by Hart
2 energy data, by other publicly disclosed sources. I
3 believe the \$71 billion that was referenced includes
4 everything that oil companies are doing in all types of
5 spaces. I do not believe it represents the clean fuel
6 investments. But we should compare numbers.

7 Either way, it's a small dot. That green dot
8 there, which you can hardly see, is actually the renewable
9 fuel investment compared to that red dot. We need to
10 change that and reverse that.

11 The current modifications are a real improvement
12 upon the current regulation. It's more performance-based.
13 Ensures the importers and domestic producers are held to
14 the same bar. Rewards innovation reduction activities and
15 minimizes crude shuffling. And it does so by focusing on
16 gasoline and diesel increasing regardless of the crude mix
17 that oil companies want to choose from.

18 However, the HICO modifications are weak in one
19 area. The modifications moved away from facility refinery
20 responsibility to industry averaging. Some refineries
21 don't actually increase, could be penalized.

22 We think the Board should direct staff to provide
23 refineries with an option to report their own performance,
24 should they choose to do so. Doing so will improve
25 fairness, provide greater flexibility, and align

1 responsibility with facility performance. Providing this
2 option though should be conditioned on producers or
3 importers providing data on the carbon intensity of all
4 finished and unfinished products in a manner that can be
5 verified with integrity. This will get to the issue of
6 ensuring that importers and domestic producers are held to
7 the same bar. Thank you.

8 CHAIRPERSON NICHOLS: Thanks.

9 Ralph.

10 MR. MORAN: Good afternoon. Ralph Moran with BP
11 America.

12 We are very troubled by the low carbon fuel
13 standard provisions that penalize the use of certain crude
14 oils in California. We believe you should be concerned as
15 well.

16 The low carbon fuel standard is a very specific
17 first of its kind policy tool designed to encourage the
18 development and deployment of new low carbon fuels. It
19 was never meant, nor is it well suited, to deal with
20 emissions from large stationary sources, such as those
21 involved in crude oil production. There are other
22 policies, such as cap and trade, that are better suited to
23 efficiently and cost effectively deal with those
24 emissions.

25 The low carbon fuel standard should focus on its

1 primary objective, and that's getting more low carbon
2 fuels into the mix.

3 Perhaps more importantly, staff has never
4 demonstrated that there will be greenhouse gas emission
5 reductions from penalizing crude oils. They haven't
6 demonstrated it, because it is not possible to demonstrate
7 it. The fact is the low carbon fuel standard's treatment
8 of crude oil will not have an effect on what crude has produced
9 or how it is produced. It will only have an effect where it's
10 used.

11 This is a clear conclusion of careful analysis on
12 this subject that Cathy talked about. We presented that
13 to staff. A market watch article December of this year
14 points out in actuality the message being sent and received
15 regarding the low carbon fuel standard treatment of crude
16 oil. The article states that the US demand for a highly
17 desirable Russian crude oil is dropping drastically and
18 attributes the drop to reaction to the low carbon fuel
19 standard. The demand for this Russian crude is being made
20 up by shipping the crude to Asian markets which highly
21 value this crude.

22 To fill the gap, U.S. markets are turning to
23 Middle Eastern and other crudes, resulting in significant
24 increase in shipping needed to bring these crudes to the
25 west coast. This is a signal that the low carbon fuel

1 standard is sending by penalizing cruel oils. The short
2 haul crudes that would otherwise be used here are sent
3 someplace else. And these crudes are replaced by long
4 haul crudes sent to the U.S. west coast with more GHG
5 emissions from this extra shipping.

6 Really, what is the point of this sort of policy?
7 So the crude oil policy of the low carbon fuel standard
8 that you will consider today will alter flows of crude
9 oil. It will not provide GHG emission reduction likely
10 increases and, according to your CEC, could impact the
11 profitability of refiners and increased fuel costs. Is
12 this something you really want to do?

13 You don't need to do this to achieve the real
14 objectives of the low carbon fuel standard, a low carbon
15 fuel standard that treats all crude as the same incentive
16 for innovation and investment in new fuels.

17 We ask your assistance in helping to focus staff
18 on the primary goal of the low carbon fuel standard,
19 innovation in new fuels, and to avoid crude
20 differentiation policies that will lead to unnecessary and
21 disruptive impacts to the State's refining sector and fuel
22 consumers. Thank you.

23 CHAIRPERSON NICHOLS: Thanks.

24 Paul Clarke.

25 MR. CLARKE: Thank you for the chance to speak.

1 My name is Paul Clark. I'm a retired Air Force
2 officer from Marin County. I spent 20 years in active
3 duties with my career spanning the Cold War to operations
4 in Iraq and Afghanistan. And now retired from the Air
5 Force, I still work in the security realm mostly doing
6 counterterrorism.

7 Early in my career, I had a chance to work at the
8 National Security Council staff at the White House under a
9 democratic President and a Republican president. I saw
10 the fall of the Berlin Wall there and the collapse of the
11 Soviet Union.

12 This success was brought about by decades-long
13 transpartison strategy. That's how we won that conflict.
14 And now our Department of Defense, our intelligence
15 community, State Department, many three and four star
16 generals and admirals are telling us we face another
17 existential threat. And that is the threat represented by
18 the dual threat of oil dependency and climate change. And
19 I would suggest that this particular challenge also
20 requires a transpartison decades long commitment to deal
21 with it.

22 It is our greatest threat -- and again, I'm a
23 counter terrorism expert. I see our greatest threat being
24 this other threat.

25 Fortunately, we have something we can do about

1 it. And sadly, though we have succeeded at the national
2 level, we have not succeeded at developing a strategy. I
3 can say, however, that the military is investing quite a
4 bit of effort and resources into dealing with this
5 strategy, which has been recognized. The Air Force, for
6 example, has agreed to in five years to acquire 50 percent
7 of its domestic aviation fuel from blended alternative
8 green sources.

9 Why is the military doing this in time of war?
10 Because it realizes it is an issue in time. It is a
11 time-sensitive threat. And there's another reason,
12 benchmarking after the actors like the State of
13 California. Benchmarking after the behavior of this Board
14 and our state. We have a long tradition of providing that
15 sort of leadership for the country. And we see the threat
16 is continuing to grow. So we continue to have this need
17 for our leadership.

18 I have to tell you, my life's work is about
19 national security. This is a real issue you need to deal,
20 and your decisions will have real impact. I urge you to
21 continue to maintain these low carbon fuel standards.

22 I thank you for your time.

23 MR. BRAEUTIGAM: It's Braeutigam. It's hard to
24 pronounce. Chairman Nichols, members of the Board, my
25 name is John Braeutigam. I work for Valero. Valero is

1 one of the largest independent oil companies. We have
2 three million barrels a day of through-put capacity. We
3 have 680 retail stations, two refineries in California.
4 We are also one of the largest U.S. ethanol producers. We
5 have ten ethanol plants, producing 1.1 billion gallons a
6 year of ethanol. And we are investing in a cellulosic
7 ethanol plant in Michigan and a renewable diesel plant in
8 Louisiana.

9 Valero has been very involved with the LCFS
10 regulations and working with the ARB staff. But we are
11 concerned about the program. The way it's designed, we
12 think it has a high risk of becoming infeasible, which is
13 especially concerned about the HICO provisions and
14 staff's -- we disagree with staff on recommending that the
15 crudes be differentiated.

16 We believe the impact to your program on the
17 global crude oil and ethanol markets will just result in
18 shuffling like the San Paulo shuffle with ethanol and
19 increased CO2 emissions and have no benefit other than
20 raised costs to California consumers.

21 I understand this is not what you want to hear,
22 but we believe it needs to be said. Thank you very much.

23 CHAIRPERSON NICHOLS: Thank you. We actually do
24 want to hear. Believe me.

25 Okay. Eileen Tutt.

1 MS. TUTT: Good afternoon again, members of the
2 Board and Chairman Nichols.

3 My name is Eileen Tutt, and I'm the Executive
4 Director of the California Electric Transportation
5 Coalition. Our members include publicly-owned and
6 investor-owned utilities, as well as auto makers.

7 CalETC largely supports the staff's amendments to
8 the low carbon fuel standard. We've worked closely with
9 staff. Appreciate their efforts. We're on the
10 Electricity Working Group. And one of our members serves
11 on the Advisory Committee.

12 You'll hear from a few of our members today.
13 We're trying to divide up our testimony to go short so we
14 don't duplicate.

15 The proposed amendments that ensure that the
16 value of the low carbon fuel standards goes back to the
17 person that made the investment purchasing the vehicle is
18 incredibly important as a market driver. And we very,
19 very support that as a goal. The utilities are committed
20 to providing every cent of the credit value back to the
21 plug-in electric vehicle customers.

22 One thing we wanted to point out was in the staff
23 report, the staff indicated that allocating LCFS credits
24 to the utilities in all market segments might not meet the
25 goal of maintaining relevancy. CalEPTC does believe that

1 the utilities are incredibly relevant and that making them
2 the primary recipient of the LCFS credit value in the
3 residential market and the secondary and all the other
4 market segments indicates that, and we very much support
5 the recommendation of the staff.

6 I think the utility's relevancy is also
7 demonstrated by their significant roles in transforming
8 markets. Like we did with the energy -- or the utilities
9 did with the energy efficiency market. The utilities are
10 committed to doing the same thing with the electric
11 vehicle markets through efforts with workplace, with
12 fleets. And we work very closely with electric vehicle
13 service providers as well. This role has been
14 acknowledged by the CARB staff.

15 We also want to recommend a 15-day amendment that
16 would allow anonymous third-party brokers to facilitate
17 the sale of the low carbon fuel standard credits. The
18 reason for that is you may have heard that there is a lot
19 of competition between the oil industry themselves and
20 then amongst the energy industries. So this kind of
21 anonymous broker would allow for a healthy competition to
22 continue, but also a healthy LCFS credit market.

23 I'll just reiterate what I said this morning,
24 which is that we are in tremendous support of the low
25 carbon fuel standard regulation. We don't want to see you

1 back down. We like your current schedule. Thank you very
2 much for your time and consideration.

3 MR. PEDERSEN: Good afternoon. I'm Norman
4 Pedersen, for the Southern California Public Power
5 Authority. SCPPA strongly supports the LCFS program, and
6 SCPPA strongly supports the amendment to the LCFS to make
7 electric distribution utilities the primary opt-in
8 regulated party in the residential market and the
9 alternate regulated party for the non-residential market.

10 We look forward to meeting the requirements that
11 the amendments would impose on electric utilities to
12 receive credits. Namely:

- 13 1. Use credit proceeds for EV owners;
- 14 2. Educate the public about the benefits of EVs;
- 15 3. Provide rate options to encourage off peak
16 charging.

17 Allowing electric utilities to opt in as
18 regulated parties will benefit the LCFS program. Our
19 participation will assure that there won't be unclaimed
20 credits. There will almost always be a utility involved
21 in providing electricity as a transportation fuel.

22 Conversely, there may not always be an EVSP with
23 a requisite contract with the property owner. Likewise,
24 some fleet operators or business owners may not want to
25 participate in the program.

1 Additionally, electric utilities are positioned
2 to return credit value to customers efficiently and
3 effectively. In our comments on the 45-day revisions, we
4 did propose some further revisions to facilitate electric
5 utilities provision of benefits to the program.
6 Specifically, we urge the provisions for utilities to meet
7 alternate opt-in parties be revised in two ways.

8 First, we urge removal of the requirement that
9 there must be Executive Officer approval of electric
10 utility opt-in as an alternate when an EVSP, a fleet
11 operator, or business owner can't claim credits. We don't
12 see what requiring that step of EO approval would
13 accomplish.

14 Second, we urge that a provision be added for the
15 Executive Officer to provide notice to the electric
16 utility when it becomes eligible to opt in as an alternate
17 to an EVSP, fleet operator, or business owner. It's hard
18 to see how an electric utility would know when it can step
19 in as an alternate without such notice. We proposed
20 language for these revisions in our written comments, and
21 we hope that the revisions can be included in the
22 proposals that are circulated for 15-day comment.

23 Lastly, we urge that the restriction to on-road
24 vehicles be revisited when issues relating to credits for
25 off-road vehicles are resolved in 2012. And thank you

1 very much.

2 CHAIRPERSON NICHOLS: Thank you.

3 Mr. Kim.

4 MR. KIM: Good afternoon, Chairman Nichols and
5 members of the Board.

6 My name is Alex Kim. I'm the Director of
7 Customer Innovations for San Diego Gas and Electric.

8 My responsibilities include SDG&E Electric
9 Vehicle Program, and I served as a member of the LCFS
10 Advisory Panel on behalf of SDG&E. Thank you for the
11 opportunity to testify today.

12 California is at the forefront of the electric
13 vehicle market. As one of the electric distribution
14 utilities that serve these customers, SDG&E recognizes the
15 critical importance LCFS credits can provide to help
16 create a sustainable market. Developing and facilitating
17 the EV market is an important aspect of achieving CARB's
18 greenhouse gas reduction goals. Using the value of LCFS
19 credits to encourage development of the market by
20 benefiting EV consumers is a major component to satisfying
21 that goal.

22 SDG&E concurs with statements by staff in various
23 LCFS workshops that it's paramount that the value of the
24 LCFS credits should be given to those who invest in EVs,
25 as well as those who help to transform the market for

1 electricity as a transportation fuel. Providing the value
2 of LCFS credits to EV customers through the utilities send
3 a signal to the market that EVs are important to advancing
4 the State's GHG goals.

5 Utilities are commit to supporting this effort.
6 Providing the value of LCFS credits to the EV customers
7 through utility rates will reduce EV operating costs, one
8 of the most critical benefits to sustaining consumer
9 interest. This will induce the credits of vehicle
10 electrification, further incentivizing EV adoption and
11 market growth. Because utilities are regulated entities,
12 CARB will have the benefit of regulatory oversight and due
13 process easing administrative burden. Moreover, utilities
14 are stable and longstanding entities upon which CARB can
15 rely to support the long-term development of the EV market
16 and success of LCFS.

17 SDG&E also supports the regulated parties for
18 electricity engaged in active education outreach to be
19 eligible for a regulated party and receive LCFS credits.
20 The CPUC requires IOUs to educate EV customers about the
21 number of related topics including safety, environmental
22 benefits, off-peak charging, and available EV rates.

23 Accordingly, utilities play a critical role in
24 supporting the EV market. As an LCFS member, SDG&E
25 commends staff on their steadfast effort on this proposal,

1 and we support their recommendations on regulated party
2 designation.

3 Thank you for your time and consideration.

4 CHAIRPERSON NICHOLS: Thank you.

5 Mr. Karner.

6 MR. KARNER: Chairman Nichols and members of the
7 Board, my name is Don Karner. I'm the President of
8 Ecotality in North America. Ecotality is headquartered in
9 San Francisco and we're leaders in clean energy,
10 transportation, and storage technologies.

11 Ecotality is currently the project manager of the
12 nation's largest electric vehicle charging infrastructure
13 demonstration project. This is for the US Department of
14 Energy to study early deployment of electric vehicles in
15 residential public and commercial charging infrastructure.
16 This study has taken place in 18 major metropolitan
17 markets, including San Diego, Los Angeles, and the Bay
18 Area.

19 On behalf of Ecotality and other members of the
20 electric vehicle services and equipment providers
21 coalition, which includes California-based charging
22 Infrastructure, Better Place, and Coolant Technologies,
23 I'm pleased to provide testimony on our industry's
24 position recommending changes to the amendments proposed
25 for the low carbon fuel standard regulation for parties of

1 electricity.

2 I should note that members of the Coalition are
3 actively involved in promoting EVs. EVs are our business
4 and they are our only business. Hardware and services
5 convert electricity provided by utilities to
6 transportation fuel. And without our services,
7 transportation fuel is not available.

8 Using innovations, such as providing meters
9 inside of our chargers, we've already been able to reduce
10 costs of EV owners obtaining charging services
11 significantly, such that well over 90 percent of the Leaf
12 EV owners in California utilize our products and services
13 to fuel their vehicles.

14 I'd like to address some of the staff's comments
15 that you heard prior to lunch. You have our written
16 testimony already. And the staff has allowed that EV
17 service providers should be a regulated party for public
18 access charging, but not for residential and fleet,
19 although our contributions to residential and fleet are
20 identical to those with public access.

21 Instead, the utility is at fault, and we have
22 several concerns with this. I'll try to address three in
23 my remaining time.

24 Staff stated that an LCFS objective was to
25 promote all fuel use. Unfortunately, giving residential

1 charging credits to utilities may have exactly the
2 opposite effect. Utilities have to install a second meter
3 to collect those credits. The installation of that second
4 meter from our experience in California costs anywhere
5 from 500 to several thousand dollars. That obviously is a
6 major impediment to someone adopting an EV. With our
7 equipment, it's already built in. There is no additional
8 cost to the consumer to collect that data.

9 CHAIRPERSON NICHOLS: I'm sorry. You've used
10 your minutes.

11 MR. KARNER: I understand.

12 I encourage the Board to direct the staff to
13 reconsider the amendments and look very hard at its
14 exclusion of EVSPs from residential and commercial
15 charging.

16 CHAIRPERSON NICHOLS: And we do have your written
17 testimony also. So thank you.

18 Question, sorry.

19 BOARD MEMBER D'ADAMO: Maybe not necessarily a
20 question, but in the issue of cost. For staff, can you
21 comment on that? And any of the utilities that plan on
22 coming up, if they could address the issue raise about the
23 500 to \$2,000 cost.

24 MR. KARNER: Sure. Would you like me to provide
25 some additional detail on that?

1 BOARD MEMBER D'ADAMO: I think if staff could
2 respond.

3 TRANSPORTATION FUELS BRANCH CHIEF WAUGH: I'm
4 Mike Waugh. I'm Chief of the Transportation Fuels Branch.

5 And I think there is a wide variety of prices for
6 chargers. One of the things that the CPUC is
7 considering -- and I believe someone is going to testify
8 here shortly -- is that they're looking at lower cost
9 charging for billing purposes. But chargers are becoming
10 a commodity.

11 I think we've read in the paper you can go down
12 to Lowes to buy them. So we think they're going to be a
13 commodity and prices are going to come down. So I think
14 they can be as high as \$2,000, and we've heard as low as
15 three or \$400.

16 STATIONARY SOURCES DIVISION CHIEF COREY: This is
17 Richard Corey.

18 I think I wanted to add to something because I
19 think the question partly concerned the need for a second
20 meter. And I think you'll hear from some of the other
21 speakers that there actually are a range of options, even
22 in the residential application, to achieve a lower rate
23 with the single meter or other technologies that are being
24 developed. So establishing a second meter is one option
25 long term in terms to have a dedicated rate for an EV, but

1 it's not the only one. And I think there will be some
2 different perspectives on those options in a minute.

3 BOARD MEMBER LOVERIDGE: From the point of view
4 of somebody who wants to buy an EV, help me out. Do I
5 have to -- if I just want to stay with my 110, can I do
6 that? Are you imposing a new standard for me to reach?

7 STATIONARY SOURCE DIVISION CHIEF COREY: Mayor
8 Loveridge, you have the full range of options. CAN you
9 stay with 110.

10 BOARD MEMBER LOVERIDGE: If I chose to stay with
11 110, you're not going to beat me up?

12 STATIONARY SOURCE DIVISION CHIEF COREY:
13 Absolutely not. People are doing that today.

14 CHAIRPERSON NICHOLS: Okay. Thank you, Ms. Winn.

15 MS. WINN: Good afternoon, Chairman Nichols and
16 members of the Board.

17 And I'm Valerie Winn, representing Pacific Gas
18 and Electric Company today. Pacific Gas and Electric
19 Company largely supports the amendments to the LCFS
20 regulations with respect to how the electricity is used as
21 a transportation fuel.

22 We support the current regulatory language that
23 designates electric distribution utilities to be the
24 primary regulated entity for light-duty on-road charging
25 in the residential marketing sector and is the secondary

1 regulated entity in the fleet, public access, and
2 workplace market segments.

3 And we are supportive of that primarily for four
4 reasons. And the first being that the current -- the
5 draft of the regulation as is being considered today is a
6 lot more simple than it was when it was adopted in 2009.
7 And we think that that simplicity will help increase
8 participation in the market and help us get a more liquid
9 and robust market for the credits.

10 Second, we fully support passing the benefits of
11 the LCFS program back to EV customers. And as a regulated
12 entity, we will do that in a very transparent manner so
13 people can see how the moneys are flowing.

14 Third, we're well positioned to maximize the
15 number of credits generated by the LCFS program preventing
16 claiming unclaimed credits. What we've seen in some
17 markets where customers may get credits instead of the
18 regulated electric distribution utility is that there are
19 many hoops for them to jump through to actually certify to
20 be able to participate in the market. And that would mean
21 credits aren't included in the marketplace, which we think
22 would not be good as we're starting down this road.

23 And lastly, for over 20 years, PG&E has invested
24 and been actively involved in supporting the development
25 of alternative fueled vehicle. We've been a steady but

1 innovative force in the market and we'll continue to be so
2 in the future. And we're steady because, regardless of
3 the shifts in the market, we'll continue to be a provider
4 of electricity as a transportation fuel.

5 We've been very innovative. And we support
6 research and development in this area. And we have
7 recently installed the nation's first publicly accessible
8 DC fast charging station in Vacaville. We're very proud
9 of that.

10 Largely, in the conversation that we just had, I
11 understand for Level 1 residential vehicles that there is
12 no need for a separate meter. People can still go plug
13 into the outlet. No need for separate billing or for
14 additional infrastructure. We like that simplicity for
15 that program and ask you to keep the regulation as it's
16 currently drafted.

17 Thank you very much. And thanks to the staff as
18 well for all their work on this issue.

19 CHAIRPERSON NICHOLS: Thank you.

20 MR. ANDREONI: Thank you, Chairman Nichols and
21 members of the Board.

22 My name is Tony Andreoni. I'm the Director of
23 Regulatory Affairs at the California Municipal Utilities
24 Association. CMUA includes more than 40 publicly-owned
25 electric utilities or POU's, we like to refer to it as,

1 which provide electricity to roughly one-fourth of all
2 Californians.

3 Just as background for the Board members, POUs
4 are local government entities and, as such, have no profit
5 motive. Our members are committed to local economic
6 development and job creation and have an excellent track
7 record in providing reliable electricity at lower rates
8 and have demonstrated leadership on both environmental
9 issues like climate change, renewable energy, and energy
10 efficiency.

11 Our members also have a lengthy history of
12 helping to transform the electric transportation market
13 through research, purchase of plug-in electric vehicles,
14 PUVs, for fleets, and educating our customers, in
15 developing low-cost off-peak electricity rates, and in
16 developing a smart grid network.

17 Today, CMUA is pleased to voice our support for
18 the proposed LCFS amendments and have provided written
19 support on December 8th.

20 CMUA believes that the staff's proposal is
21 reasonable, helps to further meet the 2020 carbon
22 intensity standards, and could be scaleable to a national
23 program. CMUA worked closely with ARB Staff, Mike Waugh,
24 and his folks, Richard Corey, as we went through many
25 meetings, including the other utilities, other

1 organizations to come to this today on the amendments
2 proposed that focus on electrical distribution utility as
3 a primary regulatory party provider in both residential
4 and multi-family situations. Thus, eligible to earn the
5 LCFS credits if a utility decides to opt in.

6 We also believe that the staff proposal provides
7 a logical and understandable division of regulated party
8 providers according to those charging applications and
9 where the provider is the most influential in affecting
10 the PUV owner decision.

11 CMUA feels strongly and agrees with staff that
12 the LCFS credits for electricity used as a transportation
13 fuel should go to the utilities since our members can
14 easily transfer any value earned to the PUV customer.

15 I did have one comment today regarding the
16 complexities of adding off-road such as mass transit, but
17 I do see it in the Resolution that this is going to be
18 looked at in the future in 2012.

19 We do recognize that there's more work ahead.
20 And as ARB begins the implementation process, we do
21 encourage staff to consider developing additional guidance
22 documents to assist stakeholders with my implementation
23 issue.

24 We look forward to working with you and staff and
25 urge your adoption of staff recommendations today. Thank

1 you and happy holidays.

2 CHAIRPERSON NICHOLS: Mr. Teall.

3 MR. TEALL: Thank you for this opportunity.

4 My name is Russell Teall. I'm the President of
5 Biodico. We've built five commercial biodiesel
6 facilities, both in the United States and internationally,
7 and have produced over 50 million gallons of fuel.

8 Since 2002, we've operated under a cooperative
9 research and development agreement with the US Navy in
10 doing sustainable and renewable energy projects down at
11 Port Hueneme. And we'll be opening a ten million gallon
12 per year advanced biofuels plant there hopefully the
13 spring or summer of this year.

14 As a member of the Advisory Panel for the low
15 carbon fuel standard, first of all, I would like to
16 commend staff. This was a tremendous interchange of ideas
17 that's very thorough, methodical, open, broad range of
18 ideas. And even though there wasn't a consensus on every
19 issue, I think everybody was heard on it.

20 I do need to comment that it was a lot more
21 transparent than the Advisory Panel I sit on for the
22 Office of the Chief Scientists of the Central Intelligence
23 Agency.

24 Generally, we support the recommendations of
25 staff that are before you today. But in particular, I'd

1 like to draw your attention to three areas that have a
2 special impact on our industry.

3 The method 2A and 2B certification process versus
4 regulation will help to speed the implementation of
5 innovative ideas. There is a lot of work going on on
6 advanced feedstocks and technologies that we're going to
7 see over the next ten years. And I think without
8 sacrificing anything in terms of the quality of review, we
9 can get rid of a lot of the regulatory baggage by going
10 through the certification process.

11 The trading system, it's absolutely essential.
12 If you look at the Kyoto protocols and the clean
13 development mechanism and the CERs, it was burdened with a
14 lot of excess baggage. I think that the trading system
15 that has been put in place here will be a very good and
16 innovative approach to it. Everybody will be watching it.
17 It will take tweaking, of course, over time. But I think
18 that the recommendations of staff which is proving that
19 process are well considered and will help the entire
20 process.

21 Finally, I know it's controversial, but the
22 indirect land use impact changes cut both ways in our
23 industry. It depends upon what feedstock that you're
24 making the biodiesel from. We happen to use yellow grease
25 and non-food products that are produced locally in

1 California. But I would urge staff to continue in the
2 direction that they have been going in, which is to apply
3 the best available science and data. Thank you.

4 CHAIRPERSON NICHOLS: Thank you.

5 Roland Hwang. I would note you and Simon are not
6 interchangeable.

7 MR. HWANG: Sometimes we are. In this case,
8 we're not.

9 Madam Chair, members of the Board, my name is
10 Roland Hwang. I'm with the Natural Resources Defense
11 Council.

12 Today, I'd like to urge the Board to reject the
13 oil industry's recommendations for eliminating crude
14 differentiation and setting up an annual review process
15 and automatic triggers.

16 The effect of these modifications would be to set
17 up a program for failure rather than success. I want to
18 reinforce what you heard this morning, which is that since
19 2007, we have seen enormous accounts of activity and
20 investments by companies that are willing and able to move
21 forward on clean fuel production. So in fact, the low
22 carbon fuel standard is a success and is doing exactly
23 what we wanted it to do, which is provide a market
24 incentive for clean fuel investments.

25 And as you heard today, there are not just a

1 single company or a single technology. There is a range
2 of companies from advanced biofuels to electricity to
3 natural gas and others. These companies are hard at work
4 developing new fuels and new technologies to comply with
5 the standard.

6 And there is no shortage of innovation. There is
7 no shortage of supply. Companies are ready to scale up,
8 to produce the fuels needed to meet the standard. In
9 fact, according to the environmental entrepreneurs report,
10 the domestic advanced biofuel industry is poised to
11 produce five times more fuel than what the low carbon fuel
12 standard would require in 2015.

13 According to the Clean Tech Group, there has been
14 \$2.4 billion invested in the North American biofuels
15 industry since 2007. Weakening the program will have the
16 effect of pulling out the rug from underneath these
17 companies and these investment.

18 And unfortunately, as you heard from my
19 colleagues, Simon Mui, the oil industry has not stepped up
20 to the plate to the level which we need to achieve. The
21 \$2.4 million investment in North American biofuels was
22 dwarfed by a \$2 trillion investment in overall oil
23 production and \$200 billion just in dirty fuels in the
24 dirtiest fuels, such as Tarsands.

25 So there are three things that we are urging the

1 Air Resources Board to do today in order to ensure success
2 of this program.

3 One is we're urging the Air Resources Board to
4 adopt the recommendations on the electric vehicle credit
5 provisions. We believe that will help electrification by
6 returning value back to the customer.

7 Second is we're asking to approve the high
8 intensity carbon crude oil provision as my colleague,
9 Simon Mui described, add a voluntary option to allow
10 refiners to have refinery specific baseline.

11 And third, we support the Advisory Committee on
12 creating a robust credit trading mechanism. So in sum, I
13 simply urge the Board to move forward today as it has
14 historically done with leadership, with vision, and most
15 of all, ambition. Thank you.

16 CHAIRPERSON NICHOLS: Thank you.

17 Adam Langton.

18 MR. LANGTON: Hi. I'd like to thank the Board
19 for giving me the opportunity to speak here today.

20 My name is Adam Langton. I'm an analyst with the
21 California Public Utilities Commission. I'm the staff
22 lead for our alternative vehicle proceeding, proceeding
23 number 0908009.

24 The CPUC supports the proposed LCFS regulation.
25 The revised staff proposal recognizes the utility as the

1 primary recipient of LCFS credits in the residential
2 charging context and as the backup or secondary recipient
3 in the case of fleet, workplace, and public access
4 charging.

5 In staff's view, this is a reasonable approach as
6 it recognizes the potential role LCFS credits can play in
7 incentivizing the installation of public and workplace
8 charging infrastructure.

9 In contrast, in the residential context, there
10 were more options for using that value to support the EV
11 market, including reducing electric vehicle rates, and
12 reducing the installation costs associated with EV
13 charging equipment.

14 A signing of LCFS credits to utilities is
15 consistent with the Commission's interest in supporting
16 the development of a robust, competitive market for
17 charging services.

18 The potential uses of LCFS credits that accrue to
19 the utilities will be considered as part of the CPUC's GHG
20 regulatory proceeding, proceeding number 11-03-012. In
21 considering this issue, we understand and appreciate that
22 the ARB requires that this revenue be used for the direct
23 benefit of electric vehicle drivers. And this will
24 certainly play an important part in the Commission's
25 deliberation.

1 The phase of the proceeding where the Commission
2 will be specifically addressing the use of LCFS credits is
3 scheduled to begin in early February. And we look forward
4 to continued collaboration on this issue with the ARB.

5 CHAIRPERSON NICHOLS: Thank you very much. We
6 really appreciate your coming over and sharing your views
7 with us.

8 Mr. Boyce.

9 MR. BOYCE: Thank you to the Chair and members of
10 the Board.

11 My name is Bill Boyce with the Sacramento
12 Municipal Utilities District. Environmental leadership is
13 a core value of SMUD, and we have pursued activities and
14 to encourage electric vehicles in support of air quality
15 in Sacramento for the last 22 years through numerous
16 programs that range from R&D to development of charging
17 infrastructure, all the way to public outreach and
18 education.

19 SMUD supports staff's proposed amendments to the
20 LCFS regulation and, in particular, the role of electric
21 utilities. We feel that this will ensure that the credits
22 get to market for robust regulation and that the credit
23 value used to enhance the market creation for plug-in
24 electric vehicles.

25 SMUD also sees the need to remain technology and

1 business model neutral in this nascent charging market.
2 We don't want to pick winners or losers because we do
3 anticipate significant technology changes as the market
4 grows. However, despite all the change that we
5 anticipate, the delivery of electricity fuel will always
6 involve the electric distribution utility. This also
7 includes supporting the often overlooked simple 110 volt
8 electricity used by many PEV owners today that does not
9 require any special service model.

10 At SMUD, we do have a submeter solution where
11 customers are participating in that. As part of that
12 effort, the additional meter to track the energy is
13 provided free to the customer. The majority of their
14 costs is simply installing that meter socket box in the
15 line. So we do have data that that we can share with
16 staff as was questioned earlier.

17 We also see a host of other metering options that
18 are available of anything what's available on board of the
19 vehicle. Many of the cars do have meters that are
20 envisioned to being able to detect electric vehicle
21 charging load at the house meter or even now network type
22 plugging meters that you can plug into an outlet.

23 We are committed to returning the LCFS credit
24 value to customers in a transparent, non-biased manner
25 that ensures that that maximum credit gets back to the EV

1 customer. We see this very much very similar to utility
2 programs for energy efficiency, which we have used
3 successfully to transform markets in other areas, such as
4 efficient lighting, refrigeration, and also with HVAC type
5 of investments.

6 SMUD is in this for the long haul. We have been
7 supporting the delivery of electricity for 60 years and
8 have worked with ARB staff and the stakeholders for LCFS
9 since it started way back in the initial University of
10 California studies.

11 We see this is an important step forward. And
12 thank you for the opportunity to make comments today.

13 CHAIRPERSON NICHOLS: Thank you for coming.

14 BOARD MEMBER SPERLING: Could I ask a question?

15 CHAIRPERSON NICHOLS: Yes.

16 BOARD MEMBER SPERLING: Both for Bill Boyce and
17 for the staff, the following up question that Mayor
18 Loveridge had earlier in a discussion with Ecotality, much
19 of the electricity is going to be used in plug-in hybrids
20 in the future. And in fact, even with the Nissan Leaf
21 about I think on something like 15 percent of the vehicles
22 are using 120 volt.

23 The question is: Without any metering, can the
24 utilities be able to -- can they measure or how are we
25 going -- I guess how is ARB thinking together with the

1 utilities it's going to measure that electricity so that
2 credit can be allocated?

3 And of course, that ties back into the
4 transparent credit marketing system and how that's going
5 to be part of the compliance processes.

6 CHAIRPERSON NICHOLS: Mr. Waugh. I think we
7 should have staff respond to that, the question as far as
8 how ARB is thinking about it.

9 TRANSPORTATION FUELS BRANCH WAUGH: Our
10 regulation allows the utilities to estimate up until 2015
11 what the electricity use would be. So we are open for any
12 kind of ideas that they may have that would be worth --
13 have a technical basis to it. We're open to that.

14 In 2015, we require direct metering. There is an
15 estimation of approach until then.

16 BOARD MEMBER SPERLING: I'm thinking we might
17 need to think -- that's what I used to say also.

18 I'm thinking having been driving a plug-in hybrid
19 this past week, I realize you don't need the 220 volt.
20 And so you don't need the metering. And this might be a
21 longer term issue.

22 So we always thought -- I think the staff always
23 thought about this as a stop-gag approach. But I'm
24 thinking this might be a more permanent.

25 And, you know, maybe Bill Boyce does have some

1 insight into that because --

2 CHAIRPERSON NICHOLS: You're welcome to add your
3 thoughts.

4 MR. BOYCE: I've been driving a Volt for over a
5 year. And one of the experiments going on is my staff
6 looks at my load profile from my home meter and they can
7 look at my load profile from home and detect when I am
8 charging at nighttime on 110. Most of the signatures of
9 the charger are easy to see, particularly Level 2. Those
10 are some of the things that can be low cost and are
11 analytical based and that we see as potential to pick up
12 the 110 volt charging behavior.

13 CHAIRPERSON NICHOLS: So this is progress.

14 BOARD MEMBER SPERLING: Just as a little thing, I
15 think we need to think about that differently and it is
16 more of a long-term permanent challenge.

17 CHAIRPERSON NICHOLS: Tim, thank you.

18 Mr. Plotkin.

19 MR. PLOTKIN: Thank you, Madam Chairman, Board
20 members. Norm Plotkin representing the California
21 Independent Petroleum Association.

22 CIPA is greatly concerned with the changes that
23 move from production default carbon score to a possible
24 future complete differentiation.

25 While not directly regulated under the LCFS, CIPA

1 members are concerned they could become collateral damage.
2 Carbon intensity measurement changes will have unintended
3 consequences for California heavy oil production.

4 As we move from default score to statewide
5 averaging approach, we ask of you, first, do no harm to
6 our domestic production, which is an integral part of
7 California's economy and represents nearly 40 percent of
8 the crude oil supply in California.

9 We're very concerned over possible drive to
10 abandon California baseline average for full differential
11 of crude stocks, feed stocks. Switching to a scheme that
12 requires detailed reporting for California production but
13 relies on default assumptions for imported crude
14 potentially has negative environmental and economic
15 consequences for state production.

16 In the staff report, they suggested the intent of
17 the reg is to ensure LCFS benefits are not diminished due
18 to increases in GHG emissions from higher carbon intensity
19 crude supplies. Yet, the only operational understanding,
20 not theoretical, not hypothetical, not modeled of carbon
21 intensity inputs available are those from domestic
22 production, which is the most permitted, regulated,
23 reported environmentally sensitive production in the
24 world.

25 Carbon intensity values from the rest of the

1 world production are extrapolated from NOAA flaring data
2 with a transportation at or appended and use of complex
3 mix of non-standardized conversion factors and based on
4 unsubstantiated assumptions.

5 The practical meaning is that the carbon
6 intensity scores for carbon intensity data based on actual
7 data versus scores for the rest of the oil production
8 based on guesses, while less important under averaging
9 scheme than fully differential methodology domestically
10 produce crude will suffer against the imports based upon
11 accurate scoring or lack thereof.

12 Buying behavior of regulated parties who will
13 suffer cost deficit for taking in too much crude feedstock
14 with higher carbon intensity scores will be negatively
15 influenced.

16 You're attempting to answer this data gap through
17 contracting with Stanford University to help construct the
18 OG (phonetic) model. By its own admission, the OG Scoping
19 Plan will suggest a trade off between accuracy and
20 required data that will be addressed by addressing
21 comprehensive default parameter value.

22 We're told that all required inputs to model will
23 be assigned default values that can be left as is or
24 changed to match the characteristics of a given field or
25 marketable crude oil blend.

1 If only limited amount of info is available for a
2 given project, then most values will remain as defaults.

3 In contrast, the Scoping Plan notes, if detailed
4 data are available, a more accurate emissions estimate can
5 be generated, to which we conclude under OG where there's
6 data, there's accuracy. No data, no accuracy. So under
7 fully differential construct using OG model for domestic
8 production for which data is readily available will be
9 accurate -- if I may just finish this --

10 CHAIRPERSON NICHOLS: Finish just that point and
11 summarize.

12 MR. PLOTKIN: -- the rest of the world production
13 will get default scores occurring in the project Scoping
14 Plan creates an unlevel playing field for California
15 crude. And we would ask that you address this as you
16 complete the regulation. Thank you.

17 CHAIRPERSON NICHOLS: Thank you.

18 MR. EISENHAMMER: Good afternoon. I'm
19 representing an organization called the Coalition of
20 Energy Users. And we're concerned first and foremost with
21 energy affordability. So we look at the CEC's estimate of
22 additional cost -- of additional cost and expressed great
23 concern.

24 Furthermore, on the restrictions on carbon
25 intensity of fuels, we're concerned that will increase our

1 reliance on imported fuel, which will raise cost, kill
2 jobs, and jeopardize our energy security.

3 We're also concerned about the civil rights
4 impacts and that higher gas price will disproportionately
5 harm the poor and the working poor.

6 To the extent that this plan relies on biofuels
7 such as ethanol, we're concerned that worldwide food
8 shortages will be increased and even starvation in the
9 third world, which I would remind you the riots in the
10 Middle East were a result of rising food prices. So when
11 we start to burn food for fuel, you wind up with less food
12 for people in the third world and higher prices.

13 I also would like to say that I have submitted a
14 petition signed by over 550 Californians urging the Board
15 to reject this proposal. Thank you.

16 CHAIRPERSON NICHOLS: Thank you.

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

20 And the American Lung Association is pleased to
21 continue our support for the low carbon fuel standard as a
22 critical program to transform California's transportation
23 fuels and improve the lives of millions of Californians
24 that are living with unhealthy air. And our urgent air
25 pollution problems in California, the mounting threats of

1 climate change, and increased public health emergencies
2 that follow call for us to quicken the pace of action.
3 And we're pleased that Dr. Maxwell was here to be able to
4 share more about the public health impacts and broad range
5 of health organizations that are behind this regulation.

6 Quickly, the quicker we move forward on this
7 regulation, the quicker we can reap the benefits of
8 diversifying our transportation fuels. And we are very
9 concerned with the reality that oil companies have been
10 turning to dirtier sources of crude oil that impede our
11 progress toward addressing climate change. And this is a
12 trend that must be reversed.

13 We have three critical points we wanted to make,
14 as you make your decision today. Number one, that we
15 support the staff proposed amendments and believe that the
16 Air Board must maintain the on-time implementation of the
17 low carbon fuel standard. As you're aware, the history of
18 regulation shows us this is the time when the affected
19 industry pushes back the hardest. It's not surprising
20 that you're hearing a lot of oil industry calls for delay.
21 But staying the course now will pay off and achieve the
22 transportation that we need to cleaner fuels. So we are
23 opposing any calls for delays or built in offramps to the
24 LCFS program.

25 Second, we want to make sure that the LCFS

1 ensures the proper accounting for all fuels and
2 differentiates between sources of fuels. We oppose the
3 WSPA proposal to weaken the high carbon intensity crude
4 oil provision and allow all petroleum fuels to be treated
5 the same way, regardless of differences in the relative
6 difference of carbon intensity.

7 And instead, of course, we support the staff
8 approach that maintains the HICO provision and ensures
9 that petroleum fuels do not become dirtier over time. We
10 feel it's very important.

11 And furthermore, we want to support the
12 recommendations of our colleagues at NRDC and other groups
13 that are encouraging you to strengthen the high carbon
14 intensity provision by allowing individual refiners the
15 option to report on the carbon intensity of their own
16 specific fuel mix.

17 We think this is the best way to go, to allow
18 individual refiners to report when where achieving better
19 than average progress in terms of their carbon intensity.
20 And we feel this will help to encourage cleaner practices
21 and the best possible support for our program goals.

22 California is moving in the right direction on
23 transportation fuels. And we're proud of that. We look
24 forward to your action next month on the advanced clean
25 cars regulation. But we need to maintain the LCFS as the

1 critical foundation for our transition to cleaner
2 transportation.

3 CHAIRPERSON NICHOLS: Thank you.

4 Chris Chandler.

5 MR. CHANDLER: Good afternoon. Thank you for the
6 opportunity to speak today.

7 My name is Chris Chandler. I'm the refinery
8 manager for ConocoPhillips Los Angeles Refinery. We have
9 600 employees and 400 contractors that work each day to
10 operate and maintain the refinery. Three-hundred-fifty of
11 our employees are represented by the United Steelworkers.

12 I have met with many of you to share our concerns
13 about the implementation of high carbon intensity crude
14 oil under the LCFS regulation. We have also had meetings
15 with CARB staff and NGOs to share our concerns.

16 The current HICO approach grandfathered some
17 crudes, effectively excluded others, and subjected the
18 remaining crudes to a lengthy review process. Non-crude
19 raw materials, blend stocks, and finished imports from
20 outside of California were not subject to any accounting
21 of their crude source, placing out-of-state refineries who
22 produce these fuels at a significant advantage over
23 California refineries.

24 The staff proposed California average approach
25 looks at all crude processed in the state and accurately

1 accounts for its carbon intensity. This approach ensures
2 that any of the gains made with biofuel blending account
3 with the change in the crude slated for the state.

4 While we would prefer no crude differentiation,
5 it has become evident to us this Board does not share our
6 view. CARB staff convened a multi-stakeholder LCFS
7 Advisory Panel to review this very issue over a nine-month
8 period, weighing the pros and cons of various approaches.
9 We view the California average approach proposed by staff
10 for approval today as an improvement to the existing
11 regulation. Fundamentally, it allows each refinery to
12 pick the most economic crudes for its particular
13 configuration and capability.

14 The proposed amendments more accurately account
15 for crude carbon intensity. They're simpler. And they
16 sustain the goals set forth in the legislation.

17 We do oppose the company-specific and
18 company-specific refinery specific approaches. Such
19 methods will restrict the type of crudes that an
20 individual refinery can process, potentially creating
21 winners and losers and causing leakage. These approaches
22 open the door to out-of-state markets by providing a
23 loophole around crude carbon intensity accounting. It is
24 very important to focus on how the regulation is
25 implemented.

1 CARB staff has developed an approach, which we
2 believe is fair, accurate, and simple. The human element
3 of this regulation must be recognized. Jobs can be
4 created or eliminated depending on how the regulation is
5 implemented.

6 At the end of the day, we need to decide if we
7 want to continue to support the in-state manufacturing of
8 fuels and protect jobs in California. If not, many are
9 waiting across the Pacific and across State borders, happy
10 to provide the commodity of transportation fuels to
11 Californians without Californians benefiting from the jobs
12 that transportation fuel manufacturing creates.

13 Thank you.

14 BOARD MEMBER SPERLING: May I say something?

15 CHAIRPERSON NICHOLS: Excuse me. Dan.

16 BOARD MEMBER SPERLING: First of all, I'm pleased
17 to hear that support for the California average at least
18 as an improvement over the previous. I personally believe
19 that we do need to be -- we should be going towards more
20 of a company-specific approach. And we'll talk a little
21 bit about that later.

22 But you made a lot of assertions about the effect
23 on costs and jobs. And going back to an earlier question
24 by Board Member Berg, in my discussions with your company,
25 with other companies, with the staff, we have not -- I

1 don't feel like we've gotten the kind of information that
2 we need to understand whether those assertions really are
3 true and to what extent they're true. We know there is a
4 lot of shuffling going on out there. We know that your
5 refineries are designed to run on specific types of
6 crudes. You can't change the refinery very easy. You
7 can't change the mix of crudes very easily.

8 There is a big differential between the different
9 crudes. So there is all this stuff going on out there.
10 And you know, a question in my mind is how big is that
11 signal from the LCFS in terms of the shuffling part of it.
12 And you know, I don't think you'll be able to answer it
13 right now. If you could, that would be great.

14 But I think that's where we really need to
15 understand better and your company and the other companies
16 have to work with us in a credible way to answer it.
17 Otherwise, you know, my take on it is we should just go to
18 a company-specific rules and put the burden on you to tell
19 us to provide real evidence that that really does have the
20 kind of impacts you're talking about.

21 MR. CHANDLER: Let me take a quick attempt to
22 answer your question on the impact of restricting crude to
23 an individual refinery.

24 Take an average size refinery in the state,
25 150,000 barrels a day. Half of them are larger. Half of

1 them are smaller. That's 50 million barrels of crude oil
2 that that refinery processes every year. So today, crude
3 is about \$100 a barrel. So that raw material cost for
4 that average size refinery are approximately \$5 billion a
5 year.

6 So a small change in crude price -- and you can
7 look on public postings crude prices vary five, ten,
8 sometimes even \$20 a barrel based on their quality. So
9 let's just assume a dollar a barrel. The refinery ran 50
10 million barrels. A dollar a barrel change in cost because
11 a refinery can't pick its most economic crude is \$50
12 million a year. And \$50 million a year could make the
13 difference between a business having a positive income or
14 a negative income.

15 That's how big it is in our mind is it's -- we
16 make or lose money in a lot of cases on how well we pick
17 the optimum crudes for our refineries. That's why we're
18 so concerned about anything that might restrict that.

19 Does that help?

20 BOARD MEMBER SPERLING: We don't want to lose
21 jobs or hurt the economy. We want to make this work. So
22 we need to follow up on that.

23 One other last little question is there is this
24 proposal this so-called hybrid approach. I'm just
25 characterize it as using a California average for crude

1 oil, but if any company does better, then they can get
2 credits. What's your position on that?

3 MR. CHANDLER: We haven't heard a lot about that
4 yet. I saw the slide earlier today, as we all did.

5 I think if you move away from what CARB staff is
6 proposing today, the question of how to handle these
7 materials that could come through the loophole -- and the
8 materials are the intermediates we run. This is non-crude
9 raw materials. Some of the refineries in the state might
10 run 20 percent of material that's not crude based. That's
11 currently not accounted for in any of the approaches being
12 discussed. It's not clear how that would be done on a
13 hybrid approach either. That's one.

14 We buy blend stocks. We might buy something and
15 blend it into the gasoline we sell. That's not accounted
16 for. There's no accounting of what crude was used to make
17 that blend stock.

18 And then the third piece is actual imports,
19 finished products. Whether we bring them in or other
20 companies bring them in, if the carbon intensity of the
21 crude oil that's used to make those materials is not
22 accounted for, that's a loophole that could penalize
23 in-state refineries while not holding out-of-state or
24 out-of-country refineries accountable.

25 BOARD MEMBER SPERLING: Let me ask the staff to

1 respond, because my understanding is that the intention
2 was to take into account the intermediate products and the
3 finished products and the blend stocks. Is that correct?
4 In the hybrid approach.

5 STATIONARY SOURCE DIVISION CHIEF COREY:

6 Professor Sperling, one of the provisions in the
7 amendments is to include as part of the reporting for each
8 refinery not only the finished product produced but also
9 the imported intermediaries areas. So annually, we have a
10 good sense if there is any change or if there is a
11 significant response from a circumvention standpoint, we
12 can annually monitor and assess that. Today, they
13 represent a relatively small volume. But be mindful of
14 that possibility and therefore included a reporting
15 element as part of these amendments.

16 BOARD MEMBER SPERLING: So I think what you said
17 is we would be responding to those concerns?

18 STATIONARY SOURCE DIVISION CHIEF COREY: That's
19 correct.

20 MR. CHANDLER: I do think it's important that
21 there is assurance that also applies to non-refineries
22 that import material into the state. And we've shared
23 concerns with CARB that might not be the easiest thing to
24 report, because we don't always know when we buy some of
25 this material exactly where it came from from a crude

1 source standpoint. And determining that would be a
2 challenge from an accounting standpoint and certainly from
3 an enforcement standpoint. That's the big certain we
4 would have around the hybrid approach.

5 CHAIRPERSON NICHOLS: I think we need to continue
6 this conversation. There will be more to come. Thank
7 you.

8 Lisa Hoyos and then Catherine Houston.

9 MS. HOYOS: Good afternoon, Chairman Nichols and
10 Board members.

11 My name is Lisa Hoyos. I'm the California
12 Director of the BlueGreen Alliance. We are a national
13 coalition of 11 big unions and four major national
14 environmental groups.

15 As you can see, we are standing here together
16 today with the United Steelworkers and also with NRDC to
17 submit a joint letter that was borne of several
18 conversations with leadership of our national
19 organization, leadership -- regional leadership of the
20 United Steelworkers and ourselves, the BlueGreen Alliance.
21 So if it's okay, I'd like to cede the rest of my time to
22 the next speaker in case it goes over, but our letter
23 should be less than three minutes.

24 MS. HOUSTON: Thank you, Madam Chair and Board
25 members.

1 On behalf the BlueGreen Alliance, the United
2 Steelworkers, and its members in the ten unionized last
3 California oil refineries and Natural Resource Defense
4 Council and its members and activists, we provide this
5 letter identifying joint areas of support on the low
6 carbon fuel standard and joint recommendations going
7 forward.

8 All three organizations have been strong
9 supporters of AB 32 since its passage and worked actively
10 to protect against Prop. 13 in last year's election.

11 We also share the goals of the low carbon fuel
12 standard to attract investments in cleaner fuel production
13 and hold all products sold in the state to the highest
14 standards possible. We want to see companies investing
15 more in California to this end.

16 We thank Air Resources Board for their efforts to
17 make improvements to the LCFS, including the high carbon
18 intensity crude oil provision. Specifically, we support
19 the efforts made to modify the HICO provision along the
20 following lines.

21 1. Ensuring a level playing field that raises
22 the bar equally for both fuel importers and domestic
23 producers. Specifically, we understand that importers of
24 all finished and unfinished products be held to the same
25 bar under the LCFS HICO provision and we'll need to offset

1 their emissions and introduce cleaner alternatives, just
2 as California fuel producers are starting to do so today.
3 Doing so will prevent leakage of California's jobs and its
4 market to imported fuels from states and countries that do
5 not participate in similar programs.

6 2. Providing refineries greater flexibility to
7 buy and sell crude oils without penalty so long as the
8 average performance does not worsen over time. The
9 proposed modifications grandfather in the carbon intensity
10 of refineries rather than 2006 baseline crude oil sources.
11 Doing so provides greater flexibility for refineries to
12 buy and sell crude oil as normal, with debits accrued only
13 if actual performance worsens going forward. Greater
14 environmental benefits will also be achieved since this
15 new approach is more performance based.

16 3. Providing incentives for upstream reduction
17 activities that reduce crude oil reduction emissions. We
18 also support modifications that will provide credit for
19 upstream production activities made by oil producers,
20 increasing the flexibility even more to comply with the
21 standard while encouraging projects that could occur in
22 the state.

23 Going forward, we look forward to working with
24 ARB to ensure that LCFS standard implementation continues
25 in a smooth manner.

1 We recommend that ARB management establish a
2 process for direct dialogue between labor and ARB,
3 potentially through the Blue Green Alliance process, to
4 concerns or questions can be addressed on an ongoing basis
5 as AB 32 is implemented.

6 We also recommend that ARB form a work group to
7 identify and evaluate potential projects in California to
8 reduce emissions at oil production facilities, as well as
9 investments that can be made in refineries to produce
10 cleaner renewable fuels.

11 We believe California can become a major producer
12 and exporter of clean fuel products, even as it moves
13 forward to provide cleaner gasoline and diesel to markets
14 here and abroad.

15 Thank you for the opportunity to provide input.
16 And we look forward to working together on the successful
17 and smooth implementation of LCFS.

18 And I'm submitting this on behalf of Lisa Hoyos
19 of the BlueGreen Alliance, Rick Lathum, sub-director of
20 the United Steelworkers and Simon Mui from NRDC.

21 Thank you. And thank you to staff for your time
22 and efforts on this. We feel it's really important.

23 Thank you.

24 CHAIRPERSON NICHOLS: Thank you.

25 That was a rare and remarkable example of three

1 groups actually managing to combine. And it worked.
2 Excellent.

3 Mr. Malins.

4 MR. MALINS: Thank you, Madam Chairman.

5 I should emphasize that contrary to appearances,
6 I'm not a member of the BlueGreen Alliance.

7 (Laughter)

8 CHAIRPERSON NICHOLS: You found a way to raise
9 the issue, which I was waiting for someone to do.
10 Congratulations.

11 MR. MALINS: I remain Chris Malins, the fuels
12 program lead for the International Council on Clean
13 Transportation.

14 Firstly, I wanted to say that we very much
15 support the amendments on credit trading. I think this is
16 an important step towards an effective credit trading
17 market. And that does represent a very important path to
18 achieving the goals of the LCFS.

19 On the constantly interesting issue of high
20 carbon intensity crude oil, I'd like to echo the sentiment
21 from the Consul General from Canada. I think there is an
22 important direction of travel here, not just for
23 California, but for the rest of the world, where
24 transparency and sort of full life cycle assessment of
25 crude oil is something that needs to be moved towards in

1 one way or another.

2 I think it's important to bear in mind that there
3 are more responses to a full crude differentiation than
4 simply shuffling. There are efficiency opportunities at
5 refineries.

6 If a value signal can be provided, all among the
7 chain, there are opportunities to achieve very significant
8 carbon savings, from flaring, opportunities to move
9 investments towards lower carbon crudes in the future and
10 away from higher carbon fuels.

11 I think that the further exploration of
12 appropriate mechanisms to impose these costs and benefits
13 on to operators is important. I think that the staff
14 position that further exploration of these issues is
15 appropriate, is important. I think in particular the
16 issue with the comparative value of shuffling versus
17 carbon intensity improvements is one more further
18 examination. The same message came out at the national
19 LCFS project. And the ICCT is committed to doing further
20 work to move us on in that area.

21 As a final thought, I would like to mention that
22 I think crude efficiency and carbon savings from crude can
23 be a compliance pathway as well as a burden as crude
24 differentiation moves in. And I hope that California can
25 be part of an increased reporting regime that will help us

1 close the information gap between jurisdictions. Thank
2 you.

3 CHAIRPERSON NICHOLS: Thank you.

4 Jon, and then Frank Harris if he's still with us,
5 and that will be our last.

6 MR. CONSTANTINO: Thank you, Madam Chair.

7 Appreciate the opportunity.

8 Jon Constantino on behalf of the Kern Oil
9 Refining. And Kern Oil is one of those remaining two
10 small refineries in the state of California.

11 And our comments are on HICO as well, but they're
12 a slightly different look at the issue. And it has to do
13 with the fact that Kern is a small refinery by a small
14 percent of the crude oil in the state and the fact that
15 California average puts us all in the same boat. So when
16 you establish your business plan and go on your compliance
17 curve, if the California average goes up, you find
18 yourself in a deficit based on what your competitors have
19 done.

20 So we think that's a problem. And we've
21 suggested specific suggestions in our comment letter that
22 we'd like to encourage the Board to ask staff to look at.
23 And they have to do with those that either don't use HICO
24 or those that use very little HICO. And so we strongly
25 encourage that provision get looked at going forward.

1 And the fact that we also have a question about
2 additional data with respect to specific oil fields and
3 the carbon intensity of which crudes come from which. And
4 for us to make the big decisions, we need to -- we need
5 more additional data and we encourage that data to be
6 presented.

7 So with those comments, that's all I have to say.
8 Other than I wish Bob Fletcher a good retirement and happy
9 holidays.

10 CHAIRPERSON NICHOLS: Thank you.

11 MR. HARRIS: Fewer this afternoon than this
12 morning. That's surprising.

13 Madam Chair, members of the Board, thank you for
14 the opportunity to speak today. Frank Harris, Manager of
15 Environmental Policy for Southern California Edison.

16 SCE supported the LCFS in the 2007 Executive
17 Order signing and again in the April 2009 hearing. And
18 today, we wanted to reiterate our support for the program
19 and particularly for the staff proposal.

20 The proposal does not provide any single party
21 all that it wants. However, the proposal is fair, it's
22 workable, it's fact based. And the proposal meets the
23 staff's stated goals. And it doesn't create too heavy a
24 regulatory burden on industry or staff. As Bob is still
25 interested in advocating, even though he's going to be

1 enjoying a long fishing trip here pretty soon.

2 Edison is committed to upholding the requirements
3 placed on the utilities as the primary or alternate
4 regulated party. And the key to these requirements as was
5 represented by the CPUC representative earlier is the
6 requirement that utility precedes in the utility sector be
7 used for the benefit of plug-in electric vehicle
8 customers. We fully support that requirement.

9 We also strongly support applying these same
10 requirements to other regulated parties in the electricity
11 fuel portion of the LCFS.

12 And SCE commends the staff for implementing the
13 principle of fairness for all the parties.

14 SCE also agrees with the earlier comments by Mr.
15 Goldstene, that it's important for the Board to stay the
16 course, particularly as it applies to the identification
17 of the regulated parties in the electricity sector. This
18 regulatory certainty will send an important signal to all
19 the regulated entities and the market participants as a
20 whole.

21 SCE and other utilities remain being very
22 relevant in the EV markets in many ways because of our
23 long-term commitment to investing in the transformation of
24 these markets.

25 This commitment can be seen in our extensive

1 customer education programs, our engagement with auto
2 makers, and other service providers and communication with
3 the community at large. Our customers come to us, because
4 they see us as a trusted energy advisor. We provide them
5 with a range of services, including information on
6 infrastructure costs, deployment considerations, benefits
7 and trade-offs of vehicle charging, and best practices for
8 affective load management, a critical issue with the
9 increase in electric vehicle charging.

10 Working together to help these customers make
11 optimal decision regarding PEV fueling and infrastructure
12 development, SCE further commends the ARB for encouraging
13 all utilities to fulfill these regulatory goals.

14 In closing, SCE activity supports the staff
15 proposal, commends the staff on their hard work, and I
16 refer to our written testimony for our other comments.

17 Thank you very much for this opportunity.

18 CHAIRPERSON NICHOLS: Thank you. Any questions?
19 Very good.

20 We do have one other card that came in, so we
21 will add him to the list. John.

22 MR. SHEARS: Apologize. I signed up online
23 yesterday morning but we got --

24 CHAIRPERSON NICHOLS: Something got lost.
25 Anyway, welcome.

1 MR. SHEARS: So yes, John Shears, Center for
2 Energy Efficiency and Renewable Technologies.

3 Again, in support of the regulation, although we
4 would like to encourage CARB to move more to the specific
5 refinery type model going forward. We understand, you
6 know, nascent. We're trying to develop a nascent market.
7 So moving incrementally forward on this.

8 I just wanted to briefly touch on the shuffling
9 issues because I know the shuffling issue is a concern for
10 some of the Board members. And Ralph has provided us with
11 a very good example in his comment referring to Russian
12 crude being shuffled. There could be positive shuffling
13 in greenhouse gas terms or negative shuffling, E.I.
14 increases or decreases in emission depending on shuffling.
15 If we go with Ralph's contention that this was attributed
16 by an employee at TNK BP, the joint concern that BP is
17 involved in in Russia, that could be related to the
18 California pending regulation, in fact, this particular
19 example of shuffling ended up in reducing greenhouse gas
20 emissions, because the crude was actually being routed
21 from eastern Siberia and all ended up going to the Pacific
22 Asian countries.

23 So I just want to highlight when we're talking
24 about shuffling, recognizing that shuffling goes on for a
25 lot of reasons as part of normal business practices in the

1 industry, you can have examples of shuffling that actually
2 reduce greenhouse gas emissions, not just the example that
3 industry has been asking us to focus on in terms of the
4 increasing emissions. So thank you.

5 CHAIRPERSON NICHOLS: Thank you.

6 I believe that John is our last witness, and so
7 I'm going to close the record on this agenda item, with
8 the understanding that the record will be reopened after
9 the 15-day notice of public availability is issued.

10 In the mean time, written or oral comments
11 received after this date but before that notice won't be
12 accepted as part of the official record. When the record
13 is reopened for a 15-day comment period, the public may
14 submit written comments on the proposed changes, which
15 will be considered and responded to in the Final Statement
16 of Reasons for the regulation.

17 I now want to bring this back to the Board. I'm
18 sure there will be people who will be eager to join in our
19 conversation, but you're not invited unless we invite you.
20 This is for the Board members.

21 So just to be clear, we now have an opportunity
22 to discuss the Resolutions before us and any amendments
23 people may wish to offer or other comments or concerns
24 they might want to make.

25 I do also want to indicate just for the record

1 that in the past we have sometimes polled the Board
2 members one by one and had them each state all the ex
3 parte communications they've had. We have changed that
4 procedure, and the Board members' ex partes will be filed
5 in writing and will be available to anyone who's
6 interested upon contacting the Clerk of the Board. We're
7 not going to go through that ritual at this meeting.

8 So we are now open for comments or thoughts that
9 anyone might wish to share about the proposal that's
10 before us for the staff to the low carbon fuel standard.
11 And I'll recognize Mrs. Riordan first, because she's
12 moving her microphone.

13 BOARD MEMBER RIORDAN: I'm moving my microphone.
14 Thank you, Madam Chairman.

15 First of all, let me just say to the staff, thank
16 you for an excellent report and briefing that you provided
17 to me.

18 There is one thing that has occurred to me that
19 might be deviate slightly from your report, and that is
20 when we are talking about accounting and how we do it and
21 this hybrid approach, the hybrid approach is one that I
22 can see some advantage to, and I'll tell you why. I think
23 if some of the participants are doing a really good job,
24 they ought to be rewarded for that. And I've long held
25 that I didn't want to be punished for somebody else's

1 problem if they were acting in an inappropriate way.

2 But I also know that everything is so technical
3 and everything is so competitive, and there are lots of
4 things that occur here. I'm wondering if there might be a
5 way to develop this more so that I feel a little bit more
6 comfortable. I mean, I'm not quite comfortable with that
7 one element. I really would like to reward people who are
8 doing a good job. And yet, at the same time, I know that
9 there are other things that may come into play, unintended
10 consequences.

11 So I don't know, Madam Chairman, that's just my
12 uncomfortable negligence of this. Otherwise, I support
13 the staff recommendation and the Resolution before us.

14 CHAIRPERSON NICHOLS: Well, I think others have
15 given some thought along those same lines as well. And
16 I'm going to -- maybe Mr. De La Torre might want to
17 respond to that.

18 BOARD MEMBER DE LA TORRE: Yes, thank you, Madam
19 Chair.

20 I, in talking to staff both at the staff briefing
21 and subsequent to that, have come up with some language to
22 try to get to an option for individual regulated parties,
23 refiners, to be able to measure their own carbon intensity
24 versus the standard, as opposed to just this lump sum mix
25 that we've been talking about here.

1 We think -- I think it's only fair, you know,
2 that folks be measured by their own performance. To the
3 extent it benefits some to be lumped in with others,
4 great. But there should be an option for folks to be
5 measured on their performance if they're doing all the
6 right things. And by doing those right things, they see
7 no benefit to it. Or in fact in some instances could be
8 penalized for it. So I think it's very important to have
9 that option.

10 To that end, I wanted to request a consideration
11 for an amendment or a Resolution that it be resolved that
12 the Board directs the Executive Director -- Executive
13 Officer to evaluate and propose, as appropriate, an option
14 for individual regulated parties to have their deficits
15 for gasoline and diesel determined on the
16 refinery-specific basis that accounts for the carbon
17 intensity of domestic and imported crude oils,
18 intermediate products, and finished fuels.

19 It's broad direction to staff to come up with an
20 alternative that will give that flexibility, that will
21 give that option. And I think that was my concern as I
22 met with the folks from the outside and reflected in my
23 conversation with the staff. And I think this helps get
24 us in that direction.

25 BOARD MEMBER LOVERIDGE: Did staff sign off on

1 that?

2 CHAIRPERSON NICHOLS: I believe that the staff
3 can accept the language as long as it's not time-specific.
4 There was some concern that if they had to propose it as
5 part of the 15-day changes they would not be ready to do
6 it because it's complicated.

7 But if they're given the opportunity to continue
8 working on this and to bring it back when they're ready,
9 that they would be able to support this idea.

10 I see some head nodding out there. Okay.

11 BOARD MEMBER D'ADAMO: Do you need a Resolution
12 before you?

13 CHAIRPERSON NICHOLS: You can formally --

14 BOARD MEMBER D'ADAMO: Move adoption of the
15 Resolution.

16 CHAIRPERSON NICHOLS: Sure. That's a good way to
17 do that, Ms. D'Adamo.

18 BOARD MEMBER D'ADAMO: So moved.

19 CHAIRPERSON NICHOLS: Move the Resolution. Do we
20 have a second?

21 BOARD MEMBER RIORDAN: Second.

22 BOARD MEMBER BALMES: Second.

23 CHAIRPERSON NICHOLS: We now have a proposed
24 amendment by Mr. De La Torre, seconded by Mrs. Riordan.

25 All right.

1 So any other -- let's just before we do any
2 voting, let's see if there are any other amendments that
3 anybody wants.

4 BOARD MEMBER BERG: I don't have an amendment,
5 but I do have a concern. That is certainly one I would
6 like some discussion either from staff on the various
7 testimony in regard to the shuffling and how we are going
8 to monitor this new amendment.

9 Evidently, when we looked at the original low
10 carbon fuel standard, it was my understanding that we were
11 looking at life cycles of each of the fuels. So I was
12 confused as to why the various crudes weren't accounted
13 for in the beginning. And so now we have this crude
14 issue, and we were always looking at shuffling as a
15 potential problem. And it is absolutely vital that we
16 don't get involved in the operational issues of these
17 refineries and tie their hands in a way that they can't
18 produce what they need.

19 On the other hand, I'm in full agreement that the
20 mandate of the low carbon fuel standard is vital. So how
21 do we marry to make sure -- what are we going to do as a
22 staff and as a Board to understand the shuffling issue,
23 the operations issue, now that we're becoming more
24 prescriptive?

25 STATIONARY SOURCE DIVISION CHIEF COREY: Ms.

1 Berg, this is Richard Corey.

2 A few points to those questions. One is in terms
3 of directly on the shuffling comment, we touched on this
4 as well as some other speakers.

5 Shuffling is not a new concept. You look at
6 crude slates from one year to the next. Crude moves.
7 It's not a commodity. It moves around the world. It's
8 not a fixed commodity. And I think the change here is
9 that there is a consideration, an additional consideration
10 of GHG implications.

11 In terms of the amendments, so we already had, as
12 you know, a provision that considered high carbon
13 intensity crude within the existing regulation. So there
14 was an accounting for it, but it was basically -- there
15 was a bright line. What we have with the proposed
16 amendments is improved accounting, because what we ended
17 up finding with the existing provision is we didn't
18 capture an increase in carbon intensity of crudes over a
19 period of time because of the grandfathering provision.
20 We also had a situation in terms of imports where in a
21 sense there was an advantage related issue.

22 So with the proposal, one, it allows for improved
23 accounting. Two, we actually think to the extent there
24 would be a shuffling response at all, even a small signal,
25 we think with the proposed amendments that reduces that

1 option. The proposed amendments provide more flexibility,
2 more options treating all crude the same irrespective of
3 its origin by removing the grand fathering element.

4 And three, I think this is a really important
5 element to the revisions, and that is refiners would be
6 providing as part of reporting their crude slates every
7 year. We know what the changes are. We are monitoring
8 the amount of crudes, their origin, because in a sense,
9 that information is used to annually revise the carbon
10 intensity.

11 So what we end up getting is better reporting for
12 information refineries already have. We get better
13 tracking, and we get better accounting with the overall
14 approach.

15 BOARD MEMBER BERG: Thank you very much for that
16 explanation.

17 And do I understand that we will have a baseline?
18 And that ten percent that's going to be reduced is off of
19 that baseline? Then the annual reporting then if higher
20 intensity crudes have come in throughout the year and
21 they're slightly above, that's when you will handle that
22 increase, so to speak, at that time?

23 STATIONARY SOURCE DIVISION CHIEF COREY: That's
24 correct. That increase will be apportioned under the
25 average. So you're correct we update the baseline there's

1 updated data '09 -- actually 2010 is what we want to
2 include as part of the 15-day changes.

3 You're right. Going forward, if there is no
4 change in the average, if there is no overall increase in
5 high carbon intensity, there is no incremental deficit
6 resulting. So in a sense, what it does is define a
7 situation where there is not a change, there is not a
8 resulting deficit. But it results for annual monitoring
9 to see if there is a general response, increase in high
10 carbon crude.

11 BOARD MEMBER D'ADAMO: And then would the
12 resolution that was just proposed, that would allow
13 facilities to opt in on a voluntary basis for an
14 individual measuring if they so chose?

15 STATIONARY SOURCE DIVISION CHIEF COREY: My
16 interpretation of the discussion I just heard was this.
17 It was that if the Board chooses to act on the average,
18 that the direction would be to staff to further evaluate
19 the opt out or opt in to the hybrid based approach. And
20 as appropriate, after the appropriate data is collected,
21 analyzed, evaluated to make sure there aren't adverse
22 outcomes, return to the Board with the recommendation.

23 Staff's assessments is that would not be within a
24 15-day. We think that's a longer process. But the idea
25 is we go through the evaluation and plan to report back to

1 the Board with either a recommendation for an adjustment
2 or assessment where it's not appropriate.

3 BOARD MEMBER BERG: And maybe we could bring that
4 back in the same time frame as the 2012. Aren't we
5 bringing back in another amendment at that time?

6 STATIONARY SOURCE DIVISION CHIEF COREY: We're
7 returning to the Board 2012 with a separate rule making
8 for the indirect land use work and a few other amendments
9 as well.

10 My sense is with respect to this opt out
11 provision, I don't think the analysis would be completed
12 in that time frame.

13 BOARD MEMBER BERG: I understand there is no
14 date.

15 CHAIRPERSON NICHOLS: Excuse me. I was just
16 going to add one other thing, which is I think when we
17 talked about this idea earlier, staff was also looking at
18 the possibility of because there is so much fluctuation in
19 crude stocks that come into refineries, looking at a
20 longer averaging period for people who wanted to take
21 advantage of some sort of an opt out, it would not be an
22 annual, but could be actually a three-year rolling.

23 STATIONARY SOURCE DIVISION CHIEF COREY: Madam
24 Chair, that's correct.

25 Even in the context of the average approach as

1 proposed, industry and some others suggested a rolling
2 average in terms of as we update kind of as to determine
3 whether or not the changes occurred relative to the base
4 line.

5 We flagged that as something we want to discuss
6 further as part of the 15-day changes and something we're
7 open to take a closer look at to see if they have merit.

8 CHAIRPERSON NICHOLS: It seems like a really good
9 idea.

10 BOARD MEMBER BERG: It really does. I think
11 what's so important in a low carbon fuel standard is that
12 we really capture the rule within the parameters of what's
13 happening on the ground. And I think if we can tie that,
14 not try to win the battle at the cost of losing the war.
15 And as we're developing this, I think that is a really
16 critical piece.

17 CHAIRPERSON SAWYER: Dr. Balmes, you had your
18 hand up.

19 BOARD MEMBER BALMES: My question was just
20 answered.

21 CHAIRPERSON NICHOLS: Okay. Good.

22 BOARD MEMBER BALMES: I'll have some comments
23 later.

24 BOARD MEMBER SPERLING: I'd like to think that as
25 we give guidance to the staff, we provide it in terms of

1 what are the overall principles and structure that we're
2 talking about and not get too caught up in the weeds here.

3 And so I'd like to emphasize that what I think
4 are the goals here -- one is, we have come to appreciate
5 and understand that there is a continuum of carbon
6 intensities improves. The position of crude is crude is
7 just thought tenable. We know that there is a large
8 variation and an important principle here is that that is
9 part of the purview, part of the goal of the low carbon
10 fuel standard is to restrain or reduce the carbon the
11 carbon intensity of all the transportation fuels and the
12 crude is part of that mix. And I think that's where we've
13 moved.

14 I want to commend staff for the last proposal
15 from a couple years ago to this. There is a big
16 improvement in that sense. So that's the first one is,
17 you know, to be moving in that direction of unappreciating
18 that and reducing that overall carbon intensity.

19 The second is that it's to make companies
20 accountable and responsible for the carbon intensity of
21 their fuels and for us to provide an incentive for them to
22 invest in and pursue innovations to reduce that carbon
23 intensity, which was in the staff report.

24 And I think what that all leads to is moving
25 towards company-specific approach. And I agree with

1 the -- I guess the amendment, because we don't have enough
2 information to be sure that there aren't unintended
3 consequences. We don't know what the implications are.

4 But I think we should be sending a signal. And
5 I'd like this to be either part of the amendment or part
6 of the overall guidance is that it is our intention to
7 gradually move towards a program where the companies are
8 responsible and we will create a structure that does
9 reward them for innovation and investment. And that's
10 what I think we should be saying.

11 And let the staff figure out the details of how
12 to do that. And that part of that is what we talked about
13 earlier. They need more information. And they need help
14 from the WSPA companies to do that.

15 CHAIRPERSON NICHOLS: John.

16 BOARD MEMBER BALMES: So as often is the case,
17 Professor Sperling said some of the things that I wanted
18 to say.

19 But I want to re-emphasize, to me, it's really
20 important to send a strong signal for investment and
21 production of alternative fuels. Whether it's 71 billion
22 as WSPA said or four billion as NRDC said, it's not
23 enough. We need to move away from reliance on fossil
24 fuels if we are going to make any dent in the problem that
25 the former Air Force officer said was the most important

1 war that we're fighting now, which I thought was an
2 amazing statement.

3 And so I don't think there is any question that
4 we have to go forward with a program that, as Dr. Sperling
5 says, moves towards a company-specific approach so that we
6 can incentivize people to do a better job.

7 So I support Mr. De La Torre's amendment. I
8 think it's actually very nice that we have a legislator on
9 the Board so he can whip out some language very quickly.

10 And one last comment is one or two of the people
11 testifying were concerned about the impact on California
12 consumers of the low carbon fuel standard in terms of
13 potential increased fuel costs. And I'm concerned about
14 that. I think every member of the Board is concerned
15 about that. I think if we do it right, they'll be --
16 actually by increasing alternative fuel supply, we'll be
17 protecting California consumers in the future in terms of
18 the price signal. So I think we need to move forward as
19 we're discussing.

20 CHAIRPERSON NICHOLS: Thank you.

21 Ms. D'Adamo.

22 BOARD MEMBER D'ADAMO: I just had a few things.

23 Along those lines of the impact to the California
24 consumer, what I think is missing here is maybe a little
25 bit more of a partnership with the industry. And what I'd

1 like to see when staff comes back -- well, first of all,
2 some questions. When they do come back, in 2012, I guess
3 it's for the indirect land use report, but want to clarify
4 we will also receive a report at that time on an update
5 for what we're doing today.

6 CHAIRPERSON NICHOLS: I think it's two separate
7 things. If I could speak for the staff, which I probably
8 shouldn't.

9 But my understanding is that they're proposing
10 some regulation change to deal with the sustainability
11 issue, because we directed them to do that. And that will
12 come forward as soon as it's ready. But they've also
13 committed to do an annual monitoring and bring that back
14 to the Board. So those might or might not happen at the
15 same time.

16 BOARD MEMBER D'ADAMO: Okay. So I just wanted to
17 maybe talk a little bit about that report. I think that
18 it's interesting because we saw such a wide range of
19 impacts. I don't have it here before me.

20 But the chart that NRDC pulled up on costs, the
21 Sierra Research, and then I think it was DEO, a variety of
22 different reports. I think that before the staff comes
23 back, it would be nice for them to continue their work,
24 obviously, with the Energy Commission, but also hear from
25 Sierra Research, how did they get those figures? Why is

1 there such a huge gap?

2 And just echoing the comments that Ms. Berg made
3 earlier, we do need to hear directly from industry on
4 their accounting and on their investment. And I think
5 that would be great if we could have that be part of the
6 report to get -- staff would hear from the various
7 stakeholders and agencies and then provide us with their
8 insight about what those numbers mean.

9 As far as coming back often, I think it's good.
10 We spent a lot of time on this today, but it was really
11 heartening to hear from all of the alternative fuel
12 providers and some of the innovation that's going on. So
13 I think from my perspective, anyway, I don't mind spending
14 the time and getting an update.

15 The other thing I wanted to do was just ask about
16 flexible compliance. I was really intrigued by that when
17 it came up by a few of the witnesses. There's not much
18 meat on the bones there.

19 Can staff comment on flexible compliance in the
20 event that things get tight as we go forward here on the
21 credits?

22 STATIONARY SOURCE DIVISION CHIEF COREY: Yes, Ms.
23 D'Adamo.

24 So this was something that was discussed in the
25 context of the Low Carbon Fuel Standard Advisory Panel.

1 And the context really was: Are there opportunities to
2 provide even more certainty to the market should an event
3 or a situation play out where there's some limited or near
4 term or short term limit on available credits. Maybe an
5 individual refinery may be short. What were the options
6 that might be available? And by including a mechanism,
7 for instance, where credits would be available at a
8 pre-defined price, that would send a signal to the market:
9 One, we're standing by the targets; two, there is an
10 opportunity to cross that bridge.

11 But what I want to be clear on, this was
12 discussed in a subset of Advisory Panel members.
13 Discussed really what I characterize at a conceptual
14 level. A subset of Advisory Panel members did more work
15 on this, continue to look at this issue. Really pleased
16 with the work they've done.

17 But what our perspective is -- and we've included
18 this in the Resolution -- is that we think there may be
19 something there that merits further analysis. We want to
20 continue to work with the sub-group. We want to pull
21 other stakeholders in in the 2012.

22 And the fundamental question is: Could a
23 mechanism like this be constructed that actually enhances
24 the program. They're clearly -- even in the discussion
25 with Advisory Panel members, several members were

1 concerned about it. So there kind of was a mixed bag in
2 terms of the overall value that it would provide. So you
3 heard from the business community that believes that could
4 enhance the program.

5 So what we have at this point are some
6 approaches -- potential approaches this sub-group has
7 developed. We are seeking and identified in the
8 Resolution was the message that we want to work further to
9 take a closer look at this and really ask the fundamental
10 question does this have a role in the program? Could it
11 enhance it? To the extent it does -- either way, we would
12 return to the Board with our assessment, having worked
13 through stakeholders whether this could benefit the
14 program overall. We're appreciative of the work that the
15 subgroup of the Panel did, but we think it merits a deeper
16 dive.

17 CHAIRPERSON NICHOLS: I think a number of
18 witnesses commented on the extent of interaction there has
19 been on this program. And I don't expect to see that
20 slacking off very much, at least in the next year.

21 About to put this to a vote. But before I do,
22 yes, I have one more person who wants to speak. Okay.

23 BOARD MEMBER LOVERIDGE: I would defer to Dan
24 first.

25 BOARD MEMBER SPERLING: So just to add to that

1 discussion.

2 First of all, I think that this flexible
3 compliance mechanism has to be not a question. I'd like
4 to elevate it. I think for this program to be successful,
5 we have to have it. As many people have said, there is a
6 lot of uncertainty. We don't know how this is going to
7 play out. It's very risky to have a rigid program where
8 there's not some kind of flexibility built into it when
9 things don't play out the way we anticipated.

10 We need to be very clear that we're committed to
11 the targets. There is no backing off. This is what we're
12 going to do.

13 But at the same time, we do have to appreciate
14 the reality of how things might not play out the way we
15 want. So I would try to -- I want to elevate this to a
16 very high priority saying this I would argue is
17 fundamental to the success of the LCFS. And if we
18 don't -- like WSPA is saying, there has to be a trigger,
19 you know, that's kind of the next level. If we can't do
20 the flexible mechanism and we do have to go to some other
21 kind of mechanism, I personally don't support using a
22 trigger, because it does create too much uncertainty for
23 the investors and industry. It will suppress investment.
24 And that's the wrong message for us to be making. So
25 that's on that. And then I just have one or two other

1 things.

2 One other principle I think that we want to be
3 using as we move forward is the idea building on what
4 Chairman Nichols said it earlier is that we are -- what we
5 do has a lot to do with the rest of the world both ways.
6 We're learning from them. They're learning from us. And
7 we need to -- this program we're putting in place does
8 not -- can't be just a California program. It's not going
9 to be a success.

10 So we need to be thinking how to -- including
11 with this hybrid mechanism and California average, we need
12 to be thinking about as we go to a national program, as we
13 interface with the European program, is this going to work
14 well? Is this the right mechanism? So I would urge more
15 effort be put into thinking about consistency and
16 exportability of the program.

17 I want to support the credit trading provisions.
18 Just going on record, I think that's important in terms of
19 making that more transparent and open.

20 And I just want to close in saying that I think
21 the LCFS has been a huge success already. And sometimes
22 we lose sight of that. And that is when I talked to a lot
23 of the executives in the oil industry, almost unanimously
24 they say the LCFS has changed their thinking, changed
25 their approach already. They think -- whether they're

1 thinking about oil or any other oil field, they're always
2 thinking about how can we reduce the carbon footprint.
3 How can we make it more efficient. And it really has
4 changed the thinking and the investment patterns already
5 and stimulating innovation.

6 So we have done our job already and we want to
7 keep doing our job into the future.

8 But we shouldn't lose sight of that. It has been
9 a success, and we want to make sure it continues to be a
10 success.

11 CHAIRPERSON NICHOLS: Mayor Loveridge.

12 BOARD MEMBER LOVERIDGE: This is a more general
13 comment, but I was talking to Dan Sperling. There was a
14 very important column in the L.A. Times talking about the
15 future of energy and how important electricity was to that
16 future. I agree with the principles for the regulated
17 parties and trying to encourage electric vehicles.

18 But, you know, they're no longer laboratory
19 types. They're in the store fronts now. And if half of
20 California consumers bought electric vehicles, we'd be
21 having a different conversation today.

22 It seems to me that as the CARB Board, you want
23 to track what's taking place in terms of the EV market.

24 Two, I think we have a vested interest as the
25 principle suggestion trying to increase that market.

1 Currently, it's fairly flat. And it does a lot in terms
2 of whether we're importing oil, whether in terms of air
3 quality, in terms of greenhouse gases. And I think rather
4 than sort of passively watching what happens in terms of
5 the share of the marketplace, that we have a high stake,
6 and the State has a high stake in increasing the
7 percentage of consumers' choice. And it's good for the
8 consumer. It's cheaper for the consumer to have electric
9 vehicle in terms of the distance you should travel than in
10 terms of a gasoline vehicle. It's more of an editorial
11 statement.

12 CHAIRPERSON NICHOLS: It's kind of a preview for
13 the next Board meeting in January where we're going to be
14 taking up the vehicle standards.

15 But there is an important point to be made here,
16 which is that while I completely agree with you that we
17 need to be doing everything we can to encourage and
18 support the nascent market for electric vehicles and
19 electric drive train vehicles, gasoline powered vehicles
20 will be with us for a long time to come. And they have to
21 be operating more cleanly, too. And the auto industry has
22 told us in no uncertain terms that they need help, that
23 it's not all on them. It's also about the fuels that are
24 available for their vehicles as well. So we have to be
25 really managing on all these fronts at the same time and

1 be clever about it.

2 I don't normally speak with a lot of empathy for
3 the petroleum industry, but I do want to say I think
4 they're in a difficult position right now. I appreciate
5 the fact that Dan is talking to people who say their
6 thinking has changed. But I don't see a lot of change
7 actually happening on the ground here in California, not
8 as much as we need to see anyway, and certainly not the
9 levels of investment that we need to see. And part of
10 that is frankly I think because confusing signals are
11 given at times about what we want.

12 And I want to be also on record here as saying
13 that one of the things I think this Board needs to do in
14 the coming year -- and this would be an important piece of
15 our mandatory update of the Scoping Plan, which believe it
16 or not we already have to be doing now, another version of
17 the AB 32 Scoping Plan, it's incumbent upon us to look at
18 the various different ways in which we are regulating the
19 oil industry, whether it's through the low carbon fuel
20 standard or through the cap and trade program, or other
21 mechanisms, mandatory audits, et cetera, you know.

22 One thing after another. And to try to -- and
23 this is something that we should do in conjunction with
24 the industry as well as with other stakeholders is to see
25 where are we getting the bang for the buck. And if there

1 is a need for adjustment overall in terms of where we're
2 putting our emphasis, we should be prepared to make those
3 kinds of changes.

4 So I want to be sending the strong signals of
5 support for the programs and the investments that people
6 are making. But I also think it's important that we
7 recognize as somebody said -- one of our witnesses said
8 here today, it's really all about fuels and energy. It's
9 the electricity and oil industry. Now we have them both
10 here under the low carbon fuel standard and the cap and
11 trade program. Let's take a more comprehensive view here
12 of where we're going to get the reductions from and where
13 we have the best ways of sending signals.

14 And so I think it's -- this has been a very high
15 level discussion. I really appreciate the quality of the
16 testimony that we got on both sides here today, but
17 recognizing there's more to be done.

18 BOARD MEMBER SPERLING: Should we follow up on
19 what you suggest in terms of the oil industry? Because I
20 agree with you. Maybe there should be some kind of
21 working group with the oil industry to look at how to
22 bring all this together, make it more synergistic as
23 opposed to negative. Make sure everything is consistent.
24 Maybe there is some streamlining that could be done.

25 CHAIRPERSON NICHOLS: Well, and I'm also mindful

1 of the fact that, as Cathy Reheis-Boyd said, they're very
2 sensitive. She represents a trade association. But
3 individual companies have a lot of problems with data and
4 what happens to the data and where and how they can
5 discuss it with each other. So I think we need to do some
6 conferring before sort of creating a process here. But
7 I'm definitely of the view we need to have a process. So
8 to be continued.

9 Okay. So we have first -- I think we should vote
10 first on the amendment. I didn't detect any dissension,
11 but I want to make sure an indication of support for the
12 De La Torre/Riordan amendment.

13 All in favor, please say aye.

14 (Ayes)

15 CHAIRPERSON NICHOLS: Any opposed? All right.

16 We now have the main Resolution in front of us
17 then. And again, I think we can just do this on a voice
18 vote. All in favor, please say aye.

19 (Ayes)

20 CHAIRPERSON NICHOLS: Unanimously carried. Good
21 work, staff. And thank you for everything.

22 We will take a five-minute break while the staff
23 re-assembles.

24 (Where upon a recess was taken.)

25 CHAIRPERSON NICHOLS: The next item is actually

1 one where we get to give away money. So I think it's a
2 little easier. Sometimes it's harder.

3 We are now on Agenda Item 11-10-3. This item is
4 to consider an award Proposition 1B grants to agencies for
5 projects to reduce diesel emissions from goods movement
6 activities.

7 In June 2010, the Board awarded \$200 million for
8 projects with bond money that we had on hand at that time.
9 The local agencies are implementing projects for trucks,
10 shore power for ships, and harbor craft using these funds.
11 Last year, at that same hearing, we tentatively approved
12 allocations of another \$275 million for additional
13 projects based on the anticipated future bond sales.

14 The Air Resources Board received the next
15 installment of cash in the amount of \$100 million from an
16 October 2011 bond sale and we may receive additional funds
17 in spring of 2012 as well.

18 I'd like to just note that given the state of the
19 economy and of the great restraint that's being used by
20 the Governor and the Treasurer's office in selling bonds
21 in this market, the fact that we are being awarded
22 additional money for these programs is an indication of
23 the belief on the part of the administration that we are
24 spending this money well and that these are important
25 projects that also help to stimulate the economy.

1 So I'm very pleased that we are in a position to
2 be dealing with this issue at this time. By providing
3 direction to staff on both the use of the new cash and the
4 potential spring money, ARB can meet the administration's
5 directive to quickly inject bond funds into the economy.

6 Today, we're going to be hearing public testimony
7 on the staff's proposal for the Board to award these funds
8 to support truck projects. We appreciate the continued
9 confidence of the administration in this program and also
10 the fact that there are real public health benefits
11 associated with these programs as well. So they're
12 meeting their objectives on both fronts at this time.

13 When funding helps thousands of business owners
14 to clean up their diesel equipment in advance of ARB
15 regulations, this is a win for everybody. And of course,
16 it's also helping to create and retain jobs here in
17 California, while supporting businesses that design, sell,
18 and install green products here.

19 We are not dealing today with the drayage truck
20 regulations. That's already been approved by the Office
21 of Administrative Law. We want to make sure that people
22 understand that the only action that we're dealing with
23 here today is the Prop. 1B grants in case there's any
24 confusion about what's actually before the Board.

25 Mr. Goldstene, do you want to introduce the staff

1 report?

2 EXECUTIVE OFFICER GOLDSTONE: Thank you, Chairman
3 Nichols.

4 Staff's funding recommendations you're going to
5 hear about today are consistent with the program
6 guidelines and priorities that the Board approved last
7 year. They also further the Board's objective to quickly
8 reduce diesel emissions that impact communities near
9 ports, rail yards, and distribution centers.

10 Under ARB regulations, the drayage trucks serving
11 these facilities must upgrade to cleaner models ahead of
12 other trucks. ARB, the air districts, and ports and the
13 federal government have provided more than \$200 million in
14 public incentives to transform the drayage industry from
15 the dirtiest trucks to the cleanest fleet. The ports of
16 Los Angeles and Long Beach have now completed that
17 transformation. The transition in other ports, like
18 Oakland and San Diego, as well as the rail yards, is still
19 underway.

20 Staff recommends a second increment of Prop. 1B
21 moneys to assist these drayage truckers who install diesel
22 particulate filters on their existing truck as an interim
23 step and who must still replace those trucks with fully
24 compliant models. The proposed reduce of those drayage
25 trucks with filters to replace the oldest agricultural

1 trucks in the Central Valley would expand the air quality
2 benefits of the Prop. 1B money even further.

3 It's also critical to provide additional bond
4 moneys to the air districts to fund the long list of
5 approved back-up projects for non-drayage or other trucks
6 subject to ARB's truck and bus regulation. These truck
7 retrofit and replacement projects are ready for early
8 compliance, pending the availability of money.

9 Staff has worked to develop a proposal that
10 balances the need for both drayage and other truck
11 funding, considering the regulatory compliance deadlines,
12 and the need to move bond money quickly into projects to
13 benefit communities.

14 I'd like to introduce Ajay Manjat, who's going to
15 provide the staff presentation. But I also want to let
16 the Board know that since we've had a long day, as he goes
17 through the presentation, he may skip some slides to speed
18 up his report. You have the full report in front of you
19 though.

20 CHAIRPERSON NICHOLS: Thank you.

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

23 AIR RESOURCES ENGINEER MANGAT: Thank you, Mr.
24 Goldstene. Good afternoon, Chairman Nichols and members
25 of the Board.

1 In the interest of time, we're going to
2 abbreviate the presentation and hit on the high points.

3 --o0o--

4 AIR RESOURCES ENGINEER MANGAT: The Board's
5 action today is to consider award of \$100 million from the
6 fall 2011 bond sale and approve the process for awarding
7 potential proceeds from a spring 2012 bond sale. Staff
8 would also appreciate your feedback on the proposed truck
9 reuse program.

10 --o0o--

11 AIR RESOURCES ENGINEER MANGAT: Could we jump to
12 slide ten?

13 --o0o--

14 AIR RESOURCES ENGINEER MANGAT: In early 2011,
15 the local agencies, in coordination with ARB, targeted
16 outreach and publicized the program on a statewide level.
17 This coordinated and simultaneous approach aimed to
18 maximize the number of trucks on each district's list.

19 The statewide solicitation resulted in a
20 significant demand for the program as districts received
21 eligible applications totaling almost \$300 million.
22 Projects from the solicitation were competitively ranked
23 against all application received by that local agency.

24 Due to the demand being in excess of \$175
25 million, each district was able to generate a list of

1 backup projects.

2 --o0o--

3 AIR RESOURCES ENGINEER MANGAT: As mentioned
4 before by Chairman Nichols, drayage trucks are an
5 important focus of staff's proposal today, so let me
6 provide a quick background on the regulation.

7 The Board has made drayage trucks a priority due
8 to health risk concerns in communities near ports, rail
9 yards, and distribution centers. In response, owners of
10 these trucks have to act earlier than other truck owners
11 to upgrade their fleet under ARB's truck regulations.

12 Phase 1 of the drayage regulation requires
13 installation of a PM filter and Phase 2 requires upgrade
14 of trucks to 2007 emission levels. Many of the Board
15 members will recall that about a year ago they considered
16 a delay in Phase 2 of the drayage rule and decided to
17 retain the original schedule. The compliance date for
18 Phase 2 is December 31st, 2013.

19 There are already more than 13,000 drayage trucks
20 based in California that are compliant with Phase 2 of the
21 regulation. To support these drayage upgrades, the ARB,
22 port, air district and federal programs have provided \$200
23 million of incentives. This proportion is much greater
24 than the incentives provided for other trucks.

25 Now I'm ready to move onto the staff proposal.

1 Our proposal includes the award of \$100 million
2 in fall bond funds, the process for spending the 2010
3 funds, and truck reuse.

4 --o0o--

5 AIR RESOURCES ENGINEER MANGAT: The proposal
6 today is a continuation of a concept presented to the
7 Board over a year ago.

8 In April 2010, ARB staff issued a Notice of
9 Funding Availability and called for local and State agency
10 projects to implement up to \$475 million in program funds.

11 The Board awarded \$200 million in available cash
12 from the spring 2010 bond sale with the preliminary awards
13 for the 275 million contingent on future bond sales.

14 The focus now is on finalizing the actual award
15 based on the \$100 million of new cash received from the
16 fall 2011 bond sale and approving the process for funding
17 projects, if proceeds become available in spring 2012.

18 To support California's recovery, Governor Brown
19 has placed an emphasis on getting bond funds out to the
20 economy as soon as possible. Staff is proposing an
21 accelerated schedule for the allocation and expenditure of
22 these bond funds.

23 Staff recommends that the entire \$100 million in
24 new cash go towards funding truck projects. This includes
25 funding the drayage priority reserve and providing

1 additional funding for other trucks on the district lists
2 of backup projects.

3 To implement the drayage funding, staff has
4 identified the owners of about 2100 eligible drayage
5 trucks based on the criteria the Board established last
6 year. Staff is proposing a combination of grants as well
7 as a new financing element for drayage truck owners.

8 We recommend that the Bay Area Air Quality
9 Management District and the South Coast Air Quality
10 Management District administer the grant portion of the
11 drayage priority reserve since the majority of drayage
12 trucks visit ports and rail yards located in these two
13 corridors. However, the pool of eligible trucks extends
14 to corridors. The ARB would administer the loan
15 assistance portion of the drayage reserve.

16 A maximum of \$66 million would be needed for all
17 of the potentially eligible drayage trucks. Although
18 100 percent participation is unlikely, staff would set
19 aside this amount until the demand is assessed in
20 February.

21 Under staff's proposal, the rest of the funding
22 would be available to other truck backup projects already
23 on existing district's lists. The first step in
24 allocating these funds would be to restore the funds to
25 the San Diego border region that the Board temporarily

1 redirected to the Central Valley last year.

2 The second step would be we would allocate funds
3 to the air districts in rough proportion to the corridor
4 targets considering the drayage funds as well. ARB would
5 sign grant agreements and distribute these funds to
6 districts in January.

7 We believe that additional funding will be
8 available for other trucks. We recommend that any of the
9 \$66 million reserved but not used for drayage trucks be
10 directed to these other truck backup projects to best
11 achieve the overall corridor funding targets.

12 --o0o--

13 AIR RESOURCES ENGINEER MANGAT: This table shows
14 the result of a feasible scenario. Starting with the
15 second column, we are showing half of the drayage grant
16 funds and all of the drayage loan assistance moneys being
17 used. In this case, drayage would utilize almost \$36
18 million. This scenario would leave \$65 million for other
19 trucks. The redirect and restore column shows how funds
20 are moved from the Central Valley and restored back to the
21 San Diego and border regions. And then staff adjusted the
22 funding amounts for other trucks to bring the cumulative
23 allocations for each corridor closer to the overall trade
24 corridor targets.

25 --o0o--

1 AIR RESOURCES ENGINEER MANGAT: This slide shows
2 how the 50 percent drayage use scenario would affect the
3 cumulative corridor funding levels compared to the Board's
4 corridor targets over the course of the program. If you
5 look at the column labeled "Overall Percentage," you can
6 see that the corridor percentages would be very close to
7 the program targets.

8 Most of the drayage trucks eligible for the
9 priority of reserve funding operate in the Port of
10 Oakland. As a result, the Bay Area would receive extra
11 funding in this round.

12 Staff proposes to ensure that future funding
13 awards brought to the Board restore each corridor to its
14 percentage target. The proposed Board Resolution includes
15 direction to staff to achieve this result.

16 --o0o--

17 AIR RESOURCES ENGINEER MANGAT: If additional
18 bond funds become available in the spring, staff proposes
19 to expand financial assistance to owners of certain
20 drayage trucks with model years 2005 and 2006 engines.

21 Staff recommends that any additional funds be
22 applied to the existing list of trucks already evaluated
23 by the districts and approved by ARB staff.

24 --o0o--

25 AIR RESOURCES ENGINEER MANGAT: The

1 implementation of drayage truck grants is going to result
2 in a number of trucks being upgraded. Instead of
3 scrapping drayage trucks which have filters, staff
4 proposes to utilize this unique opportunity to reuse these
5 trucks and applications to that have the most extended
6 compliance dates under the truck and bus rule.

7 These applications would primarily include low
8 use and specialty agricultural trucks. Between the four
9 trade corridors, more than 80 percent of these trucks are
10 based in San Joaquin Valley.

11 Staff recommends the San Joaquin district
12 administer a truck reuse program to replace even older
13 trucks that aren't required to upgrade until 2017 or
14 later. This would provide many years of early and extra
15 PM reductions.

16 The South Coast and Bay Area districts have
17 expressed interest in reuse of drayage trucks in their
18 areas as well. While we continue to recommend that the
19 drayage trucks first be available for reuse in the Valley,
20 we support the ability to use any remaining drayage trucks
21 to replace low use agricultural trucks in the Bay Area and
22 South Coast in proportion to the number -- in proportion
23 to the numbers in each region.

24 What we're recommending is that the San Joaquin
25 district hire contractors to administer this reuse program

1 for the Valley, but also coordinate with the South Coast
2 and Bay Area -- with South Coast and Bay Area such that
3 these districts could provide additional funding to the
4 contractor to administer the same program for any trucks
5 available to those regions. The current program
6 guidelines provided for truck reuse programs that meets
7 specified criteria and are approved by ARB's Executive
8 Officer.

9 Staff is describing this proposal today because
10 it would involve the transfer of trucks between regions.

11 --o0o--

12 AIR RESOURCES ENGINEER MANGAT: In conclusion,
13 staff recommends that the Board adopt Resolution 11-40.
14 This Resolution identifies primary and backup projects
15 that reflect the proposal to fund drayage and other truck
16 projects as I've described. The Resolution would provide
17 Board delegation to the ARB Executive Officer to redirect
18 un-used drayage funds to other truck backup projects.

19 We also ask that the Board approve the minor
20 guidelines changes to streamline the process so we can
21 meet the accelerated schedule for this round.

22 Finally, although the guidelines have already
23 authorized truck reuse programs, staff is asking for your
24 support to proceed with the reuse of drayage trucks to
25 replace low use and specialty agricultural trucks in the

1 San Joaquin Valley.

2 Thank you. And we'd be happy to answer any
3 questions you may have.

4 CHAIRPERSON NICHOLS: Okay. Any questions?

5 If not, we'll go straight to the testimony
6 beginning with the San Joaquin Valley and then moving
7 on to South Coast/Bay Area.

8 MR. SADREDIN: Thank you, Madam Chair, members of
9 the Board. It's been a long day. Happy holidays to
10 everyone. And I want to wish my friend, Bob Fletcher,
11 happy retirement. He and I started about the same time,
12 but he has aged more than I have also. But we will miss
13 him.

14 So back to business. At your last Board meeting,
15 you took decisive action to re-affirm your longstanding
16 commitment to environmental justice. And I want to
17 congratulate you today. The item that's before you with
18 your staff recommendation shows that you mean what you
19 said and puts those priorities regarding environmental
20 justice in play here for everyone to actually benefit
21 from.

22 We do share your concern with the pollution
23 impact and the port neighborhoods. As you said, the
24 environmental justice communities in Los Angeles and Bay
25 Area. And therefore, we support putting a focus this year

1 on the drayage trucks in those areas. And I say that
2 knowing that that means more money this year will go to
3 Bay Area and Los Angeles.

4 But we also want to do what we say, and we don't
5 want to have a parochial concerns stand in the way of
6 doing the right thing for environmental justice in those
7 communities. So we support that. And we know that you
8 will ultimately make each area whole in terms of their
9 overall allocation. So no problem there.

10 We also support your truck reuse recommendation
11 that we have been talking to your staff about. We believe
12 that it will go a long ways in addressing environmental
13 justice issues in San Joaquin Valley. As staff mentioned,
14 we have 80 percent of the trucks in that fit that category
15 of not having to retrofit until after 2017.

16 It's also a good government in this economy. You
17 don't get credit often enough regarding your concern and
18 sensitivity to the fiscal issues. But this is also good
19 for the economy if you can take the old trucks and put
20 them back in business.

21 Now, we value that program so much I'm also here
22 to announce that the district, our district, is actually
23 willing to put some local funding in play here to make
24 this a no-cost option/proposition that will be available
25 to the truck owners in those environmental justice

1 community so that they can take that option and be able to
2 use these trucks without any out-of-pocket expense. It's
3 going to be a new program to administer, but we think we
4 can do it.

5 I do have a couple of recommendations for you --
6 a couple of administrative changes that I have talked to
7 the staff and they are okay with it, pending your Board's
8 approval, if I get 20 more seconds I can spell out.

9 CHAIRPERSON NICHOLS: We'll give you extra time
10 for having come up with extra money.

11 MR. SADREDIN: On page 26 of your staff report,
12 the staff is recommending a number of temporary
13 streamlining measures to make the project move forward
14 faster and reduce administrative cost. We believe those
15 are good ideas that deserve to actually be made permanent.
16 Now, I understand some of them may not be transferable to
17 other project types, because drayage trucks may not have
18 all of the competitive components that go into these other
19 programs. There are two specific recommendations that
20 I've discussed with your staff and I believe with your
21 Board's blessing we should make them permanent and extend
22 them to the other programs that the district also
23 administers.

24 One of them is that for the trucks that have been
25 recently inspected, because we already funded retrofits

1 for them, there is no need to inspect them again. If they
2 have been inspected recently and they have gone through
3 that process, we can save the cost on the time. And we
4 suggest your Board extends that to the grant administered
5 by the district and make them permanent.

6 The other recommendation that we have relates to
7 allowing the applicants to at their own risk purchase
8 trucks before their contract is approved. That will also
9 expedite the process.

10 Now, we don't want to have somebody buy a truck
11 and five years later come to us and say we don't want to
12 pay for, we don't want to pay for any way type reduction.
13 What I'm simply suggesting is for trucks that are
14 purchased after an applicant files an application with the
15 district at their own risk they proceed with buying the
16 truck before we have made final ruling on the application,
17 that that should not disqualify them from receiving
18 funding.

19 So for that short period of time after they filed
20 the application, they should be able to make advanced
21 purchases. And I've discussed those with Ms. Marvin and
22 she seems to be okay with it.

23 CHAIRPERSON NICHOLS: Okay. Thank you.

24 Henry Hogo and then Jack Broadbent.

25 MR. HOGO: Good afternoon, Madam Chair, members

1 of the Board. I'm Henry Hogo, Assistant Deputy Executive
2 Officer at the South Coast AQMD.

3 I want to express our concerns to three items
4 that our Chair, Dr. Berg, submitted comments on. And two
5 of the three items have been addressed by staff. And we
6 want to thank staff for addressing those issues relative
7 to keeping -- meeting the original targets that the Board
8 had approved and also expediting the use of -- or turning
9 back -- taking used funds and reallocating those funds as
10 expeditious as possible so we could clean up more trucks.

11 Relative to the reduce program, we feel it's an
12 environmental justice issue also and the program should be
13 open to all ag trucks and low specialty use trucks
14 throughout the four trade corridors, because we believe
15 that even though we recognize that San Joaquin has the
16 lion's share of the trucks, we believe that most of the
17 funding would go to San Joaquin, but it would be important
18 that sends the message that environmental justice applies
19 throughout the four trade corridors. So we'd like to see
20 a program where all these trucks are put on equal footing.
21 And we are open to working with San Joaquin and the other
22 air districts and having one program throughout the four
23 corridors.

24 And we'd like to continue that discussion if that
25 is made available to the other corridors. Thank you for

1 consideration of our comments.

2 CHAIRPERSON NICHOLS: Thank you.

3 Jack Broadbent. You're not Jack, but you do
4 represent the bay area.

5 MS. MC CREE: Good afternoon, Chairperson Nichols
6 and members of the Air Resources Board. Mr. Broadbent was
7 unable to attend this afternoon.

8 My name is Tina McCree, and I work with the
9 Strategic Incentives Program at the Bay Area Air Quality
10 Management District. Your staff have entered into the
11 record for today our full remarks and our slide set, which
12 I'm going to skip using for this time period.

13 I'm happy to speak here before you in support of
14 the staff's recommendation for the third installment of
15 the goods movement bond funding. Staff's recommendation
16 to provide over \$61 million of drayage truck upgrades is a
17 hugely important step in completing the work to reduce the
18 cancer health risk in west Oakland community.

19 As you may remember, our agencies conducted a
20 joint health risk assessment in west Oakland in December
21 2008, and that assessment identified cancer risk levels
22 that were three times higher than any other area of the
23 Bay Area, some numbers exceeding risk levels of 1500 to
24 one million. Drayage trucks were identified as being a
25 large component of this risk and the air district in

1 partnership with the port of Oakland, U.S. EPA, and your
2 agency moved quickly to provide \$26 million to address
3 that risk by installing particulate filters and replacing
4 vehicles. That action in 2009 and '10 has lead to a
5 50 percent reduction of emissions from drayage trucks.
6 And we particularly would like to thank and commend
7 Cynthia Marvin and the staff of the ARB Goods Movement
8 Program for their dedicated efforts to achieve these
9 reductions.

10 While this is a welcome improvement in air
11 quality, our work in west Oakland is not finished. As
12 recent studies suggest, the proportional risks assigned to
13 drayage trucks may be higher than originally estimated.
14 The replacement of drayage trucks in this community is
15 critical to lowering overall health risks over time. The
16 air district believes that the drayage community in
17 Oakland has partnered with both of our agencies to clean
18 up operations, and this is evidenced in the chart that was
19 submitted into the record in our slide set showing 1,319
20 trucks retrofitted with our moneys. And there are an
21 additional 400 trucks that were retrofitted using private
22 funds that will also need to be upgraded to meet the
23 upcoming Phase 2 regulatory requirement in 2014.

24 Staff's proposal makes California goods movement
25 bond funding available for both sets of these truckers and

1 re-enforces the idea of providing financial assistance to
2 those who take early action to come into compliance ahead
3 of regulatory deadlines.

4 However, while staff's proposal to fund these
5 truckers makes sense, the air district believes that the
6 applicant process being proposed for the allocation of
7 funding has some flaws and we've expressed our specific
8 concerns to staff and believe that ARB and the air
9 district will be able to work together to address these.

10 One specific area of concern that remains for us
11 is the manner in which retrofitted trucks are assigned for
12 reuse, possibly outside the air basins in which local
13 funds were used to pay for the retrofit filters. And we
14 look forward to working with the San Joaquin Air District
15 and the ARB in order to address these concerns. Thank
16 you.

17 CHAIRPERSON NICHOLS: Thank you.

18 Carl Dolk and then Mike Watt and Mike
19 Loutzenhiser.

20 MR. DOLK: Good afternoon, Madam Chair and
21 members of the Board. My name is Carl Dolk. I work for
22 Devine Intermodal, a trucking company based in west
23 Sacramento. Most of our business involves moving freight
24 to and from the port of Oakland. Although we support
25 staff's recommendation, we do believe the proposed grant

1 amount for model year '94 through model year 2003 truck is
2 insufficient. And I could like to direct you to our first
3 slide here.

4 It's important to remember that pursuant to
5 program guidelines replacement vehicles must have fewer
6 than 500,000 miles to be eligible for a grant.

7 Slide two please.

8 --o0o--

9 MR. DOLK: Slide two shows the mileage of Class A
10 trucks sold during the four-month period of June 2011
11 through September 2011. If you trend the mileage and use
12 the average as your starting point, which is a
13 conservative average, we can project what the mileage will
14 be in September of 2012. I chose September 2012 as the
15 deadline because that is midyear -- the mid-amount of the
16 time frame when the expected funding will be for this
17 project. You'll see it as very unlikely that the
18 population of 2008 model year trucks will be on the cusp
19 of the 500,000 mile limitation. If you look at the middle
20 of the column there, very bottom, you're talking about
21 496,000 miles projected at the time that we believe that
22 funding may be available. Because of this anticipated
23 high mileage for 2008 model year truck, it is likely that
24 a grantee would seek a 2009 or newer vehicle.

25 Slide three, please.

1 trade corridor will help to ensure these trucks are
2 replaced or retrofitted, which will result in additional
3 annual emission reductions of up to seven tons of toxic
4 diesel particulate matter and 140 tons of smog forming
5 oxides of nitrogen from related goods movement activity in
6 our corridor.

7 As was discussed by San Joaquin earlier, your
8 staff's proposal also includes recommendations to approve
9 a temporary variance from the guidelines to allow for a
10 streamlined application process for these priority drayage
11 truck funds. We are supportive of these recommendations
12 as well. And we would also like to request that the
13 proposed temporary streamlining measures, particularly
14 those pertaining to vehicle mileage documentation as well
15 as vehicle registration documentation, be permanently
16 incorporated into the guidelines.

17 Permit adoption of these streamlining measures
18 will simplify the application process for equipment
19 owners, ease the administrative burden for participating
20 local agencies, and result in earlier achievement of
21 emission reductions.

22 San Diego and Imperial County APCD would like to
23 thank ARB's goods movement staff who have worked closely
24 with us to ensure these projects were successfully
25 implemented as expeditiously as possible in order to

1 achieve the goals of the program and get the needed
2 reductions in our trade corridor. We look forward to
3 continuing our collaborative relationship with ARB staff.
4 And thank you for considering these issues today.

5 CHAIRPERSON NICHOLS: Thank you.

6 MR. LOUTZENHISER: Good afternoon, Chairman
7 Nichols and members of the Board.

8 You know I can tell I've been up here a few too
9 many times over the years now when you can actually
10 pronounce my last name correctly. I'm Mark Loutzenhiser,
11 representing the Sacramento Air Quality Management
12 District today. I oversee and manage the district's
13 incentive programs.

14 Just I'm going to keep this very short. Since I
15 wasn't sure what time we were going to get to this
16 presentation today, I ended up going back to my office
17 briefly, the building being just down the block. So I did
18 go ahead and put it down into writing as well. I'm going
19 to keep it very short.

20 We support the changes being proposed by the ARB
21 staff and we appreciate all the work and effort they've
22 been doing with this program going forward. And we
23 recognize the need to go ahead and get these additional
24 funds as provided by the State and through the Department
25 of Finance as quickly as possible in order to be able to

1 show the continuing need for these bond sales to finish up
2 the program.

3 One small suggestion we have provided to staff
4 and just mentioned in this is for the spring bond sales.
5 And that is just in the -- because we are forecasting
6 out -- we are pulling out our crystal ball in terms of
7 what's been happening, I just want to share our experience
8 at the moment. We're a little bit fortunate at the moment
9 in the sense of that we're on the front end of the curve
10 in terms of getting our applications out. It looks like
11 we're going to be sending out our applications next week
12 for the contracting of last year's bond sales. I believe
13 that will be putting us at the first district getting
14 those out.

15 One of the things we've found as we're going
16 through this process, we are making phone calls to those
17 participants and letting them know the applications are
18 coming. And while the majority of them are very excited
19 and ready for them, we are seeing a small percentage, but
20 some people are saying things have continued to change for
21 them in terms of their business model as we go forward.

22 And so my only concern in terms of trying to
23 forecast and boxing us in too much on the spring bond
24 sales is that other districts may find as they get to this
25 point that that list may not be quite as big as everyone

1 hoped it would be to begin with. And our list was
2 originally upwards of 15 million. We're down to 11
3 million. We've gone through the applications having
4 gotten in all the documentation that's required as part of
5 the program.

6 The only small change we would throw out there is
7 just to leave the door open for the spring bond sales in
8 terms of as opposed to saying we are only limiting it to
9 the spring 2011 solicitation is just to leave the door
10 open that there may be needs of solicitations coming
11 forward into the spring of 2012. I'm not saying that's
12 the direction that would have to happen, but rather than
13 closing that door, if that option is still available, I
14 think it would be more proactive going forward to show
15 Department of Finance the continued demand for the program
16 of not just existing lists, but if people are going to be
17 in a different financial position now than they were a
18 year ago, especially as they're getting up closer to the
19 regulations dates and maybe in a better position to move
20 forward.

21 With that, I thank you very much.

22 BOARD MEMBER LOVERIDGE: Two minutes and 50
23 seconds.

24 MR. LOUTZENHISER: What was that?

25 CHAIRPERSON NICHOLS: You used up two minutes and

1 51 seconds.

2 MR. LOUTZENHISER: So not as short as I would
3 have hoped.

4 CHAIRPERSON NICHOLS: It's fine. Thank you.

5 Staff want to respond to any of those comments?

6 ASSISTANT DIVISION CHIEF MARVIN: We appreciate
7 the support -- this is Cynthia Marvin.

8 We appreciate the support from the air districts
9 in terms of the overall proposal and the understanding
10 that it needs to fluctuate with priorities and everyone
11 will be made whole.

12 In terms of the specific comments that were made,
13 Mr. Sadradin from the San Joaquin Valley talked about two
14 streamlining measures that we had discussed earlier in the
15 day. And in general, we do support those. I just want to
16 clarify that the second item, which we characterized as
17 allowing truckers to purchase trucks after they applied
18 but before they have a grant contract, what we've proposed
19 is allowing folks to order trucks, not purchase trucks.

20 CHAIRPERSON NICHOLS: So they wouldn't be getting
21 reimbursed?

22 ASSISTANT DIVISION CHIEF MARVIN: Well, the
23 important distinction is on the bond funds, you can't have
24 already purchased it. We actually couldn't do that, even
25 if the Board wanted to.

1 So with the understanding that second
2 streamlining provision is allowing folks to order trucks
3 after they've applied at their own risk, then that is
4 something that we would support.

5 The other comments regarding truck reuse, we
6 continue to support the original recommendation, which is
7 that any reused drayage truck available from Bay Area,
8 South Coast, or other regions be prioritized to the San
9 Joaquin Valley. Not only are most of the trucks that
10 would ultimately be replaced be agricultural trucks in the
11 San Joaquin Valley, this also helps us address San Joaquin
12 Valley SIP needs and provide extra PM reductions in the
13 valley.

14 I would point out that the Bay Area and the South
15 Coast are getting a larger share of funding and have done
16 so because of the drayage priority of that the Board has
17 set before. So this is also a way to try to balance the
18 early and extra benefits that this program provides across
19 the major regions of the state.

20 If there's any other items you'd like us to
21 address, we'd be happy to. But these seem to be the
22 important ones.

23 CHAIRPERSON NICHOLS: The issue about the open
24 opportunity for a solicitation next spring, that's always
25 a possibility, isn't it, if we chose to.

1 ASSISTANT DIVISION CHIEF MARVIN: The difficulty
2 here is that in our discussions to advocate for bond funds
3 for this program, we are going to have to guarantee that
4 new funds from spring of 2012 go out the door right away.
5 The only way that we can do that is to reference the
6 existing lists that have already been created. So what
7 we're suggesting is through spring of 2012 we work on the
8 existing list that the districts have already compiled.
9 After spring of 2012 when we are fortunate enough to get
10 the next bonds proceeds, we reopen the process. Districts
11 can re-submit.

12 CHAIRPERSON NICHOLS: Yes, Dr. Balmes.

13 BOARD MEMBER BALMES: So maybe I missed it. But
14 did you respond to Mr. Dolk's concern about the cost of
15 the trucks?

16 FREIGHT TRANSPORT BRANCH CHIEF KITOWSKI: This is
17 Jack Kitowski, and I can respond to Mr. Dolk's.

18 What Mr. Dolk was pointing out was that there is
19 a requirement on our program that any used truck purchase
20 have a maximum of 500,000 miles. And the purpose of that
21 is to ensure that the trucks that we're bringing into this
22 program that we're paying for have a long life. He
23 provided some information that with this requirement what
24 is going to end up happening is that there will be fairly
25 broad availability of '08 and '09 trucks, but not the

1 average '07 truck would not be able to be used. But he is
2 talking averages. So there will be a number of trucks
3 that can't fit into the program, a number of trucks that
4 can.

5 And our objective was never to make sure every
6 truck was being purchased, but simply that there would be
7 trucks available and ensure they have long lives.

8 I guess I would point out one other point, and
9 that's the prices that were on his presentation were from
10 November of this year. We expect if, as he says, that
11 we're really dealing this program in September next year
12 when he extrapolated the mileage that the prices would
13 also come down on those used trucks a little bit. We
14 think we're in the right ballpark to get a robust supply
15 of trucks. Not every truck, but a robust supply.

16 CHAIRPERSON NICHOLS: And they're trying to
17 spread the money further obviously.

18 FREIGHT TRANSPORT BRANCH CHIEF KITOWSKI: There's
19 a key point too obviously.

20 BOARD MEMBER D'ADAMO: Do you want a motion?

21 CHAIRPERSON NICHOLS: Yes.

22 BOARD MEMBER D'ADAMO: I'd like to move adoption
23 and just would like to briefly thank staff.

24 Cynthia, you've done a lot of work on this and
25 the entire staff. And the first time this came before us,

1 it was pretty rocky. It's just great to see some creative
2 ways of moving forward in order to spread these dollars
3 out, stretch them.

4 And thanks also to Seyed for keeping on us with
5 that reuse program. I know you guys have wanted this for
6 a long time. So it's exciting to finally have it
7 implemented. Thank you.

8 BOARD MEMBER SHERRIFFS: I'd like to second the
9 motion. I'd also like to say I'd be happy to buy a used
10 trucks from Seyed.

11 CHAIRPERSON NICHOLS: Okay. Any additional Board
12 member comments?

13 If not, okay. All in favor, please say aye.

14 (Ayes)

15 CHAIRPERSON NICHOLS: Any opposed? Very good.
16 Thank you all. Great program.

17 We have one more regulatory item. Do we have
18 witnesses who signed up for that one? Two. The staff
19 will get bonuses for shaving time off of their report.
20 And they wouldn't believe me anyway, and rightly so. But
21 I could try.

22 We have two witnesses signed up and they're both
23 in support. So I think it's possible to expedite this, if
24 people don't mind. Can you do it?

25 BOARD MEMBER LOVERIDGE: Do we need a report?

1 CHAIRPERSON NICHOLS: Do we need a report at all?
2 We can do it on consent.

3 BOARD MEMBER RIORDAN: Well, we can take public
4 testimony.

5 CHAIRPERSON NICHOLS: Well, the two people who
6 are here support it. The question is, do they feel a
7 great desire to actually get up and speak? They do. They
8 want to get up and speak. Okay, staff, go.

9 EXECUTIVE OFFICER GOLDSTONE: Thank you, Chairman
10 Nichols.

11 California began controlling exhaust emissions
12 from off-road mobile sources in the early 90s. Over the
13 years, since then, the U.S. EPA has already promulgated
14 similar control measures at the federal level with the
15 same mobile sources.

16 In the interest of reducing the burden of
17 compliance on industry, both agencies have made efforts to
18 harmonize the regulatory requirements as much as possible.

19 To that end, the proposal before you today seeks
20 the better align California with the most current federal
21 certification requirements for both small off-road engines
22 and off-road compression ignition engines.

23 The benefit of this proposal is that it maintains
24 the stringency of our current emission standards while
25 eliminating unnecessary reporting requirements and

1 duplicative testing for the manufacturers. Additionally,
2 the proposal modifies the fuel that off-road manufacturers
3 will use for exhaust emission certification testing to the
4 ten percent ethanol blend of gasoline, which is for the
5 same fuel that the Board will also consider adopting next
6 month for testing on on-road motor vehicles and which is
7 currently dispensed from commercial gasoline pumps
8 throughout the state. This modification will apply not
9 only to the small off-road engine regulations, but also to
10 the regulations for off-road large spark ignition engines,
11 recreational marine engines, and off-highway recreational
12 vehicles.

13 I'd like to have Yun-Hui Park of the Mobile
14 Source Control Division make the staff presentation.

15 (Thereupon an overhead presentation was
16 presented as follows.)

17 AIR RESOURCES ENGINEER PARK: Thank you, Mr.
18 Goldstene. Good afternoon, Madam Chairman and members of
19 the Board.

20 The following presentation is the staff's
21 proposal to amend several of California's off-road
22 regulations and test procedures.

23 --o0o--

24 AIR RESOURCES ENGINEER PARK: First, I will
25 provide some background information and present staff's

1 proposed modifications beginning with the small off-road
2 engine test procedures and then compression ignition or
3 diesel fueled engine test procedures, and finish off with
4 the exhaust emission certification fuel requirements for
5 several off-road categories.

6 --o0o--

7 AIR RESOURCES ENGINEER PARK: To begin, here are
8 some of the examples of equipment that are in the small
9 off-road engine test proposal. The engines are generally
10 installed in a variety of lawn and garden and utility
11 equipment typically categorized based on the size of the
12 engine.

13 Next slide.

14 --o0o--

15 AIR RESOURCES ENGINEER PARK: For the test
16 procedures applicable to small off-road engines, ARB
17 references the Code of Federal Representation, or CFR.
18 The U.S. EPA revised these test procedures in 2008, which
19 go into effect in the 2011 to 2013 time frame. As part of
20 their revisions, they moved the current test procedures to
21 Part 1065 of the CFR and introduced standards in Part
22 1054. Manufacturers of small off-road engines would like
23 ARB to align our test procedures and requirements with
24 those of U.S. EPA.

25 Next slide.

1 --o0o--

2 AIR RESOURCES ENGINEER PARK: Staff is proposing
3 that the Board modify the small off-road engine test
4 procedures to adopt portions of the U.S. EPA's CFR Parts
5 1065 and 1054. This would further align the certification
6 and exhaust emission testing requirements without any
7 changes to the stringency of the emission standards and
8 without any cost impacts.

9 Next slide.

10 --o0o--

11 AIR RESOURCES ENGINEER PARK: Next I would like
12 to focus on diesel engines which are used in a variety of
13 applications and are the preferred choice where durability
14 and fuel economy are the primary considerations. Off-road
15 applications include agriculture, construction, and
16 general industrial equipment.

17 Next slide.

18 --o0o--

19 AIR RESOURCES ENGINEER PARK: The Board adopted
20 the Tier 4 emission standards for off-road diesel engines
21 on December 9th, 2004, incorporating the majority of
22 requirements promulgated by U.S. EPA earlier that year.
23 In 2004, U.S. EPA has made a number of revisions to the
24 federal Tier 4 requirements. The most significant of
25 these revisions is the new NOx plus HC emissions standard

1 adopted in 2010. Like the SORE manufacturers, diesel
2 engine manufacturers want ARB to align with the federal
3 test procedures and requirements in order to avoid
4 duplicative testing requirements with no associated
5 emissions benefits.

6 --o0o--

7 AIR RESOURCES ENGINEER PARK: In addition to the
8 new NOx plus HC emission standards previously mentioned,
9 listed here are other significant proposed amendments to
10 the Tier 4 regulation.

11 The proposed combined emission standard would
12 provide industry with additional compliance flexibility
13 while preserving the emission benefits and cost
14 effectiveness of the original regulation.

15 To assist ARB's various in-use off-road
16 compliance program, staff proposes that all engine control
17 labels, including the information necessary, to properly
18 register these engines under those programs.

19 The additional information would also facilitate
20 ARB's enforcement efforts regarding in-use engines.

21 Additionally, anti-stockpiling requirements are
22 proposed to ensure the manufacturers do not over-produce
23 engines prior to a change in emission standards to
24 circumvent the regulations. And if I could skip to next
25 slide.

1 --o0o--

2 AIR RESOURCES ENGINEER PARK: And the next one.
3 Off-road gasoline fueled spark ignition engines are used
4 in four off-road categories. These include already
5 discussed the SORE category, the recreational marine
6 engine category, the large spark ignition category, and
7 the off highway recreational vehicle category.

8 Next slide.

9 --o0o--

10 AIR RESOURCES ENGINEER PARK: The basis for these
11 proposals lie with the pending change to the on-road motor
12 vehicle test fuel requirements which the Board will
13 consider next month as part of the advanced clean car
14 regulatory proposal.

15 I'll skip to the next slide.

16 The current emission testing fuel requirements
17 for most off-road spark ignition engine categories are the
18 same as those for on-road motor vehicles.

19 Next slide.

20 --o0o--

21 AIR RESOURCES ENGINEER PARK: Therefore, staff is
22 proposing that the exhaust emission test fuel requirements
23 for the small off-road engine, recreational marine engine,
24 large spark ignition engine, and off-highway vehicle
25 categories be amended so that they are consistent with the

1 new E10 test fuel that is presently proposed for testing
2 on-road motor vehicles.

3 To allow time to completely adjust the new fuel,
4 staff proposes that this be optional for the 2013 through
5 2019 model year and would become mandatory in the 2020
6 model year.

7 --o0o--

8 AIR RESOURCES ENGINEER PARK: Slide 15.

9 Since the release of our proposal, we've had some
10 minor changes. And we will be having 15-day changes to
11 account for these.

12 Next slide. Last slide.

13 --o0o--

14 AIR RESOURCES ENGINEER PARK: In conclusion,
15 staff recommends that the Board adopt the proposed
16 revisions, including modified Parts 1054 and 1065 for
17 small off-road engines, adopt proposed revisions including
18 modified Parts 1039, 1065, and 1068 for Tier 4 diesel
19 engines, adopt the E10 exhaust emission certification test
20 fuel for small off-road engines, recreational marine
21 engines, large spark Ignition engines, and off-highway
22 recreational vehicles and adopt the proposed 15-day
23 changes along with staff's suggested modifications.

24 Thank you.

25 CHAIRPERSON NICHOLS: Thank you. We appreciate

1 your making the extra effort to compress the staff report.

2 But I want to congratulate you on having worked
3 through some very complicated issue and obviously achieved
4 a lot of support.

5 We can now hear from our witnesses here, John
6 McKnight and Mark Riechers. Start with John.

7 MR. MC KNIGHT: Good afternoon, Madam Chairwoman
8 and Board members.

9 My name is John McKnight. I'm director of
10 Environmental Health and Safety for National Marine
11 Manufacturers Association. We have a lot of experience
12 with ethanol because we represent the people who build
13 recreational boats and marine engines and accessory. It's
14 been a disaster for us from the beginning. But it
15 happened many years ago and over the years, both our
16 manufacturers and our consumers have learned to live with
17 ethanol. I can say today that E10, being a nationwide
18 fuel -- although I still get all the complaints from the
19 boaters, it's a usable fuel within the marine environment.
20 E15 is not. And Mark Riecher is going to talk about some
21 testing that was just done with DOE funding, of which we
22 had some major failures on outboard engines. But we're
23 not here to talk about E15 today. And if staff ever does
24 decide to do that, please let me know so I can be here.

25 The real difference is E10 is three percent

1 oxygen. And although we certify our engines at E0, we
2 calibrate them and we do our durability test at three
3 percent oxygen. And E15 is up to five percent oxygen, and
4 it basically makes the engines run too hot.

5 Because of this ethanol problem in the marine
6 industry, a lot of companies that work on renewable fuels
7 and low carbon fuels have contacted my association and
8 said would you like to take a look at do some testing of
9 these renewable fuels.

10 One of the ones that we tested last summer was
11 Butanol. There's some really positive things that we
12 found out. We ran 16.1 percent Butanol, which has the
13 same oxygen content as E10 at three percent. It's also
14 not soluble in water, as the alcohol fuels are. It has
15 about the same solubility as gasoline, which is not a
16 problem in the marine environment. It's not corrosive
17 like ethanol is. It has a higher BTU value than ethanol.
18 It has a lot of positive things.

19 I think one of the negatives we have is it's
20 really not available in production quantities yet. One of
21 the companies we are working say they have 50 million
22 gallons coming on line by next June, and there is a lot of
23 talk about the future of what they call drop-in renewable
24 fuels, low carbon fuels.

25 When I took a look at what staff was

1 recommending, I said, you're saying you want to certify
2 E10 and we're going to do that. As marine manufacturers,
3 we're already doing testing on E10. But I said what would
4 be a nice thing to do is just put some language in there
5 and say that the new certification fuel be E10 or any
6 other California-approved renewable fuel that comes out of
7 in the future. I puts some language that I'll pass on to
8 you.

9 Just because why lock ourselves into E10? It's
10 like locking yourself into the rotary phone. Don't say
11 everybody has to use a rotary phone. Say design me a
12 communication system. And I think going down this path
13 I'm going to have these same discussions with EPA in the
14 coming months. Let's go with that route. And that's what
15 I ask. I hope you take it under consideration.

16 Thank you for your time.

17 CHAIRPERSON NICHOLS: Thank you.

18 Mr. Riechers.

19 MR. RIECHERS: Good afternoon. Almost good
20 evening.

21 My name is Mark Riechers. I'm Director of
22 Regulatory Development for Mercury Marine, and I just
23 wanted to hit on some of the things and expand on some of
24 the things that John just said.

25 First of all, we have submitted to you some

1 copies of some slides. And while we know that California
2 right now is not looking to go beyond E10, we did some
3 testing on E15 because EPA is going that route and we want
4 to share that information with you so that if you ever do
5 consider going there, you can see it didn't look so good.
6 We blew up engines on E15. So it's not real good for the
7 legacy fleet out there.

8 With regards to the particular issue we're
9 dealing with right now, as John discussed, we have had
10 some issues with E10. And the biggest thing right now is
11 that we're starting to see a lot of development on bio
12 Butanol and other fuels out there that do show a lot of
13 promise. And one of the great things about Butanol is you
14 can go to 16 percent today on it versus there is this big
15 fight with EPA over going to 15 percent ethanol.

16 There are two companies that are really pushing
17 it right now. One is called GVO and the other is called
18 Butimax. And one of the things that's interesting about
19 Butimax, it's a joint venture between two companies you
20 probably heard of, DuPont and BP. And companies like
21 DuPont and BP don't jump into something on speculation.
22 They figured out there is a business case for this stuff.

23 So we just wanted to make sure that as we go
24 forward because this is something that doesn't become
25 mandatory until 2020. And in 2020, I'm not sure any of us

1 can say what the fuels are going to be out there. And
2 we'd like to just have wording in there that leaves some
3 flexibility for staff to react to it. And we have
4 actually proposed language that we gave to staff this
5 morning that's literally just adding a few words in there
6 and it takes care of that.

7 So thank you for your time. Appreciate it.

8 CHAIRPERSON NICHOLS: Thank you. This is
9 actually more interesting than I thought it was going to
10 be. How's that for great praise. I think you got our
11 intention.

12 Question is: Staff, have you had a chance to
13 look at what was submitted? They are making some pretty
14 sensible sounding suggestions.

15 EMISSION RESEARCH AND REGULATORY DEVELOPMENT

16 BRANCH CHIEF CARTER: Yes, Michael Carter.

17 We've talked to Mr. McKnight and Mr. Riechers
18 prior to this as they suggested, and we looked at their
19 15-day change language they're suggesting. What they're
20 suggesting is certainly reasonable. We are on the same
21 page.

22 One thing should be made clear. In order for a
23 fuel to be accepted as a certification-type fuel, it would
24 have to be the predominant fuel or the dominant fuel in
25 that particular industry. So it's representative of

1 what's actually out there in the field.

2 So with that assumption being the case, it would
3 normally go through the typical fuel evaluation process
4 with our fuel evaluation folks. And certainly it could be
5 looked at in the future. Certainly, we will leave the
6 door open. And as I said, we will incorporate 15-day
7 language to make sure that happens.

8 CHAIRPERSON NICHOLS: Okay. I think you got what
9 you came for. All right. Any further comments or
10 questions? If not, do I have a motion?

11 BOARD MEMBER RIORDAN: I would move -- just a
12 minute. Let me get this on the table.

13 Let me move Resolution 11-41 and add then a
14 15-day change that staff work in, generally speaking, with
15 the testimony that we've heard.

16 BOARD MEMBER D'ADAMO: Second.

17 CHAIRPERSON NICHOLS: Already Mayor Loveridge.

18 BOARD MEMBER LOVERIDGE: Jet me just see if I
19 understand the premise. There is a dominant fuel and you
20 can't certify a new fuel until there is a dominant fuel?
21 How does that -- I must not have understood correctly.

22 EMISSION RESEARCH AND REGULATORY DEVELOPMENT

23 BRANCH CHIEF CARTER: No. The suggestion is when they
24 certify the engines, they certify on a particular type of
25 fuel. That fuel should be representative of what fuel is

1 out there they use in normal real life --

2 CHAIRPERSON NICHOLS: You have a new engine
3 coming in to be certified.

4 BOARD MEMBER SHERRIFF: I'd like to second, even
5 though I'm very happy to have sold my boat.

6 CHAIRPERSON NICHOLS: All right. Nothing like
7 somebody who's eager to get in there second motions.
8 Okay.

9 In that case, I think we're ready to vote. All
10 in favor, please say aye.

11 (Ayes)

12 CHAIRPERSON NICHOLS: Any opposed? Very good.
13 We are adjourned. Happy holidays. We are almost done.

14 We have four witnesses who have signed up to
15 speak on different items during the public comment period.
16 So we begin with the --

17 EXECUTIVE OFFICER GOLDSTONE: Chairman Nichols, I
18 think Dr. Sherriffs would like to --

19 CHAIRPERSON NICHOLS: I'm sorry.

20 BOARD MEMBER SHERRIFFS: I wanted to make some
21 comments about my first day on the Board. Would you like
22 me to make them now --

23 CHAIRPERSON NICHOLS: You could do that after the
24 public comment period or before the public comment period.
25 But I think after would be better, because after you hear

1 the range of public comments, you're going to have even
2 more thoughts about your first day.

3 BOARD MEMBER SHERRIFFS: You may are sorry.

4 CHAIRPERSON NICHOLS: I want to give you an
5 opportunity to more fully experience this.

6 John Larrea from California League of Food
7 Processors.

8 MR. LARREA: Hello, Board members. Thank you
9 very much for allowing me to comment here. I'll try to
10 keep this quick and brief.

11 And Dr. Sherriffs and Mr. De La Torre, I want to
12 welcome you to the Board here. Glad to see a full Board.

13 We just have just some very brief comments on the
14 cap and trade. As you know, we've been engaged with staff
15 on a number of issues involving food processors.

16 First of all, I'd like to say we are very pleased
17 with staff with regards to the leakage study. We've been
18 very engaged with them, and they have been with us. We
19 have been communicating back and forth on a level we feel
20 is appropriate for this. And we feel like we are very
21 much a part of the development of this study that's going
22 to go forward.

23 However, on a couple of other issues, we have
24 some concerns. As you know, we've been engaged in a
25 industry-wide benchmark issue for the past year and a

1 half. And just about a month ago -- well, no. When was
2 it? It was right after I got back from my vacation, I
3 inquired about the status of the benchmark and was
4 informed they were not going to be using the equation that
5 we had been developing and that they just decided to go
6 with the 85 percent.

7 Now, what that's based on is our concern is that
8 we have yet to understand why that decision was made. We
9 haven't seen any data on that. This is not to say we
10 aren't communicating with staff on this. But we are
11 concerned that it was just kind of dropped on us. And
12 we'd like to see at least some reasoning behind why we
13 spent a year and a half on this and they decided not to go
14 with that.

15 Secondly, we had another miscommunication or some
16 difficulty regarding new entrants. We thought we had an
17 agreement with at least with staff on new entrants and the
18 allocations associated with production growth. However,
19 we were just informed last week that that is not going to
20 be the case either. Now, a lot of our members are very
21 upset about that, because what that would have done was
22 put us on an even par associated with product-based
23 benchmarking so if we were increasing production, we would
24 see an increase in allocations associated with it. That
25 now wipes it out. We want to understand what's going on

1 in that particular area, too.

2 Finally, we were told -- you know, I know that
3 the Board and the staff would really like us to get
4 involved in product-based benchmarking. It's very
5 difficult and we talk about this quite a bit. We
6 understand that you are now negotiating with a company
7 called Ecofys in order to develop a product-based
8 benchmark for food processors. At least that's what we
9 were told last week on the our meeting by one of the CARB
10 staff members.

11 If that's the case, it's going to be requiring a
12 lot of cooperation and a lot of data from our particular
13 industry. So we would like to learn more about Ecofys and
14 also about what you envision in terms of trying to develop
15 this product based benchmark and be actively involved in
16 it.

17 But having said all that, I do want to know that
18 I was in contact with staff program managers today and we
19 have set up a meeting to discuss these issues and others
20 right after the first of the year. So we are looking
21 forward to that meeting, and we'll be trying to resolve a
22 lot of these issues because these are going to be
23 important for our members and for the communities in which
24 we operate.

25 CHAIRPERSON NICHOLS: Thank you. As you know,

1 when someone raises an issue in the public comment
2 session, all we can do actually is direct staff to talk to
3 you. So you've already taken care of that.

4 MR. LARREA: I already got that. So happy
5 holidays.

6 CHAIRPERSON NICHOLS: Yes, Dr. Sherriff.

7 BOARD MEMBER SHERRIFFS: I'd just like to add,
8 I'm glad to hear staff is involved in this because this is
9 a very important type of business in the valley. It's
10 value added to the agricultural produce in the valley.
11 And often, these kinds of businesses are located in
12 communities where employment is a real issue. So thank
13 you, staff.

14 CHAIRPERSON NICHOLS: Okay. Our next witness is
15 who wishes to talk about global warming is Ken Percival.

16 MR. PERCIVAL: I was hoping to say good morning,
17 Board, but I don't think that's possible anymore.

18 I offered last month something for you to read.
19 It had its problems in regards to who typed it, but the
20 conclusions I offered, there was no problems with.

21 I return again. The questions I offered last
22 month in regards to how does one atom of carbon raise the
23 temperature of 1250 molecules of nitrogen oxygen was
24 greeted with silence. I did get a letter yesterday from
25 Mr. Croes where he actually end up making my own argument

1 for the reason why you wouldn't find carbon dioxide in a
2 layer blocking in heat.

3 I brought a few examples to show you. These are
4 actually called books. These are the books that no one on
5 your staff ever read or I suspect none of you read written
6 by very eminent people that would disagree with your
7 global warming concerns.

8 I'll quote one, just tell you about one man. His
9 name is Roy W. Spencer principle research scientist at the
10 University of Alabama Huntsville where he directs a
11 variety of climate research projects, received his Ph.D.
12 from University of Wisconsin 1981, formerly senior
13 scientist for climate studies at NASA. Dr. Spencer also
14 served as a U.S. science team leader for the advanced
15 microwave scanning radio meter and also the aqua
16 satellite. He's the developer of the original satellite
17 method and precise monitoring of global temperatures. He
18 would disagree violently with you.

19 I quote his other second book I offer you today
20 where all he wants to do is actually have the debate over
21 global warming, and that's what I'm trying to do. I've
22 sat with much interest today, and I am trying to
23 understand how this Board can work at cross purpose. You
24 serve two masters: One, air letter, which I'm behind.
25 And if you're talking about black carbon, carbon monoxide,

1 things like that, I support you. But if you're talking
2 about carbon dioxide, which is not a pollutant, then I
3 disagree with you totally in that carbon dioxide cannot
4 raise the temperature of any climate or any air mass at
5 current levels.

6 Now the piece I offer you today, all I ask is
7 that you read it. Mr. Bode has been very kind. I'm
8 trying to develop a dialogue. I know I come to this
9 debate late. I'm non-political. I don't play Kabuki
10 football, which is what politics have turned into. I
11 stand here though amazed that a Board -- first time I've
12 ever seen a Board unanimously agree constantly. I've
13 never see that before. I hoped there might be one
14 dissenting voice about something. As of yet, I haven't
15 seen one. I hope maybe as we continue this process that I
16 do.

17 I ask only your indulgence and read what I offer
18 up. I can prove everything I put in my paper and I don't
19 pretend to know things that I call the minutia of reality,
20 whether carbon dioxide is vibrating or whatever, they say
21 it does. I agree. That's what thermal dynamics says.

22 But when it comes to the point of raising the
23 temperature of an atmosphere -- I'm running out of time.
24 I've been here all day. Can I have more time, please?

25 CHAIRPERSON NICHOLS: You've submitted an ample

1 amount of material in writing, and our staff has responded
2 to you.

3 MR. PERCIVAL: And in regards to the questions
4 they attempted to answer yesterday, the response I got to
5 my question was because a molecule of carbon dioxide could
6 stay up in the atmosphere for 100 years, apparently they
7 don't understand what darkness is.

8 So I'll leave it at that. Just please read my
9 material and let's have the dialogue. That's all I ask.
10 And we'll go from there. And thank you, Mr. Boyd, for
11 your support.

12 CHAIRPERSON NICHOLS: Michael Lewis from the
13 Construction Industry Air Quality Coalition.

14 MR. LEWIS: Thank you and good afternoon.

15 I think -- I want to talk to you today about the
16 on-road rule. I have with me representatives from the
17 Dump Truck Owners Association, the Engineering Contractors
18 Association, and the concrete pumpers.

19 And in the interest of time, they asked me to
20 sort of speak and not take up any more time this
21 afternoon.

22 I wrote you earlier I think in November,
23 Chairman, about some concerns we had about the devices --
24 particularly the Cleaire device and how that was affecting
25 the implementation of the rule. I got -- your staff

1 shared your response with me today, and I appreciate that.

2 But it raises a number of issues. The rule was
3 final with OAL on Wednesday of this week. Your website
4 for reporting for all the contractors or the truck owners
5 to report also became available this week.

6 The guidelines, which is 28 pages long and
7 explains to you how to handle the reporting system, was
8 available on Tuesday of this week. And the DPF, which is
9 one of the more popular ones in use, which came off the
10 market 90 days ago only got re-verified last week. So
11 there are a number of issues that have come up as a result
12 of that.

13 First of all, the only copy of the rule that's
14 available on line is still the strike-out, underline
15 version, which is about 78 pages long. And I don't think
16 that any truck owner is going to be able to read that
17 version and understand it.

18 The online system is very incomplete. It doesn't
19 recognize doors, passwords, and user's names, as an
20 example, as we were told it would. It doesn't print the
21 certificate of reporting compliance, which is the one
22 reason you want to report is to get the certificate so you
23 can use it and show people that you're legal.

24 There are a raft of other issues that we
25 discovered as people started trying to report and we've

1 been relaying some of those to your staff.

2 The reverification of the Cleaire devices I'm not
3 sure solve the problem. You just frankly put a big diaper
4 on the same device and I'm not sure anyone who was looking
5 at one of those device as a possible option would want to
6 continue to consider it.

7 You also recently changed the rules for data
8 logging, the engine installation. And most of the
9 companies don't have those data loggers now so you're sort
10 of dependent on the installers to do the data logging,
11 which adds further delay to ordering and selecting a
12 device.

13 We were also told this morning that a number of
14 other manufacturers have pulled off their high horsepower
15 devices off the market, because they don't want to have
16 another Cleaire type incident.

17 So it would be fine if we were having this
18 discussion last July. The problem is the compliance date
19 is 15 days away and we've created a lot of uncertainty
20 about options. And frankly, it's not that we're not
21 ready. It's that you're not ready. You used up an awful
22 lot of time in preparation since this rule was last
23 amended a year ago, and we're now in the final seconds of
24 the game and you sort of dumped it in our lap and asked us
25 to comply.

1 What I would like to ask of you today is not --
2 we're not asking for a rule change. I think you've taken
3 up a lot of time to get ready. What we would like is a
4 little more time.

5 I'm not sure that your staff has any discretion
6 to grant a lot of time from that January 1st compliance
7 date. But I'd like to at least get the 90 days that you
8 took to re-certify the device. And I think absent some
9 Board direction and to grant more time, staff's not going
10 to have a lot of discretion. And I'd like to ask you
11 direct staff to find a way to grant some additional time
12 for compliance with that January 1st date so we don't end
13 up with a lot of confused scofflaws on January 2nd. Thank
14 you.

15 CHAIRPERSON NICHOLS: Thank you.

16 I don't think under the circumstances that we
17 could give direction without having had something more
18 like a hearing on this topic. But I can certainly direct
19 staff to look at the issue and to think about it and to
20 meet with you and to get back to you prior to the deadline
21 here so that we can get a Resolution on your request.

22 EXECUTIVE OFFICER GOLDSTONE: There is a meeting
23 scheduled for Monday.

24 CHAIRPERSON NICHOLS: There is a meeting now
25 scheduled for Monday. So I don't think that's a meeting

1 that people are intending to come to without an open mind.
2 So we'll take it from there.

3 Okay. Thank you. We have one more witness, one
4 more person who wanted to testify, I believe. I lost my
5 list, Ken Nelson. Mr. Nelson, are you here? Ken Nelson
6 from Element Markets. No. It was someone who had a
7 question. Apparently, hopefully, it got answered. Okay.
8 Thank you.

9 Dr. Sherriffs, closing.

10 BOARD MEMBER SHERRIFFS: Thank you. Have you
11 started the timer?

12 CHAIRPERSON NICHOLS: Board members are allowed
13 to violate the three minute rule.

14 BOARD MEMBER SHERRIFFS: Well, I wanted to share
15 some reflections about the day for the new kid on the
16 block. I had thought about making some remarks at the
17 beginning of the meeting and in some ways I'm glad I
18 didn't.

19 Part of this reflection comes from speaking to
20 someone before the meeting, a friend, "Congratulations
21 you're on the Board. Isn't this wonderful?" And I'm
22 thinking, "Yeah, it's wonderful and it's a lot of work."
23 And he said, "And aren't you being paid for all this
24 work?" And he said, "Why are you doing this?" And my
25 answers at that point, they're the same answers I have

1 now. But the answers I have now are a bit more
2 complicated, a bit deeper.

3 Yes, this is highly important: Air quality and
4 health. It's key. It's what we're all about. It's our
5 primary mandate. Why be involved with this Board. I look
6 at the past 40 years and I see success. Much has been
7 accomplished. A long way to go, but much has been
8 accomplished. And very exciting the Board is engaging
9 really the next critical step of greenhouse gases.

10 What I want to reflect on is that discussion
11 about low carbon fuel. I wasn't in the room here, but I
12 was able to observe and it was very exciting. It was very
13 exciting. And I think the discussion was really
14 emblematic why at the end of the day I look back and say,
15 "Yes, this will be a lot of work but good decision to make
16 that commitment."

17 You know, staff is so knowledgeable, so bright,
18 so creative and so enthusiastic, so interested in solving
19 problems and making adjustments as issues come up, as was
20 just demonstrated.

21 The public is engaged. Marvelous how the public
22 is engaged in the process, innovation, in their ability to
23 clarify their requests about what will help them change
24 direction with the least disruption.

25 It's also very impressive how much information

1 you can get in three minutes and that you can even
2 sometimes have a little discussion.

3 The other thing that I came away with, the
4 decrease in carbon intensity working on the low carbon
5 fuel standard, this is not the paternalistic CARB
6 presenting what will be done. The goal is not CARB's
7 goal. The goal was the goal of everyone who was here.
8 Everyone was engaged. And everyone who was represented by
9 the people here were engaged.

10 Remarkably, at the end of the day, it was a
11 unanimous vote, which to me suggests a lot of hard work
12 went into it, that there was a consensus at the end of the
13 day. And that is always gratifying because it means it
14 getting much easier to accomplish what we're trying to
15 accomplish. Everybody is on the same page.

16 And so who are the winners of all of this? The
17 citizens of California. Thank you.

18 CHAIRPERSON NICHOLS: Thank you very much. Thank
19 you for those closing words. They're really a great way
20 to end the year. It's been an amazing year. This is our
21 last Board meeting of 2011. I'm pleased with what we've
22 accomplished this year. We've got an exciting year ahead
23 of us next year. We start off in January with a Board
24 meeting in Los Angeles. So you'll be on my home turf and
25 looking forward to seeing you all then. And until then,

1 everybody have a very good holidays season and happy new
2 year.

3 (Whereupon the Air Resources Board adjourned
4 at 4:56 p.m.)

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