

MEETING
STATE OF CALIFORNIA
AIR RESOURCES BOARD

AIR RESOURCES BOARD
2020 L STREET
BOARD ROOM
SACRAMENTO, CALIFORNIA

THURSDAY, DECEMBER 7, 2000
9:00 A.M.

JAMES F. PETERS, CSR, RPR
CERTIFIED SHORTHAND REPORTER
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APPEARANCES

BOARD MEMBERS

Dr. Allan Lloyd, Chairperson

Mrs. Barbara Riordan

Dr. William Burke

Mr. Joseph Calhoun

Supervisor DeSaulnier

Ms. Dorene D'Adamo

Professor Hugh Friedman

Dr. Friedman

Mr. Matthew McKinnon

Supervisor Mark Roberts

STAFF

Mr. Mike Kenny, Executive Officer

Mr. Tom Cackette, Deputy Executive Officer

Mr. Mike Scheible, Deputy Executive Officer

Ms. Lynn Shenk, Deputy Executive Officer

Mr. Steve Albu, Chief, Engineering Studies Branch, Mobile
Source Control Division

Ms. Analisa Bevan, Manager, ZEV Implementation Section,
Mobile Source Control Division

Ms. Sarah Carter, Air Resources Engineer, Mobile Source
Control Division

Mr. Bart Croes, Chief Research Division

Mr. Bob Cross, Chief, Mobile Source Control Division

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APPEARANCES CONTINUED

STAFF CONTINUED

Ms. Vicky Davis, Staff Counsel

Dr. Deborah Dreschler, Air Pollution Specialist, Research
Division

Mr. Paul Hughes, Chief, Engineering Studies Branch, Mobile
Source Control Division

Ms. Roberta Hughan, Air Pollution Specialist, Mobile
Source Control Division

Mr. Tom Jennings, Senior Staff Counsel

Ms. Diane Johnston, Senior Staff Counsel

Ms. Renee Kemena, Manager, Planning and Regulatory
Development Section, Mobile Source Control Division

Mr. Jack Kitowski, Chief, On-Road Controls Branch, Mobile
Source Control Division

Ms. Leslie Krinsk, Senior Staff Counsel

Ms. Gayle Sweigert, Air Pollution Specialist, Mobile
Source Control Division

Ms. Judy Yee, Air Pollution Specialist, Mobile Source
Control Division

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

iv

INDEX

	PAGE
Opening remarks by Chairperson Lloyd	1
Pledge of Allegiance	1
Roll Call	1
Presentation to Mr. Ray Menebroker	3
Item 00-12-1	10

Chairperson Lloyd	10
Executive Director Kenny	12
Presentation by Air Pollution Specialist Dreschler	13
Presentation by Dr. Lipsett	19
Presentation by Air Quality Advisory Committee Chairperson Klansman	25
Discussion	28
Public Testimony	
Mr. Brian Lamb	40
Vote	45
Item 00-11-2	46
Chairperson Lloyd	46
Executive Director Kenny	48
Presentation by Air Pollution Specialist Yee	50
Discussion	63
Public Testimony	
Dr. Chung Liu	78

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

v

INDEX CONTINUED

	PAGE
Mr. David Modisette	82
Mr. Tom Addison	94
Vote	96
Item 00-12-3	
Chairperson Lloyd	97
Executive Director Kenny	98

Air Resources Engineer Carter	100
Ombudsman Tschogul	108
Discussion	109
Vote	110
Item 00-12-2	111
Chairperson Lloyd	111
Executive Director Kenny	112
Air Pollution Specialist Hughan	114
Discussion	132
Public Testimony	
Mr. Brian White	149
Mr. Todd Campbell	153
Dr. Chung Liu	160
Ms. Robina Suwol	164
Mr. Nicholas Buber	166
Ms. Sandy Silberstein	166
Mr. Bruce Bertelsen	170
Mr. Kevin Hallstrom	176
Mr. Henry Hippert	181
Mr. Jeff Redoutey	182
Mr. Thomas Trueblood	186
Mr. Warren Slidolsky	195
Mr. Lelon Forlines	196
Mr. Greg Vlasek	197

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

vi

INDEX CONTIUNED

	PAGE
Public Testimony Continued	
Mr. Chris Brown	200
Mr. Paul DeLong	206
Mr. Michael Applegate	213
Ms. Nina Young	216
Mr. Peter Whittingham	222
Mr. Ted Holcombe	235
Mr. Mike Murray	238
Mr. Jim O'Connell	244
Mr. Dave Smith	250
Mr. Ed Manning	253

Ms. Stephanie Williams	257
Ms. Pam Jones	261
Mr. Scott MacDonald	264
Mr. V. John White	267
Ms. Bonnie Holmes-Gen	286
Ms. Sandra Spelliscy	291
Ms. Gail Ruderman Feuer	294
Ms. Julia Levin	303
Ms. Marta Arguello	309
Mr. Jesus Santos-Guzman	311
Ms. Tiffany Schauer	313
Mr. Stephen Rhoads	316
Mr. Brett McFadden	321
Mr. Dave Randall	328
Mr. Doug Snyder	337
Mr. Kirk Hunter	341
Mr. Steven Stetson	343
Mr. Ranson Roser	346
Mr. Victor Ogrey	349
Mr. Michael Hulsizer	351
Ms. Veronica Dale Muchmore	369
Mr. Mark Fairbanks	374
Mr. David Walrath	376
Ms. Claudia Sherrill	379
Vote	418
Adjournment	418
Reporter's Certificate	419

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

1

1 PROCEEDINGS

2 CHAIRPERSON LLOYD: Would everyone take their
3 seats, please.

4 Good morning, the December 7th, 2000 public
5 meeting of the Air Resources Board will now come to order.

6 Ms. D'Adamo, would you please lead us in the
7 Pledge of Allegiance.

8 (Thereupon Ms. D'Adamo lead the Pledge of
9 Allegiance which was recited in unison.)

10 CHAIRPERSON LLOYD: Thank you very much.

11 Will the clerk of the Board, please call the
12 roll.

13 SECRETARY KAVAN: Dr. Burke?

14 BOARD MEMBER BURKE: Present.

15 SECRETARY KAVAN: Calhoun?

16 BOARD MEMBER CALHOUN: Here.

17 SECRETARY KAVAN: D'Adamo?

18 BOARD MEMBER D'ADAMO: Here.

19 SECRETARY KAVAN: Supervisor DeSaulnier?

20 BOARD MEMBER DeSAULNIER: Here.

21 SECRETARY KAVAN: Professor Friedman?

22 BOARD MEMBER HUGH FRIEDMAN: Here.

23 SECRETARY KAVAN: Dr. Friedman?

24 BOARD MEMBER WILLIAM FRIEDMAN: Here.

25 SECRETARY KAVAN: McKinnon?

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2

1 BOARD MEMBER McKINNON: Here.

2 SECRETARY KAVAN: Supervisor Patrick?

3 Riordan?

4 BOARD MEMBER RIORDAN: Here.

5 SECRETARY KAVAN: Supervisor Roberts?

6 Chairman Lloyd?

7 CHAIRPERSON LLOYD: Here.

8 Thank you. Just a note here on today's meeting.

9 Since the last meeting in the building, I have asked staff
10 to video tape it or at least parts of it for posterity.

11 On January 25th, at our next meeting, we will be
12 meeting at the Sacramento Municipal Utility District for
13 our hearing on the Zero Emission Vehicle Program.

14 And then in March we will be on the road. And
15 then in April we've got our new facility at the Cal EPA
16 building on 10th and I, so that's why you see the lights
17 on today here.

18 So at this point, I would take great pleasure to
19 have a special ceremony here. And that I would like to
20 announce and invite Ray Menebroker to come up to the
21 Board.

22 While Ray is getting here, I think it's my
23 pleasure to take the opportunity to honor one of the Air
24 Resources Board's most valuable Branch Chiefs as he
25 retires.

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3

1 Ray Menebroker, Ray to us, has been on the Board
2 for almost as long as it has existed. Ray's career began
3 on July 31st, 1970 and comes to a close next week on
4 December 15th, 2000. He has devoted over 30 years of his
5 life to the pursuit of clean air.

6 Good morning, Ray.

7 PROJECT REVIEW BRANCH CHIEF MENE BROKER: Good
8 morning.

9 CHAIRPERSON LLOYD: In the early days, Ray
10 learned the ropes of air pollution control doing field

11 work and investigation in the Enforcement Division. He
12 then moved quickly into the management position in 1974
13 responsible for the Subvention Unit, where he administered
14 grant programs in excess of \$1 million.

15 By 1976 he moved to Control Strategy Development
16 on such sources as coke ovens, glass furnaces, stationary
17 internal combustion engines, architectural COLINKS. In
18 the eighties, Ray began working in fuels and energy and
19 even spent a short time at the Energy Commission.
20 Ironically, the questions of fuel supply and prices,
21 siting new power plants and securing the best available
22 control technologies would follow Ray for the rest of his
23 career, and are as important today as they were when he
24 started.

25 He was promoted to Branch Chief in 1984 to manage

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4

1 the Project Review Branch and has been actively involved
2 with the new source siting ever since. Ray is recognized
3 as a national and state leader in the implementation of
4 Title 5, Permits Program. He has participated nationally
5 in the effort to reform new source review requirements and
6 streamlined Title 5 permitting requirements. He manages
7 the Portable Equipment Registration Program and has
8 recently been active in the Board's diesel risk reduction
9 efforts.

10 Ray has extensive experience working with local

11 districts, industry, environmental groups and various
12 stakeholders. He is widely known as a man of integrity
13 and technical expertise. When you want a straight answer,
14 Ray gives it to you and I can personally attest to that,
15 by the way. And that's one of the joys during the brief
16 time I've been here working with Ray, he's been an
17 incredible resource.

18 When an agency has a person who is important and
19 as well respected as Ray, there is need to give him
20 special recognition and appreciation. On behalf of my
21 fellow board members and myself, I am pleased to present
22 Ray with a board resolution and personal thanks for a very
23 long hard job well done.

24 Ray, you can look back over your career at the
25 Air Resources Board knowing that the years you have given

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5

1 to the achievement of clean air for the citizens of
2 California were well spent. We wish you well in your
3 retirement. However, I think you should rename that, it's
4 not really retirement. As Dr. Morgan reminded us several
5 board meetings ago, retirement has killed many good men.
6 So we wish you a good transition to future activities in
7 the future and we recognize, and I hope that your
8 expertise will not be lost for the citizens of California
9 or the rest of the world, because the investment that you
10 have made, the expertise that you have, we hope that you

11 will continue to share that.

12 At this point, I would like Executive Officer
13 Mike Kenny to read the resolution and present you with a
14 plaque.

15 EXECUTIVE DIRECTOR KENNY: The is the resolution
16 that has been prepared.

17 CHAIRPERSON LLOYD: Mike, just before --
18 hopefully we've got a photograph somebody will be taking
19 of this board resolution.

20 EXECUTIVE DIRECTOR KENNY: Board Resolution and
21 it's dated today.

22 "Whereas Sections 39600 and 39601 of the
23 Health and Safety Code authorized the
24 Air Resources Board to adopt standards,
25 rules and regulations and to do such

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1 acts as may be necessary for the proper
2 execution of the powers and duties
3 granted to and imposed upon the Board by
4 law,

5 "Whereas Mr. Raymond Menebroker, has
6 officially announced his desire to
7 retire from public service after a long
8 and productive career with the State of
9 California,

10 "Whereas Ray began his career with the

11 Department of Water Resources in 1967
12 after graduating from Cal State
13 University at Sacramento with a degree
14 in Mechanical Engineering,
15 "Whereas Ray wisely moved to the Board
16 in 1970 and even more wisely married his
17 wife Vickie in 1971,
18 "Whereas Ray has dedicated his efforts
19 and talents without reservation to the
20 Board since that date with the exception
21 of a brief sabbatical with the
22 California Energy Commission in the
23 early 1980s,
24 "Whereas Ray's substantial career
25 accomplishments include landmark water

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7

1 engineering work on the AV Edmondson
2 water pumping plant near the Grapevine,
3 and precedent setting work on State and
4 local air district rules and regulations
5 that have had a significant impact on
6 California's environment,
7 "Whereas Ray has established himself as
8 a nationwide clean air policy expert on
9 both the New Source Review Program and
10 Title 5 operating permit program

11 resulting in the implementation of rules
12 in California that have served as a
13 model for the nation and has
14 substantially improved new air pollution
15 control technology,
16 "Whereas Ray has brought enough rocks to
17 the United States Environmental
18 Protection Agency to build a national
19 monument to air pollution control while
20 still maintaining his common sense and
21 productive cynicism,
22 "Whereas Ray has complemented his
23 technical competence with a great sense
24 of humanity, kindness and ethical
25 behavior that has endeared him to his

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8

1 friends and colleagues in California and
2 throughout the nationwide air pollution
3 control community,
4 "Whereas a public retirement dinner
5 meeting will be held on January 12th,
6 2001 in accordance with the provisions
7 of Chapter 3.5 commencing with Sections
8 11340 part 1, Division 3, Title 2 of the
9 Government Code to honor Ray on his
10 accomplishments and to allow his

11 co-workers, friends and family to wish
12 him well in his retirement,
13 "Whereas the Board finds that even
14 though we would like to keep him around
15 for another 30 productive years, Raymond
16 E. Menebroker meets all the requirements
17 for retirement from the Board,
18 Now, therefore be it resolved, that the
19 Board extends a heartfelt thank you to
20 Ray for his superior quality work over
21 the years and a fond farewell with the
22 sincere wish that Ray enjoy a long
23 retirement with his wife Vickie,
24 daughters Heidi and Cari and son-in-law
25 Matt.

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9

1 "Executed in Sacramento, California on
2 the 7th day of December 2000."
3 Ray, congratulations.
4 (Standing applause.)
5 BOARD MEMBER HUGH FRIEDMAN: Stay for a picture.
6 PROJECT REVIEW BRANCH CHIEF MENEKROKER: Thank
7 you for the kind words. I want to thank the Board. I've
8 worked for every board chair and every executive officer
9 that's been with the Air Resources Board. And it's been a
10 good career and I wouldn't trade it for anything. I think

11 that it's a good organization and it's just been a
12 pleasure.

13 I remember meeting Mr. Calhoun in 1970, I think
14 wasn't it, Joe, when he was here with the Board. And
15 there's a lot of people around here that I owe a debt of
16 gratitude to. And I just want to thank everybody, because
17 it has been a pleasure.

18 But the one thing that I got out of the Board was
19 my wife Vickie. She and I worked here in 1970 together
20 and that's where I met her. So good things come, too.

21 (Applause.)

22 CHAIRPERSON LLOYD: Thank you very much, Mike and
23 Ray.

24 Just to link to what I mentioned earlier about
25 our next board meeting to alert you that the staff report

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10

1 on ZEV's will be out some time tomorrow. So those of you
2 who are waiting for that will have it. The Board Members
3 also will get a synopsis of that report and should have it
4 today or tomorrow.

5 I think with respect to the schedule, I'll just
6 mention some slight changes we've made here. Hopefully
7 that information has got out to many of you. The game
8 plan is to complete the first four items on our agenda
9 today, holding the research proposals and the not to
10 exceed standards until tomorrow morning at 8:30 a.m.,

11 starting tomorrow at 8:30.

12 So if you're here for either of the two items I
13 just mentioned, you may wish to come back then or stay for
14 today's discussions.

15 We're going to start with SB 25, Standards Review
16 today, followed by the Electric Vehicle Incentive Program
17 and then the meeting to do LEV alignment.

18 That should take us to lunch time, plus or minus.
19 We will intend to take a luncheon break and then we'll
20 start the Lower Emission School Bus Program after the
21 lunch break and continue that through the rest of the day
22 into the evening as long as it takes, so we will bring
23 that item to a close here today.

24 So hopefully that will give you a sense of where
25 we're headed and fit into your schedules as well. Also,

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11

1 depending on the list of witnesses that we have signed up,
2 I may be limiting the time allotted for witnesses to
3 testify.

4 I think with that, I'd like to turn over to the
5 first agenda item. Just a reminder that anyone in the
6 audience who wishes to testify on today's agenda items to
7 sign up with the Clerk of the Board. If you have a
8 written statement, please provide 30 copies to the Clerk,
9 if possible.

10 The first item on the agenda and item number

11 00-12-1 is a review of the Health-based California Ambient
12 Air Quality Standards.

13 The children's Environmental Health Protection
14 Act, by Senator Martha Escutia of Montebello requires
15 several actions by the board.

16 First, we are to go back over our existing
17 standards and regulations to make sure they took
18 children's unique vulnerabilities into account and make
19 any necessary adjustments on that score.

20 Second, we are to gather new data on children's
21 exposure so that looking ahead we can make the right
22 regulatory and policy decision to protect their health.

23 The Air Resources Board is not the only agency
24 affected by this law. The Office of Environmental Health
25 Hazard Assessment has a substantial role in helping us

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12

1 re-examine all medical data to see if our criteria or
2 toxic air contaminant standards missed anything vis-a-vis
3 children's health.

4 In addition, the Act directs CalEPA to establish
5 a Children's Environmental Health Center. So, in fact,
6 we're delighted to work with our sister here from OEHHA
7 and delighted to see representatives here today.

8 Finally, the South Coast Air Quality Management
9 District is required to directly notify schools of
10 unhealthful air pollution levels, a program they've been

11 successfully operating for some time now under Chairman
12 Burke's leadership. South Coast also has a ten-point
13 Children's Health Protection program, again created by
14 Chairman Burke.

15 Today, we will be taking the first formal action,
16 board action, to fulfill one of the requirements of the
17 new law.

18 Mr. Kenny, will you please introduce the item and
19 begin staff presentation.

20 EXECUTIVE DIRECTOR KENNY: Yes. Thank you, Dr.
21 Lloyd and Members of the Board. As you stated, the
22 Board's first action under the Children's Environmental
23 Health Protection Act is the approval and joint ARB-OEHHA
24 report reviewing the current health-based California
25 ambient air quality standards.

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13

1 The purpose of this report is to determine
2 whether in consideration of public health, scientific
3 literature and exposure, the standards adequately protect
4 public health, including infants and children. The report
5 includes literature reviews, recognized experts on each
6 pollutant with emphasis on health effects in infants and
7 children, as well as information on California's air
8 quality.

9 The report also contains OEHHA's determination as
10 to which standards are inadequate and recommendations for

11 priority review of these standards. The report and
12 recommendations were reviewed by OEHHA's air quality
13 advisory committee. Dr. Deborah Dreschler from ARB and
14 Dr. Lipsett from OEHHA will now present the joint report.

15 Dr. Michael Klansman, Chairman of the Air Quality
16 Advisory Committee will present an overview of the Air
17 Quality Advisory Committee's review and its
18 recommendations for priority review of standards
19 considered inadequate to protect public health.

20 AIR POLLUTION SPECIALIST DRESCHLER: Thank you,
21 Mr. Kenny. Good morning, Dr. Lloyd and Members of the
22 Board.

23 (Thereupon an overhead presentation was
24 presented as follows.)

25 AIR POLLUTION SPECIALIST DRESCHLER: My

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14

1 presentation will include an overview of the Children's
2 Environmental Health Protection Act and a description of
3 the process staff, from the Office of Environmental Health
4 Hazard Assessment, OEHHA, and the ARB used to prepare the
5 joint staff report and recommendations before you this
6 morning.

7 --o0o--

8 AIR POLLUTION SPECIALIST DRESCHLER: This will be
9 a three-part presentation. First, I will present an
10 introduction to the Children's Environmental Health

11 AIR POLLUTION SPECIALIST DRESCHLER: The first
12 action required by the Act is that ARB, in consultation
13 with OEHHA, review the health-based ambient air quality
14 standards with emphasis on the adequacy of protection of
15 infants and children. Standards that are considered
16 inadequately protective of public health must be
17 prioritized for complete review and possible revision.
18 Both of these activities are to be completed by December
19 31st, 2000.

20 --o0o--

21 AIR POLLUTION SPECIALIST DRESCHLER: The ambient
22 air quality standards reviewed were those for PM 10, or
23 Particulate Matter, ten microns or less in aerodynamic
24 diameter, sulfates, ozone, nitrogen dioxide.

25 --o0o--

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1 AIR POLLUTION SPECIALIST DRESCHLER: Lead, carbon
2 monoxide, hydrogen sulfide and sulfur dioxide.

3 --o0o--

4 AIR POLLUTION SPECIALIST DRESCHLER: The initial
5 step in the ambient air quality standards review process
6 involved preparation of scientific literature reviews by
7 recognized health experts. Each health expert provided a
8 written report to OEHHA and the ARB evaluating the health
9 protectiveness of one or more of the State ambient air
10 quality standards.

11 These were not exhaustive reviews. Rather, they
12 focused on whether there was evidence suggesting adverse
13 health effects, particularly in infants and children with
14 exposure to pollutant concentrations at or near the
15 current standards.

16 The ARB and OEHHA then integrated the information
17 on pollutant exposure and from the literature reviews into
18 a draft report which was available for public comment and
19 was also presented to public workshops. Following the
20 public comment period, the report was reviewed by the air
21 quality advisory committee, OEHHA's outside advisory
22 review panel, which is comprised of world recognized
23 health experts on health effects of air pollution
24 exposure.

25 The air quality advisory committee reviewed and

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18

1 discussed the draft staff report at a public meeting and
2 made recommendations as to which standards appeared to be
3 inadequate. The Committee then made recommendations as to
4 the priority order for review of the standards considered
5 possibly inadequate.

6 After the air quality advisory committee meeting,
7 the draft report was revised to incorporate the comments
8 of the Committee and the public. It was, again, made
9 available for public comment and is today presented to the
10 Board for approval.

11

--o0o--

12

AIR POLLUTION SPECIALIST DRESCHLER: The Act

13

requires that the Board publish a report summarizing the

14

review of the adequacy of the State ambient air quality

15

standards and that standards considered possibly

16

inadequate be prioritized for further review no later than

17

December 31st, 2000.

18

Today, you, the Board, will consider for approval

19

and publication the staff report.

20

And the Act requires that the highest priority

21

standard be extensively reviewed, and, if necessary,

22

revised by December 2002. The report conveys the

23

recommendation of the staffs of the ARB and OEHHA as well

24

as the air quality advisory committee that particulate

25

matter including sulfates should be the first standards

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19

1 reviewed.

2

And the Act further requires that any additional

3

standards which are deemed not sufficiently protective

4

undergo extensive review, and, if necessary, revision at

5

the rate of one per year starting in 2003. And the staff

6

report will also be valuable guiding research planning

7

over the next several years so that our research efforts

8

support the standards review process.

9

I would now like to introduce Dr. Michael Lipsett

10

from OEHHA who will present the pollutant reviews.

11

--o0o--

12

DR. LIPSETT: Good morning, Chairman Lloyd and
13 Members of the Board. I'm pleased to be here to present
14 our recommendations to you regarding SB 25.

15

Next slide, please.

16

--o0o--

17

DR. LIPSETT: And as Dr. Dreschler mentioned, our
18 role in the process initially has been to review all of
19 California's health-based ambient air quality standards,
20 and during the process to determine whether the standards
21 adequately protect public health, with an adequate margin
22 of safety. The bill, as mentioned, focuses particularly
23 on infants and children, however, not to the exclusion of
24 other potentially susceptible subgroups.

25

Next slide, please.

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1

--o0o--

2

DR. LIPSETT: This is the list that Dr. Dreschler
3 has already presented to you, so I won't dwell on this one
4 here.

5

Next slide, please.

6

--o0o--

7

DR. LIPSETT: Now, the guidelines that we used to
8 evaluate each of the standards included five principals
9 really. We looked at the extent of the evidence of health
10 effects reported to occur at or near the level of the

11 existing standard. We tried to assess from the literature
12 the nature and the severity of these health effects.

13 Next slide, please.

14 --o0o--

15 DR. LIPSETT: The magnitude of the risk expected
16 for each one of the particular health effects identified.
17 And that magnitude of risk consists of looking at the kind
18 of the baseline level of the particular health effects and
19 also the potential increase in risk that might be related
20 to exposure to the particular pollutant.

21 We looked for evidence specifically indicating
22 that children might be more susceptible than adults to
23 exposures to a given pollutant. And then, finally, we
24 tried to assess the degree of exposure in the State
25 relative to the level of the standard.

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21

1 Next slide, please.

2 --o0o--

3 DR. LIPSETT: As Dr. Dreschler had mentioned, we
4 contracted with recognized world experts who undertook the
5 initial critical reviews of the existing literature. And
6 their reviews are part of this report as one of the
7 appendices.

8 Then based on these reviews, we drafted summary
9 statements and recommendations for each one of the
10 pollutants, and these were circulated for public comment

11 and review by our Air Quality Advisory Committee.

12 Next slide, please.

13 --o0o--

14 DR. LIPSETT: The bottom line of our evaluation
15 was that the health effects may occur in infants, children
16 and other potentially susceptible subgroups exposed to
17 some of the pollutants at or near levels corresponding to
18 their ambient air quality standards.

19 Now, of these eight pollutants or pollutant
20 classes, we divided them into two tiers.

21 Next slide, please.

22 --o0o--

23 DR. LIPSETT: The Tier 1 standards included those
24 for which evidence indicated their potential risk to
25 public health at or near the current level of the

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22

1 standard, and they included PM 10. And within that, even
2 though there was a separate sulfate standard, we thought
3 that in looking at the PM 10 standard, we ought to also
4 include sulfates because they really are a subclass of PM
5 10; ozone and nitrogen dioxide.

6 Next slide, please.

7 --o0o--

8 DR. LIPSETT: Then for Tier 2, we found either
9 that the scientific evidence was less certain about the
10 potential risks to public health or that public health

11 protection is already provided through other regulations.

12 And this latter criterion applies specifically to lead.

13 Next slide, please.

14 --o0o--

15 DR. LIPSETT: Now we received a number of public

16 comments which I'm going to be summarizing in the

17 following slide.

18 First, was that the PM standard in California

19 should be reviewed, but during the process of review, we

20 need to focus on which components of PM 10 are likely to

21 be causally related to the effects observed.

22 One of the other extensive comments related to

23 making sure that we evaluate the potential effects of

24 indoor sources of particulate matter and also that the

25 commenters, two commenters, indicated that they felt that

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23

1 the allocation of nitrogen dioxide into the first tier was

2 in their opinion inappropriate because they felt that for

3 the most part that throughout California their nitrogen

4 dioxide standard has been met.

5 Next slide, please.

6 --o0o--

7 DR. LIPSETT: And then were a series of comments

8 related to ozone. And these commenters felt that ozone

9 should be a priority for review, because the background

10 concentrations within California had not been adequately

11 designation of pollutant designations into Tier 1 and Tier
12 2. The Committee members felt, however, that within Tier
13 2 the carbon monoxide should be the top priority. And
14 then, finally, they made a number of relatively minor
15 technical suggestions for improvement of our document
16 which had been incorporated.

17 Next slide, please.

18 --o0o--

19 DR. LIPSETT: Now, I'm going to be concluding
20 with the slide that shows our recommendation was that the
21 PM 10 ought to be the first and the highest priority
22 pollutant to be reviewed in the process. The last review
23 that took place for the particulate standard was in 1982
24 and 1983. And since that time, there have been many, many
25 studies published linking particulate matter exposure in

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1 cities throughout the world to increased daily mortality,
2 to chronic mortality, hospital admissions, emergency room
3 visits, lung function changes and other adverse health
4 effects.

5 There are also documented effects in children and
6 infants in the country and in a number of other countries
7 that had been reported. And finally, most Californians
8 are intermittently exposed to levels of PM currently that
9 exceed the standard in California.

10 And with that, I'd like to conclude my

11 presentation and turn it over to Dr. Michael Klansman, the
12 chair of our Air Quality Advisory Committee.

13 --o0o--

14 AIR QUALITY ADVISORY COMMITTEE CHAIRPERSON

15 KLEINMAN: Thank you, Commissioner Lloyd and Board
16 Members. The Air Quality Advisory Committee met on
17 December 7th -- I'm sorry, on December 7th was not the
18 date -- on October 12th, to review the staff draft
19 document on, review and adequacy of the California Air
20 Quality standards. Can I have the next slide, please.

21 --o0o--

22 AIR QUALITY ADVISORY COMMITTEE CHAIRPERSON

23 KLEINMAN: We reviewed the Commission critical reviews on
24 the recent health effects literature which specifically
25 focused on the health effects of air contaminants on

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26

1 children. And I'm just presenting here the names of the
2 individuals who actually authored the reviews.

3 These have been summarized and used as the basis
4 for the staff document prepared by Dr. Ostro and Dr.
5 Lipsett and their staff. And, in general, the Committee
6 found that these reports were very well assembled. They
7 served the purpose to which they were defined.

8 May I have the next slide, please.

9 --o0o--

10 AIR QUALITY ADVISORY COMMITTEE CHAIRPERSON

11 AIR QUALITY ADVISORY COMMITTEE CHAIRPERSON

12 KLEINMAN: In Tier 2 various concerns were raised for each
13 of the pollutants. For example, I've just selected out a
14 few that hydrogen sulfide, for example, that the adequacy
15 of monitoring association of levels of complaints with
16 levels of exposure have been documented, but not very
17 well, and that there are new data available from several
18 of the air quality management districts that might help
19 provide new light on health effects from hydrogen sulfide.

20 With sulfur dioxide there does seem to be some
21 new data in the literature that indicate that the margin
22 of safety has been somewhat eroded by the most current
23 data. And with carbon monoxide, there are very few real
24 studies done with children. And although there are
25 several that imply and suggest important health effects,

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28

1 the data has not currently been very compelling, but they
2 raise the level of concern sufficient that carbon monoxide
3 should be given the highest priority in Tier 2.

4 --o0o--

5 AIR QUALITY ADVISORY COMMITTEE CHAIRPERSON

6 KLEINMAN: And I believe that summarizes the overall
7 comments that we received.

8 In general, our committee recommends this report
9 to the Board for it's approval.

10 CHAIRPERSON LLOYD: Mr. Kenny, do you have any

11 final comments?

12 EXECUTIVE DIRECTOR KENNY: Nothing further.

13 CHAIRPERSON LLOYD: Thank you very much. I would
14 also like to express my appreciation to Dr. Klansman, good
15 to see you here, Mike, for your work and for summarizing
16 the Committee's recommendations. I'd also like to say how
17 fortunate we are to have the caliber of the people we have
18 to review these standards across the Board. So I think
19 it's a particular pleasure for me to see that and gives me
20 a lot of confidence that what we're going to come out with
21 is, in fact, going to be a first rate report, starting out
22 with the particulates. And I guess before I turnover it
23 over to the Board -- yes, Dr. Friedman.

24 BOARD MEMBER WILLIAM FRIEDMAN: Well, I also
25 really do appreciate not only the amount of work that went

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29

1 into this but the quality of the work that went into it.
2 And I think that the report is fully compliant with the
3 requirement of SB 25.

4 I want to make a number of comments and I don't
5 want to get too discursive. But as someone who's devoted
6 most of his life to studying developmental phenomenon, I
7 really appreciate the difficulties in creating a
8 developmental framework to analyze age-dependent
9 susceptibilities to anything, let alone pollutants. It's
10 not dissimilar to the issues of how do you do drug doses

11 for children and infants compared to adults and all the
12 rest of it. It's not just simply by size or surface area
13 or age or whatever. It's very difficult.

14 And what makes it extremely difficult are that
15 animal studies don't really apply very well, because rates
16 of maturation in all the species we use are very, very
17 different from the human species. And as I read through
18 all these reports, and they're very, very good, I sort of
19 have to toss out the comparisons between adolescents and
20 adults. That's really not what this is focused on. This
21 is an infants/children kind of an issue and the data is
22 very soft, because it has to be soft since we don't expose
23 infants and children as guinea-pigs specifically to test a
24 hypothesis. And it makes it very difficult.

25 I found myself wishing that there was a bit of an

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30

1 introduction to the wonderful reports that all of our
2 friends wrote that just stated and recognized the problems
3 with age-dependent analyses of any kind. That's sort of
4 not a preamble to all of this and it would educate not
5 only the people in the Legislature who are interested in
6 this, but all subsequent analyses as we continue to do
7 research and develop prospective data.

8 So I had hoped that a couple of pages would just
9 recognize the generic issue of how difficult age-dependent
10 studies are, and could be included at some future time.

11 That was point number one.

12 Point number two, and I was really glad to see
13 Dr. Lipsett including some of the so-called criticisms of
14 some of the folks that responded and, frankly, the
15 criticisms, to some degree, were specious in my opinion,
16 especially with respect to the business about ozone and
17 oh, physiological effects are transient and they don't
18 really matter because they're physiological. Well,
19 anybody who takes care of people understands that
20 physiological adaptation is repetitive, overcompensates
21 and creates disease.

22 So in the written comments that you got, in
23 particular about ozone and we shouldn't worry about it
24 because some of these effects on kids are transient,
25 misses the point entirely. That transient does not mean

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31

1 safe. And I appreciated your having that included in your
2 slide.

3 I had one comment. I thought the reports were
4 very well done and clearly they can't be completely
5 comprehensive. And because different folks prepare
6 different portions of the report, I thought there was a
7 little bit of unevenness in the emphasis on the
8 relationship between oxides of nitrogen and some of the
9 findings most recently in the Children's Health Study with
10 respect to lung development. For example, in Mark

11 Frampton's report, which does reference the early findings
12 of the John Peters group, it just references nitrogen
13 dioxide as having an effect on kids with asthma, but
14 doesn't even remark on the potential for diminished lung
15 growth, which is far more potentially important in terms
16 of its implications.

17 And so I think it would have been helpful to have
18 an extra sentence or two in that report, because I think
19 it's one of the most important findings that we've heard
20 about from the research that we're funding.

21 And I really appreciate Dr. Kleinman's remark,
22 prospectively, between the Children's Health Study and the
23 Fresno initiative where we may actually have an
24 opportunity to gather the kind of data that finally will
25 be, if not, a gold standard, at least a silver standard

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32

1 and be scientific.

2 The last point I want to make, this is a
3 spectacular group of experts, really knowledgeable in all
4 these areas with respect to the lungs and with respect to
5 pollutants. We're about to create a Children's
6 Environmental Health Center within the EPA. I think that
7 if you're going to develop a Children's Health Center,
8 please ask some children's experts to participate.

9 There really are a number of people who have a
10 specific interest, expertise and focus on pediatric,

11 pulmonary and other issues that really need to be
12 represented in the group of folks, whoever are picked, to
13 provide expertise to the California EPA.

14 So I hope that that process really reaches out
15 beyond the, you know, usual superb group of folks that we
16 deal with all the time into the community that's
17 interested in development, because that's what we're
18 talking about here, infants and children, and it's very
19 difficult to analyze them.

20 So given those couple of remarks, I really, as I
21 said at the very beginning, this was a big effort. I
22 think I understand a bit of, you know, you want to get
23 some attention, put infants and children out front. Don't
24 just put them out front, let's actually do something.
25 It's like the politician who kisses the child to get

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33

1 elected and then forgets about the child because the child
2 doesn't vote.

3 Well, I really hope that we really continue the
4 activity and I appreciate the compliance entirely with SB
5 25 and I compliment you guys on a really good job.

6 Thank you.

7 CHAIRPERSON LLOYD: Thank you for those excellent
8 comments, Dr. Friedman.

9 Ms. Riordan.

10 BOARD MEMBER RIORDAN: Mr. Chairman, it occurs to

11 me, do we have the time to perhaps do the preamble that
12 Dr. Friedman indicated? I think it's a good idea if we
13 could do it. It appears to me it has to be in to the
14 Legislature, when, no later than December 31st. And his
15 comments were something that would be less than two pages,
16 so could we include that?

17 BOARD MEMBER WILLIAM FRIEDMAN: Barbara, I think
18 it takes more than a week and a half with Christmas coming
19 up to do justice to it. And I think you have to identify
20 someone who would be thoughtful and wise enough to do it.

21 I'm less interested in getting it in right now
22 than our understanding that it needs to be part of a
23 future commentary that creates a framework within which
24 all the future findings, because this is not going to go
25 away, can be recognized. I don't think it can be done in

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34

1 two weeks. Maybe it can.

2 DR. LIPSETT: Could I respond to these comments,
3 briefly, please?

4 I was just told by Dr. Melonee Marty, who's the
5 Chief of our Air Toxicology and Epidemiology section, that
6 we actually have a document that was recently presented at
7 a public meeting, that it's almost as if it was tailor
8 made to deal with this, so this is something that probably
9 could be either incorporated or attached.

10 The other comment I wanted to make was I

11 appreciate your thoughtful comments. And I certainly
12 agree that with toxicologically controlled types of
13 exposures, it's very difficult to try to -- I mean
14 ethically it's not possible really to deal with the
15 children. However, we do, in addition to that, we do have
16 epidemiologic studies, which, you know, observes children,
17 free-living children in their natural environment.

18 And I think that the interpretation of these
19 studies with respect to the standards is somewhat less
20 problematic. But I certainly agree with the difficulties
21 of looking at the age dependence of specific effects and
22 how those carry through in development and into an adult.
23 And evidently we do have a document that we could attach
24 to it within a week or two.

25 BOARD MEMBER RIORDAN: I'm just thinking of those

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35

1 who are going to be very interested initially with the
2 first report. And I think the point is well made, if you
3 draw those items that you mentioned to their attention, it
4 is, I think to our advantage to let them know early on
5 some of the difficulties, in that preamble.

6 So, I mean, that's -- if it could be done, that
7 would be wonderful.

8 BOARD MEMBER WILLIAM FRIEDMAN: Sounds like it's
9 been done, that would be terrific. I'd love to see a
10 copy.

11 DR. LIPSETT: I have not seen this document. Dr.
12 Marty has just assured me though that it would meet the
13 specifications of what you would like. The other thing,
14 too, is we could attach a copy or at least reference the
15 latest publication of the Children's Health Study. The
16 study had not yet been published at the time Dr. Frampton
17 wrote his report or when we wrote our summaries, but it
18 has come out in the last month in the American Journal of
19 Respiratory and Critical Care Medicine.

20 And we could either, if you would like, we can
21 add a couple of sentences about or we could attach it as
22 well?

23 BOARD MEMBER WILLIAM FRIEDMAN: I think both
24 would be indicated, frankly.

25 DR. LIPSETT: Okay.

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36

1 CHAIRPERSON LLOYD: Seeing Dr. Marty back there,
2 is there any chance we could get a copy of that report
3 today?

4 DR. MARTY: I could probably have it faxed up.

5 CHAIRPERSON LLOYD: That would be great.

6 Any other comments or questions?

7 Dr. Burke.

8 BOARD MEMBER BURKE: Can I ask Dr. Friedman a
9 question? I've gotten testimony in the past that waffled
10 kind of on this issue and I wondered if you could clarify

11 it for me.

12 If you have a given unit of pollution and an
13 adult is exposed to that given unit of pollution and a
14 child is exposed to that given unit of pollution, given
15 the smaller lung size of the child, is the effect on the
16 child geometrically proportionate to the effect on the
17 adult? And the second part of the question is, is there,
18 in fact, then a domino effect on the child which would not
19 be found in the adult?

20 BOARD MEMBER WILLIAM FRIEDMAN: There are so many
21 different aspects of that issue, first of all.

22 There may or may not be a relationship between
23 the size of the lungs and the size of the insole. The
24 volume of distribution of insole may be different, but the
25 concentration of the insole depending on the rate of

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37

1 breathing or what have you is so different, the child may
2 be breathing at 30 to 40 times a minute and an adult 12
3 times a minute. But it may or may not have an effect
4 depending on what the enzymes responsible for metabolizing
5 the pollutant is with respect to age.

6 A kid may be revved up as a full-speed machine
7 and most adults that I know are not going at full speed
8 anymore. So, you know, there are so many variables that
9 there's not a simple answer. And you'd like to think
10 that, you know, children, by definition, are vulnerable,

11 when, in fact, in certain cases they're less vulnerable,
12 depends on the insole. And that's the reason, you know,
13 the epidemiology explains it. There's never control of
14 all the variables you'd like to know in an epidemiologic
15 study, to respond to your question.

16 And so what I've just done is a typical
17 professorial way of telling you I don't know with four
18 paragraphs.

19 (Laughter.)

20 CHAIRPERSON LLOYD: Mr. McKinnon.

21 BOARD MEMBER MCKINNON: Also for Dr. Friedman.
22 You talked about we're working on including the study.
23 You also talked about, kind of, a practical step that we
24 should include experts in the future. Should we add
25 something to the resolution, a line or something, that

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38

1 talks about including folks that do developmental medicine
2 or research?

3 BOARD MEMBER WILLIAM FRIEDMAN: I don't see any
4 harm. I think that would be fine. I don't even know
5 exactly how the process of appointment and identification
6 will occur. I mean, we're all on board in wanting the
7 very best people. If we can, sort of, have a little
8 asterisk reminder, it certainly would be helpful.

9 I'm not anxious that we take over or make
10 specific recommendations, just that we be mindful of how

11 we have to reach out to get folks with that specific
12 interest on that environmental health center. So if it's
13 possible to add that sentence, we ought to do it.

14 CHAIRPERSON LLOYD: I think here at the bottom of
15 the first page, it says, "By current standard by
16 recognized independent expert." We could put a paren
17 there, "including", if that would be appropriate?

18 EXECUTIVE DIRECTOR KENNY: That's fine.

19 CHAIRPERSON LLOYD: Any other questions?

20 I know I think we have one witness signed up.
21 But before that I'd like to ask, again, I see in the
22 resolution PM 10, "including sulfates by December 31st,
23 2002." In all honesty, from my viewpoint, that's not good
24 enough. We have to do it much faster.

25 This is an area where there's great concern. We

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39

1 heard it last board meeting, we'll hear some more today,
2 this afternoon, I'm sure, about particulates, relative
3 toxicity, et cetera. I think we need to accelerate it. I
4 know it says by December 31st, so there's the caveat
5 there. But from my experience when you've got a "by" it's
6 always "at". So I would suggest that we try to, you know,
7 aim for something like the Spring of 2002, because I don't
8 think it's unreasonable. It's over a year to get the work
9 done.

10 And there's a lot of emerging data here and in

11 Europe. And I recognize we'll never have all the
12 information we need, but I would request that we actually
13 put a harder target in there, because we're going to need
14 the information, and sooner rather than later.

15 Dr. Lipsett.

16 DR. LIPSETT: Could I respond to that? I think
17 we will make every effort to accelerate this process, and
18 we'll work and ARB staff. I think it will be necessary to
19 probably contract out part of the reviews as we did for
20 the initial process, but we will make every effort to try
21 and accelerate it.

22 CHAIRPERSON LLOYD: That will be great. And
23 maybe I'd request the Executive Officer, if we see a
24 reason why this can't be met, keep us informed.
25 Otherwise, I will look for something in the Spring of

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40

1 2002.

2 EXECUTIVE DIRECTOR KENNY: All right.

3 CHAIRPERSON LLOYD: We have one witness signed up
4 today Brian Lamb, District Counsel with the Great Basin
5 APThatD.

6 Good morning, Brian.

7 MR. LAMB: Mr. Chairman, honorable members. With
8 the lights and the cameras, I have to keep reminding
9 myself I'm not addressing the Florida Supreme Court.

10 (Laughter.)

11 MR. LAMB: I call you "Your Justices." I'm the
12 District Counsel for the Great Basin Air Pollution Control
13 District. We're the air pollution control district
14 comprised of Alpine, Mono and Inyo counties, all of the
15 Eastern Sierra counties. We have four nonattainment areas
16 for particulate matter, including what EPA has designated
17 the largest single source of particulate matter pollution
18 in the United States, which is the dry lakebed of the
19 Owens Dry Lake.

20 And, at this time, I'd be remiss if I didn't
21 acknowledge the contributions of several Chairmen of the
22 Air Resources Board, past and present namely John Dunlap,
23 Chairman Riordan, and our current Chairman Lloyd for their
24 encouragement and support in getting us to address the air
25 pollution off the Owens Dry Lake.

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41

1 The status now is that the City of Los Angeles
2 has hired a contractor for \$72 million to implement the
3 first phase of the control measure. They have
4 structurally retrofitted the California -- I'm sorry, the
5 Los Angeles aqueduct to provide the water to control 13
6 and a half square miles of the Owens Dry Lake, which is
7 more than one-third of the area that's been described as
8 needing control.

9 So we're making progress. And a lot of the
10 credit for that comes from the encouragement and support

11 we've gotten from the top at ARB.

12 On behalf of my APThatO Ellen Hardbeck, I am here
13 to endorse the recommendation that you make particulate
14 matter your first priority for review. We see in our
15 district the effects on sensitive populations of
16 particulate matter. We have a number of Indian
17 reservations, some of which are very close to Owens Dry
18 Lake and to other sources of particulate matter. We have
19 a Navy base, which is actually in Kern County, but which
20 is affected very often by transport from Owens Lake and we
21 see acute episodes of both respiratory and cardiovascular
22 complaints based on these events.

23 I think I wanted to, along with the -- in picking
24 up on Dr. Friedman's comments, that we're kind of in a
25 funny situation with respect to the legislation by the

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42

1 State Legislature, which is asking us to review the
2 location of our goalpost for particulate matter. At the
3 same time, our statewide structure for making progress
4 toward attainment of the State standards is very different
5 for particulate matter than it is for, say, ozone and
6 certain other particulate -- certain other pollutants.

7 In particular, we don't have, in California, the
8 same planning and control requirements for particulate
9 matter as we do for ozone and other pollutants. So,
10 although we do planning and we do controls and we have

11 deadlines under the federal Clean Air Act, for reasons
12 that aren't always clear, particulate matter has been
13 exempted from those planning and control requirements
14 under the California Clean Air Act.

15 So on the one hand, the Legislature is advising
16 us, perhaps, to move the goalposts back for particulate
17 matter, without providing us with a gameplan or a playbook
18 or a time clock or requiring us to develop or adopt those
19 to make real progress toward attainment of the State
20 standards.

21 The dichotomy between the treatment of the State
22 standard for particulate matter and for ozone has actually
23 come up several times in the regulatory context in our
24 district, where we've had to actually convince sources
25 that the PM standard was an enforceable requirement and

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43

1 not just a goal. And whenever that happens we call Leslie
2 Krinsk and she gives us the right opinion, that it's a
3 State requirement.

4 So I think when we look at the total framework
5 for addressing particulate matter pollution in California,
6 we're going to have to come to the issue of are we going
7 to have a statewide plan or a statewide requirement of
8 actually meeting these goals other than just addressing
9 what the level should be.

10 One third point, and it's a little technical and

11 we've addressed it on the Board once before, so for a
12 reason that's not really clear, the particulate matter
13 standard for the State standard not only tells you what
14 the level of the standard is, it tells you what kind of
15 monitor you can use to determine the level of the
16 standard.

17 So in 1985 when the State standard was adopted,
18 the State of the art for measurement of particulate matter
19 was the high volume size elective inlet monitor which is
20 an Anderson Sampler. And in fact, I have the staff report
21 from 1985 and the staff said we have direction from the
22 Board to make sure that our monitors that we require are
23 the same as the monitors that EPA is going to require.

24 Well, what happened is this requirement of using
25 that particular kind of monitor was set in stone. When

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44

1 the standard was adopted, monitoring technology has moved
2 on, we find ourselves in the funny situation very often of
3 we're using EPA reference-method samplers and
4 equivalent-method samplers. All around Owens Lake we're
5 setting up more monitoring stations.

6 But in order to measure for the State standard,
7 we would have to buy the old kind of monitor that most
8 people don't use anymore, and which we feel, in our
9 situation, is not as accurate as the most current
10 monitors. So I'm asking your staff and you to consider in

11 reformulating this standard to allow for or provide that
12 the districts can use the federal reference method
13 monitors for attainment purposes of determining attainment
14 with the State standard.

15 CHAIRPERSON LLOYD: Thank you. I presume on the
16 latter point that the way in which you would actually
17 measure the concentration to compare the standard would be
18 addressed in the review.

19 EXECUTIVE DIRECTOR KENNY: I'm going to presume
20 the same thing.

21 CHAIRPERSON LLOYD: I think that. You make a
22 good point and clearly we feel that we're continuing to be
23 leaders in the area. And what you're saying is we have to
24 compare it with some old technology. I understand that
25 may probably be the rationale, but it seems that we should

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45

1 revisit that.

2 MR. LAMB: Thank You.

3 CHAIRPERSON LLOYD: Thank you very much. Have
4 you got any other comments, Mr. Kenny?

5 EXECUTIVE DIRECTOR KENNY: No.

6 CHAIRPERSON LLOYD: Since this is not a
7 regulatory item, it's not necessary to officially close
8 the record. However, we do have a resolution before us
9 and I know we have Dr. Friedman's suggestion that I hope
10 that we will include that. I would also, if my colleagues

11 would be okay, I'd like to also include there that we
12 would try to complete the particulates by say April 30th,
13 2002 preferably, but no later than that.

14 So we're trying to ask the staff to do a little
15 bit of pressure. In all honesty, I think we do this with
16 the industry all the time, we keep pressure on. I think
17 it's -- why shouldn't we pressure the Government in this
18 case and some of our consultants. So I have every
19 confidence that we can meet those deadlines.

20 Do we have a motion for the resolution.

21 BOARD MEMBER WILLIAM FRIEDMAN: So move.

22 BOARD MEMBER RIORDAN: Second.

23 CHAIRPERSON LLOYD: All in favor say aye?

24 (Ayes.)

25 CHAIRPERSON LLOYD: Unanimous. Thank you very

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46

1 much and thank you Dr. Kleinman, Dr. Ostro and Dr. Lipsett
2 as well our staff, thank you.

3 We'll take a moment while we change staff and go
4 on to the next agenda item, that's the proposed guidelines
5 for the ZEV incentive program.

6 (Thereupon a pause in the proceedings occurred.)

7 CHAIRPERSON LLOYD: I'd like to continue with the
8 next item. The next item on the agenda today is 00-11-2,
9 Proposed Guidelines for the ZEV Incentive Program.

10 The incentive program is very timely and

11 significant. Assembly Bill 2061 by Assemblyman Alan
12 Lowenthal of Long Beach provides \$18 million in grants for
13 the purchase or lease of new zero emission vehicles during
14 this critical ramp-up period to the 2003 ZEV requirements.

15 A little more than two months ago, the Board held
16 its Biennial Review of the ZEV Program. Staff described
17 the results of its intensive investigations on the status
18 of ZEV development and implementation.

19 We also have an abundance of public comment from
20 automakers, to battery manufacturers, ZEV drivers electric
21 utilities and environmental groups. In addition, we
22 received more than 85,000 letters and cards on the matter.

23 We heard that ZEVs are significantly cleaner than
24 the alternatives even after taking power plant emissions
25 into account. We also heard that EV drivers love their

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47

1 vehicles and that ZEVs are capable of meeting almost all
2 of their transportation needs and are fun to drive as
3 well.

4 But we were also told that there was a problem,
5 there are no ZEVs available. And we heard significant
6 disagreement over the marketability of today's ZEVs.
7 Cost, range and recharge time are major concerns, with
8 cost remaining a huge factor. ZEVs today are more
9 expensive than their conventional counterparts and will
10 continue to be so for the foreseeable future.

11 After listening to the testimony, the Board
12 unanimously decided to keep the ZEV mandate in place.
13 Half of our State's smog-forming pollutants come from
14 motor vehicles. All together these vehicles drive a
15 quarter of a trillion miles per year, a quarter of a
16 trillion miles per year. We need more than low emissions.
17 We need zero emission vehicles. We also need the
18 technological innovations that have resulted from the ZEV
19 mandate. ZEVs are sometimes referred to as our gold
20 standard, with no tailpipe or evaporative emissions and no
21 emission control equipment to degrade.

22 The Board did address concerns on several items:
23 In particular, the need for product availability, the
24 cost, the uncertainty regarding market demand, the cost
25 and the need for incentives. We directed staff to develop

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48

1 and propose regulatory modifications and other steps that
2 address some of these challenges to the successful
3 long-term implementation of the ZEV Program.

4 As I mentioned earlier, staff will be coming back
5 to the Board on January 25th, 2001 with a specific
6 proposal. As I mentioned before, the staff report will be
7 out tomorrow. As luck would have it, the State
8 Legislature was working at the same time on its own
9 contribution to the ZEV Program, an \$18 million grant
10 program. And it, in fact, was signed by the Governor into

11 law.

12 So I'm looking forward to staff's presentation of
13 how we can quickly put the money to use to address some of
14 the concerns that the Board expressed at the ZEV hearing,
15 so that, in fact, we can get these programs on the road
16 quickly and address some of our not only air pollution
17 concerns but also our fuel diversity.

18 At this point I would like to ask Mr. Kenny to
19 introduce the item and begin the staff presentation.

20 EXECUTIVE DIRECTOR KENNY: Thank you, Mr.
21 Chairman and members of the Board. Today staff is
22 proposing guidelines for a ZEV incentive program pursuant
23 to AB 2061. Governor Davis signed this bill into law on
24 September 30th and it became effective immediately as an
25 urgency bill. We believe it is important to get the

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49

1 program up and running because the bill authorizes grants
2 for the purchase or lease of ZEVs beginning October 1st
3 2000.

4 Staff has worked many long hours over a very
5 short period of time to bring these guidelines to you.
6 This is a significant ZEV incentive program. Eighteen
7 million dollars in grants. The is also a timely proposal,
8 providing incentives for ZEVs between October 1st, 2000
9 and December 31st, 2002, the ramp-up period to the 2003
10 ZEV requirements.

11 ARB is directed to develop and administer the
12 program in consultation with the California Energy
13 Commission and the Department of Motor Vehicles. Local
14 air districts can also administer the program in their
15 jurisdictions on a voluntary basis. The program would
16 provide a maximum grant of up to \$9,000 for each eligible
17 ZEV purchased or leased by individuals, local government
18 agencies, State agencies, nonprofit organizations and
19 private businesses.

20 The air districts are also allowed to augment
21 these grants. There are sufficient State funds for, at
22 least, 2,000 ZEVs. The bill directed ARB to develop
23 guidelines for the grant program. Staff received input
24 from various stakeholders, from the bill sponsors, the
25 CE that the Department of Motor Vehicles, the Franchise Tax

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50

1 Board, the air districts and some vehicle manufacturers
2 and dealers in developing the proposed guidelines.

3 These guidelines contain a schedule for
4 implementing the program and identifying the recipients, a
5 criteria for eligible vehicles, procedures for
6 administering the program and criteria to be met by air
7 districts volunteering to administer the program.

8 Judy Yee will make the staff presentation.

9 Judy.

10 (Thereupon an overhead presentation was

11 presented as follows.)

12 AIR POLLUTION SPECIALIST YEE: Thank you, Mr.
13 Kenny.

14 --o0o--

15 AIR POLLUTION SPECIALIST YEE: Chairman Lloyd,
16 members of the Board, for today's agenda staff will
17 provide an overview of Assembly Bill 2061, describe
18 staff's proposed guidelines for implementing the zero
19 emission vehicle, the ZEV, incentive program created by
20 this bill, identify some issues that remain, offer staff's
21 recommendation for some changes to the proposed guidelines
22 and list the steps that staff will take to implement the
23 program.

24 We will conclude with a summary.

25 --o0o--

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51

1 AIR POLLUTION SPECIALIST YEE: Chairman Lloyd
2 mentioned that AB 2061 creates an incentive program that
3 will complement the Board's September decision to reaffirm
4 the ZEV mandate. The new incentive program for zero
5 emission vehicles will be a statewide program. The
6 current incentive programs are geographically limited,
7 covering seven specific areas of the State. The largest
8 areas are the Bay Area and the south coast.

9 The program has the potential to introduce ZEVs
10 to additional areas of the State. The \$18 million are

11 automakers and dealers, the administrators and local,
12 regional and State agencies. The group met twice and
13 provided review and comments on the earlier drafts of the
14 guidelines. We were able to incorporate many of their
15 suggestions in the proposed guidelines and appreciate
16 their contributions.

17 --o0o--

18 AIR POLLUTION SPECIALIST YEE: How will the
19 program be administered? A program manager will be
20 established to administer the program for ARB. The
21 proposed guidelines specify that the ARB program manager
22 will administer the statewide program. Where a local air
23 district volunteers to administer the program within its
24 jurisdiction, the ARB program manager will work closely
25 with the district to ensure that its implementation of the

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54

1 program is in accordance with the guidelines.

2 The ARB program manager will work with the
3 district to establish the mechanisms for transfer of State
4 funds for payment of the grants approved by the district.

5 As mentioned previously, an informally working
6 group assisted staff in developing these guidelines.
7 Staff has proposed in the guidelines that such a working
8 group be expanded and meet on a regular basis at least
9 quarterly to ensure that the integration of State and
10 locally available ZEV incentives is easy, transparent and

11 seamless to the consumers.

12 --o0o--

13 AIR POLLUTION SPECIALIST YEE: How will the
14 grants be obtained?

15 It's staff's intent that the program design will
16 provide the consumer with a one-stop seamless shopping
17 experience. As with the current vehicle incentive
18 programs, the vehicle dealer will assist in the process.
19 The dealer will begin filling in the application for a
20 grant and will have the consumer complete and sign the
21 application as part of the vehicle purchase or lease
22 process.

23 The consumer then has two options for receiving
24 the grant. We assume that most consumers will assign the
25 grant to the vehicle dealer lessor to reduce the monthly

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55

1 lease payments that the consumer must make. However, the
2 consumer is not required to sign the grant. In that case,
3 there will be a higher, upfront vehicle cost to the
4 consumer, but the cost will be defrayed by three equal
5 annual grant payments sent directly to the consumer.

6 The consumer may also apply directly to the
7 program manager to receive a grant retroactively. Staff
8 is aware of six to eight ZEVs that have been leased as of
9 October 1st, the effective date of this program. And
10 these vehicles would be eligible to receive grants

11 retroactively.

12 --o0o--

13 AIR POLLUTION SPECIALIST YEE: The eligibility
14 criteria section of the guidelines establishes the
15 criteria for applicant eligibility and the criteria for
16 vehicle eligibility.

17 --o0o--

18 AIR POLLUTION SPECIALIST YEE: The criteria for
19 applicant eligibility are clearly laid out for this
20 program in AB 2061. The bill lists individuals, local
21 governments, State agencies, nonprofit organizations, and
22 private businesses as qualified recipients. The bill does
23 not, however, identify federal agencies as qualified
24 recipients.

25 Therefore, staff is proposing that federal

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56

1 agencies and entities such as the US Postal Service and
2 military facilities would not qualify for its incentives
3 through the program.

4 --o0o--

5 AIR POLLUTION SPECIALIST YEE: AB 2061 identified
6 these criteria for vehicle eligibility. The vehicle must
7 be a new zero emission light-duty car or truck capable of
8 operation on the freeway, and it must meet all applicable
9 safety standards. The ZEV must be purchased or leased
10 between October 1, 2000 and December 31st, 2002 and be

11 Staff is proposing that vehicles that are
12 required by our Memorandum Of Agreement with the
13 automakers be, as a matter of policy, ineligible for
14 incentives through this program. MOA vehicles placed
15 earlier received \$5,000 in local incentives and such
16 incentives remain available. Staff believes only a few
17 MOA vehicles will fall under the exclusion.

18 Language in AB 2061 excludes motorcycles, medium-
19 and heavy-duty vehicles, such as delivery vans and buses.
20 Therefore these buses are not eligible for incentives from
21 this program also.

22 --o0o--

23 AIR POLLUTION SPECIALIST YEE: The ZEV
24 manufacturer must establish that their vehicle meets the
25 criterion that it is capable of operation on the freeway.

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58

1 The manufacturer must assure the ARB program manager in
2 writing that the vehicle has the ability to operate on the
3 freeway in compliance with the California Vehicle Code.
4 Neighborhood or low-speed vehicles limited by the vehicle
5 code to roadways with speed limits of 35 miles per hour or
6 lower clearly do not meet and are not eligible for
7 incentives from this program.

8 Additionally, the ZEV would not be eligible if it
9 is the manufacturer's recommendation to the consumer that
10 the vehicle should not be operated or should have limited

11 operation on a freeway.

12 --o0o--

13 AIR POLLUTION SPECIALIST YEE: Additionally, a
14 vehicle must meet all applicable federal and State safety
15 standards. The automakers will be required to provide
16 appropriate documentation to the ARB program manager
17 demonstrating that its ZEVs meet applicable federal motor
18 vehicle safety standards, the FMVSS, and California
19 Vehicle Codes.

20 Where the ZEV's are to be utilized solely for a
21 demonstration project or are imported in limited numbers,
22 manufacturers typically obtain waivers or exemptions to
23 the FMVSS. In such cases, the automaker will need to
24 submit copies of appropriate applications and approvals,
25 if applicable, to the ARB program manager.

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59

1 --o0o--

2 AIR POLLUTION SPECIALIST YEE: A variety of ZEVs
3 will be eligible for incentives from this program. Shown
4 here clockwise from the upper left corner is a two-seat
5 passenger car, a five-seat van, a two-seat City EV and a
6 light-duty truck.

7 --o0o--

8 AIR POLLUTION SPECIALIST YEE: The proposed
9 guidelines describe the program's incentive structure. AB
10 2061 specifies that the maximum grant is 90 percent of the

11 ZEV's incremental cost over \$1,000 up to a maximum of
12 \$9,000 per vehicle. The Energy Commission will provide
13 incremental cost data to the ARB program manager. The
14 incremental cost is defined by the bill as the reasonable
15 difference between the cost of the ZEV and a comparable
16 gasoline or diesel fuel vehicle.

17 This is the same definition that the Energy
18 Commission utilizes for incremental costs.

19 Excuse me.

20 This is the --

21 CHAIRPERSON LLOYD: Take your time.

22 I realize being on camera is a bit of a strain.

23 (Laughter.)

24 ZEV IMPLEMENTATION SECTION MANAGER BEVAN: This
25 is the same incremental cost --

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60

1 CHAIRPERSON LLOYD: This is now Analisa Bevan
2 taking over.

3 ZEV IMPLEMENTATION SECTION MANAGER BEVAN: This
4 is the same definition that the Energy Commission utilizes
5 for incremental costs that is used to calculate a lower
6 vehicle license fee for alternative fueled vehicles, which
7 includes ZEVs. Senate Bill 1782, which was sponsored by
8 Senator Thompson allows for the ZEV license fee to be
9 based on the cost of a comparable, conventionally fueled
10 vehicle. For the vehicle license fee exemption, the

11 Energy Commission compares the Manufacturer's Suggested
12 Retail Price, MSRP, for the ZEVs and comparable vehicles.

13 They have determined incremental costs for ZEVs
14 ranging from \$11,000 to over \$20,000. ZEVs with
15 incremental costs in that range would be eligible in the
16 program for the maximum grant, \$9,000.

17 AIR POLLUTION SPECIALIST YEE: Thank you Analisa.

18 --o0o--

19 AIR POLLUTION SPECIALIST YEE: Moving on to the
20 next item in today's agenda, the issues remaining. During
21 the working group meetings various stakeholders were able
22 to share their experiences with the existing incentive
23 programs and they made recommendations or brought forth
24 issues for consideration by staff.

25 As mentioned earlier, AB 2061 excludes certain

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61

1 vehicles from being eligible for grants from this program.
2 However, categories of excluded vehicles, such as zero
3 emission motorcycles and neighborhood electric vehicles
4 may provide air quality benefits. There are existing
5 programs and we anticipate additional ones in the near
6 term that provide incentives for these categories of
7 vehicles.

8 Tax consequences are listed here as an issue only
9 because this is not fully resolved. Public agencies do
10 not pay taxes. However, some of the private consumers

11 week or so. Staff will accept applications almost
12 immediately. As mentioned earlier, staff is aware of
13 several instances of ZEVs being leased since October 1.

14 Staff will conduct outreach activities to promote
15 awareness of the incentive program on an ongoing basis.
16 And staff has targeted February 2001 to begin distribution
17 of grants.

18 --o0o--

19 AIR POLLUTION SPECIALIST YEE: Here we list
20 planned outreach activities. Staff is in the process of
21 developing outreach materials to distribute. The
22 interested public will be directed to our zero emission
23 vehicle web site or alternatively our toll free number
24 1-800-END-SMOG for our information on the program. If
25 they have questions, they are provided with telephone and

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63

1 E-mail contacts to knowledgeable program staff.

2 We intend to hold informational workshops for
3 auto dealers. Staff will also continue to coordinate with
4 managers of other incentive programs. Staff will meet
5 quarterly with an expanded working group to resolve any
6 issues that may come up during program implementation. We
7 expect that the group will also be an excellent source for
8 suggestions for additional outreach activities.

9 --o0o--

10 AIR POLLUTION SPECIALIST YEE: To summarize, ZEV

11 incentives will help with the transition to the 2003 ZEV
12 requirements. The proposed guidelines will be used by the
13 ARB program manager and volunteer local air districts to
14 implement a consistent program throughout the state and
15 for the timely award of incentives.

16 The application process will occur primarily
17 through the vehicle purchase or lease process that
18 typically takes place at the auto dealer. Staff and
19 stakeholders recognize that quick response to
20 implementation issues and coordination with existing
21 incentive programs is essential for an effective
22 user-friendly program.

23 We would like to thank the stakeholders who
24 assisted in developing these guidelines, the bill
25 sponsors, ZEV proponents, automakers and dealers, fleet

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64

1 administrators, local air districts and regional and State
2 agencies, including the Energy Commission, the Department
3 of General Services, DMV and the CHP.

4 This concludes staff's presentation and we'd be
5 happy to take any questions.

6 CHAIRPERSON LLOYD: Thank you very much. Do the
7 Board Members have any questions?

8 Dr. Burke.

9 BOARD MEMBER BURKE: I'm not quite clear on what
10 our role is in our outreach to people to educate them to

11 the availability of money. In my briefing from the staff,
12 they did an excellent job in filling me in on the program,
13 but I kept asking how do people who are not techees, who
14 are not advocates of clean air, who are not friends of ARB
15 or their local air districts find out about the program?

16 And the discussion that was kind of stopped at
17 the dealer, which I have a grave question about how much
18 they'll do to educate the public in general.

19 CHAIRPERSON LLOYD: You have some experience in
20 that area, I understand.

21 (Laughter.)

22 BOARD MEMBER BURKE: Yeah. So I was just hoping
23 that we would have some -- and they said that there is an
24 outreach program. I just think that it's important that
25 we know about it and that it does go forward to those

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65

1 areas. I think we ought to concentrate on people who are
2 exactly -- who would never think about owning an electric
3 vehicle, because that's where the real education, I think
4 needs to be.

5 CHAIRPERSON LLOYD: Comments from the staff?

6 ON-ROADS CONTROLS BRANCH CHIEF KITOWSKI: I'll
7 start it. There's certainly no disagreement there.
8 Outreach is going to be a key critical factor of what we
9 are going to be doing in the future. And the outreach of
10 this program is simply a small part of the larger outreach

11 package and the work that we need to do over the next
12 couple of years. And I think you'll be seeing more of the
13 larger outreach program for the ZEV requirement in
14 January, but there's no dispute that outreach is a
15 necessary component of zero emission vehicles.

16 And we actually, although the dealers and -- I
17 understand the skepticism about the dealers. We actually
18 do, though, look forward hopefully to partnering more
19 extensively with dealers and automakers in the future as
20 they really do need to ramp up to higher production levels
21 in the future.

22 BOARD MEMBER BURKE: Can you tell me how Arizona
23 was so successful in -- well, wait a minute, I'm --

24 (Laughter.)

25 BOARD MEMBER DeSAULNIER: Define success?

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66

1 (Laughter.)

2 BOARD MEMBER BURKE: I've only got six EVs in my
3 garage from Arizona, so I'm looking for a couple more.

4 (Laughter.)

5 BOARD MEMBER BURKE: But you see, even, you know,
6 everybody is not inclined to do those kind of things, so
7 the word had to get out someway other than, you know,
8 here's some free money, let's go down and get it.

9 (Laughter.)

10 BOARD MEMBER BURKE: I know that, you know, it

11 was a terrible situation, but maybe in that mess there's
12 something that we can learn and utilize.

13 CHAIRPERSON LLOYD: I don't know whether --

14 BOARD MEMBER BURKE: Do you know how they
15 marketed to the general public, was there government
16 involvement or was it totally the dealers?

17 EXECUTIVE DIRECTOR KENNY: Dr. Burke, we can look
18 at the Arizona experience and try to learn from it. I
19 think one of the things that we probably can't copy with
20 the Arizona experience is, to a certain extent what they
21 ended up doing, was almost giving out free vehicles. It
22 wasn't just simply subsidies on vehicles.

23 BOARD MEMBER BURKE: \$221 million.

24 EXECUTIVE DIRECTOR KENNY: Yeah. And we're
25 obviously not quite there.

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67

1 (Laughter.)

2 EXECUTIVE DIRECTOR KENNY: But we can look at
3 essentially some of the techniques that they used to try
4 to market to the public and see what might be advantageous
5 here in California.

6 BOARD MEMBER BURKE: I understand because of the
7 Arizona experience, Ferrari is not going to be looking to
8 do an EV.

9 CHAIRPERSON LLOYD: Professor Friedman.

10 BOARD MEMBER HUGH FRIEDMAN: Well, we had talked

11 previously when we were discussing revisiting the mandate
12 about trying to develop an effective coalition of the
13 environmental organizations and others who are natural
14 supporters of the ZEV mandate and of getting these
15 vehicles placed and used and on the road, so that others
16 will see them and they can be given a fair test in the
17 public.

18 And it seems to me that with the reality of the
19 subsidy, as modest as it is, but perhaps with more to
20 come, hopefully, that we could enlist the support of the
21 long list of legitimate organizations, all of whom who
22 have members, and try and get them through their news
23 letters, through -- try and enlist their support in it,
24 and get it out, that there are these subsidies, and then
25 let people -- and whatever information we can help them

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68

1 disseminate about how to go about accessing these
2 subsidies, the leases and all that.

3 EXECUTIVE DIRECTOR KENNY: You're right, we can
4 do that. And I think, actually, one of the things you're
5 probably going to hear in a few moments is from Dave
6 Modisette. And when he talks about, you know, what his
7 organization has been doing and really, quite honestly,
8 his efforts in Electric Transportation Coalition's efforts
9 were very instrumental in the bill getting passed.

10 And I think we will see a lot of effort to

11 essentially kind of partner with them, partner with the
12 environmental organizations to make sure people are aware
13 of what's happening and what opportunities are out there.

14 BOARD MEMBER BURKE: Obviously, my concern is in
15 those areas where normally those kind of communications
16 are not viable in the areas of where the environmentally
17 challenged people are also economically challenged. So
18 the natural assumption is because you're economically
19 challenged, that you're not going to go out and buy an EV.
20 And I don't think that that is necessarily so if you're
21 properly educated, because those environmentally impacted
22 communities need the most help.

23 And I think, quite honestly, my experience in the
24 last seven years, is they're becoming more aware of the
25 environment as a whole and they have an interest now,

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69

1 where before it was like what, you know. But now there is
2 an interest, so I think if we can encourage that and
3 enhance that, I think we'll be serving the public
4 interest.

5 CHAIRPERSON LLOYD: Supervisor DeSaulnier.

6 BOARD MEMBER DeSAULNIER: Somewhat along the
7 lines of Professor Friedman, and, Mike, maybe you can
8 respond to it, but in terms of this formula, I think is a
9 good beginning, but with new money maybe we can be more
10 proactive and be flexible, not so much just on subsidies

11 but looking at other money grants, sustainability,
12 partnering with transit agencies around station cars and
13 things like that. Maybe in a legislative -- now is a good
14 time to do it, to start looking for an author who might be
15 willing to carry that.

16 But I'm particularly interested in more
17 flexibility, so we don't just get hooked to the
18 subsidizing and the fine example of Arizona, because there
19 are other ways I think, and also to blend funding around,
20 particularly sustainability.

21 EXECUTIVE DIRECTOR KENNY: Actually, we will be
22 looking at that. And one of the things that we actually
23 had a whole lot of hopes for was kind of a transportation
24 connection here. And what would occur is that maybe using
25 station car concepts or using other types of electric

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70

1 vehicles in the context of transportation networks would
2 actually provide a lot of value to a lot of people.

3 And what would occur then is instead of a car
4 being associated with a person, the car would be
5 associated with a community and there would be multiple
6 users of that particular vehicle. And we are trying to
7 figure out mechanisms that we could pursue to incentivize
8 that.

9 BOARD MEMBER DeSAULNIER: And also around rental
10 fleets, particularly at airports. I think those are

11 exciting possibilities. So while this is good, I don't
12 think we should get locked into the formula. It might be
13 good to really start to work on it now.

14 CHAIRPERSON LLOYD: Thank you.

15 Mr. McKinnon.

16 BOARD MEMBER McKINNON: Yeah. I understand this
17 is one grant program in the whole, kind of, scheme of
18 ZEVs. And maybe, you know, as we get into things and in
19 the next couple of months, we can, you know, broadly nail
20 down some of the issues.

21 The one thing I think is really important is if
22 somebody is making a buy or lease decision on buying a
23 ZEV, on getting a ZEV, is that there be a source. And I
24 guess folks are working on a web page, and someone may
25 want to talk about that, but a source of kind of seamless

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71

1 information, so you can get all the information on all of
2 the subsidies available depending on where you live and
3 then also so you can consider issues like installation of
4 the charger at your house, so that a person kind of gets
5 everything they need to make that decision and then know
6 what they need to move through to do it. And I think it's
7 real helpful to consumers. And it's certainly not mine.
8 I think there's people way ahead of this. It just hasn't
9 come up.

10 CHAIRPERSON LLOYD: Dr. Burke, Mr. Calhoun.

11 BOARD MEMBER BURKE: I'm sorry.

12 BOARD MEMBER CALHOUN: One of the things I notice
13 in the staff report in there, no incentives would be
14 offered for the neighborhood electric vehicles. Will you
15 talk about the city electric vehicles, and I guess there
16 is, sort of, a catch all there that would allow the staff
17 to determine whether or not these vehicles can be operated
18 on a freeway. Can you clarify that. I looked at the bill
19 and I also looked at the staff report and it seems to me
20 that there is some flexibility in there that allows the
21 staff to make the determination as to whether or not the
22 city electric vehicles can operate; is that correct?

23 ON-ROADS CONTROLS BRANCH CHIEF KITOWSKI: What
24 the bill clearly says is the vehicle has to be freeway
25 capable.

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72

1 BOARD MEMBER CALHOUN: What does that mean?

2 ON-ROADS CONTROLS BRANCH CHIEF KITOWSKI: But it
3 doesn't define what freeway capable is. By saying freeway
4 capable, we feel it clearly takes away the neighborhood
5 electric vehicles. When you look at city electric
6 vehicles and you look at California requirements for being
7 able to operate on the freeway, the basic requirement
8 comes down to not impeding traffic. And so there aren't
9 really -- the State laws on being able to operate on a
10 freeway are rather vague and the city electric vehicles do

11 qualify.

12 Where we're, sort of, drawing the line at our
13 proposal would be that we are -- there's a lot of
14 incentive for the manufacturers, natural incentive, not to
15 put a vehicle in situations that it would be dangerous,
16 for liability reasons.

17 So we're feeling that the manufacturer will be
18 responsible in assessing whether their vehicle is, in
19 fact, freeway capable. And if they put any limitations on
20 it with regard to their consumers, then they would be out
21 of this program.

22 So if the manufacturer is fully saying that their
23 vehicle is capable of operating on the freeway, and
24 therefore they're accepting the liability associated,
25 potential liability associated with that, we feel that's

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73

1 good enough for the program, and it does still comply with
2 the State law that is on the books.

3 BOARD MEMBER CALHOUN: Let me tell you what my
4 concern is. My vote at the September hearing was to
5 support advancement of technology. And I would hate to
6 see us take, what I call, sort of, a catch-all approach
7 just to comply with a regulation. And I certainly don't
8 want to see us offer a lot of incentives to something that
9 isn't going to take us where we want to be about 20 years
10 from now.

11 Bob Cross mentioned at the workshop that he
12 thought we ought to be looking down the road, where do we
13 want this program to be 20 years from now. And I think
14 that it's certainly consistent with my views. And I think
15 that we ought to be looking at something that's going to
16 force technology, and maybe I'm taking a preemptive strike
17 here relative to what's happening in January, but I just
18 have trouble with having golf carts getting incentives,
19 for certainly you can go buy those today.

20 EXECUTIVE DIRECTOR KENNY: If I might, we don't
21 think that the low-speed vehicles or the neighborhood
22 electric vehicles will get any incentives.

23 BOARD MEMBER CALHOUN: And I think what we're --

24 EXECUTIVE DIRECTOR KENNY: We don't think they
25 will receive any incentives under the proposal that we're

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74

1 making today. Well, actually what Mr. Cackette is saying
2 is that they will not. I'm actually saying I don't think
3 they will. And the reason I'm saying that is a low-speed
4 vehicle would not be able to be freeway capable. And so
5 what ends up happening there is that because it is not
6 freeway capable it cannot meet one of the criteria that is
7 essential for it to receive an incentive.

8 MOBILE SOURCE CONTROL DIVISION CHIEF CROSS:
9 There's a minimum speed limit on the freeways. And I
10 think it's 45. It's gone up. It used to be 45.

11 (Laughter.)

12 EXECUTIVE DIRECTOR KENNY: Let me go one step
13 further, which is essentially if you take --

14 BOARD MEMBER WILLIAM FRIEDMAN: I think it's 80.

15 (Laughter.)

16 EXECUTIVE DIRECTOR KENNY: It's 80, so we're
17 safe. I think the real key here, because essentially what
18 Mr. Kitowski was talking about, which is that you cannot
19 impede traffic when you're on the freeway, otherwise
20 you're operating illegally. And the difficulty to a
21 low-speed vehicle with a top speed of 35 miles an hour
22 will impede traffic on a freeway.

23 And consequently, it will not be freeway capable,
24 and consequently it will not be eligible for dollars.

25 BOARD MEMBER CALHOUN: It would impede traffic on

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75

1 some of the surface streets also, I just thought about it.

2 I think other thing, Mr. Calhoun, is that, you
3 know, we are looking at the issue of neighborhood electric
4 vehicles and we are trying to address that in the staff
5 proposal that will be released tomorrow with regard to the
6 ZEV Program for your consideration next month. And we
7 have actually taken a lot of these very issues into
8 consideration in terms of that staff proposal.

9 And the beauty you espoused a moment ago about
10 looking down the road, where do we want to be in the

11 future, that is exactly the kind of thinking that we are
12 involved in.

13 CHAIRPERSON LLOYD: Mr. Kenny, dealing with
14 vehicles, again, we know we've got a couple of letters
15 here vis-a-vis the sparrow. Now, my understanding is that
16 this is prohibited under the regulation, because it's
17 classified more as a motorcycle, am I correct on that?

18 EXECUTIVE DIRECTOR KENNY: You're correct. It is
19 classified as a motorcycle and we were not proposing
20 funding for motorcycles under the program.

21 CHAIRPERSON LLOYD: So we're prevented by the law
22 from doing that.

23 EXECUTIVE DIRECTOR KENNY: Yes.

24 CHAIRPERSON LLOYD: Thank you.

25 Mr. McKinnon.

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76

1 BOARD MEMBER McKINNON: In that you raised that,
2 I look forward to thinking of some way to include
3 motorcycles and vehicles like the sparrow. I, however,
4 agree that the law doesn't provide that. It's not only
5 something like a motorcycle, it's single passenger. And I
6 think the law looks pretty clear on that.

7 But, you know, maybe we can legislate some
8 approach to motorcycles and smaller vehicles like that,
9 because the sparrow certainly will get commuters to work
10 and back with zero emissions and so that is something we

11 should look towards.

12 CHAIRPERSON LLOYD: And Mr. Cross, I think --

13 MOBILE SOURCE CONTROL DIVISION CHIEF CROSS: I
14 had an extended conversation with our attorney and she
15 assures me that there is no speed limit anymore, minimum
16 speed limit.

17 I recall a sign, so I don't know maybe the law
18 changed. But I think that the point remains that a
19 vehicle which is designed for places that are speed
20 limited to 35 doesn't meet the test of having a minimum
21 speed, which is freeway safe.

22 In other words, if someone were traveling at 35
23 miles an hour on a freeway on one of the Los Angeles
24 freeways they'd get a ticket for obstructing traffic.
25 Variation that if -- and my recollection was that if not

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77

1 the absolute law, the guidance that the CHP used to use
2 was 45, but that was in a world with a speed limit of 55.

3 So I'm saying that, as far as I can see, there's
4 no way that a neighborhood vehicle would qualify as a
5 freeway-capable vehicle.

6 CHAIRPERSON LLOYD: Thank you.

7 Dr. Burke.

8 BOARD MEMBER BURKE: They're lucky if they get a
9 ticket in Los Angeles, you know, it's a drive-by shooting,
10 you know, you get one between the eyes.

11 But I just wanted to go back --

12 BOARD MEMBER RIORDAN: So you don't want to drive
13 slow, do you.

14 BOARD MEMBER BURKE: Mr. McKinnon's comment about
15 the Internet. There was a special on 20/20 last week,
16 which indicated that they were doing a comparison of all
17 the Internet car shopping, what do you call them, sites on
18 the Internet, and it's now so that you can go in and
19 compare every automobile at one time with one scroll, and
20 that means cost, insurance costs and those kind of things.

21 I think it's very important that we be in touch
22 with those web sites and make sure that with the grant
23 program that our -- that the vehicles which are going to
24 be offered in California be highlighted in their
25 comparison studies.

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78

1 EXECUTIVE DIRECTOR KENNY: We can do that.
2 That's a good idea, because what we can do is contact the
3 site and let them know that these subsidies are available
4 so that when people are scrolling down, they see that. In
5 fact, not only is the vehicle available but there's a
6 subsidy available with it, so we'll follow up on that.

7 CHAIRPERSON LLOYD: Any other comments from the
8 Board?

9 With that, we have two witnesses signed up. And
10 so I'd like to ask them to come forward. We have Dr.

11 Chung Liu from the South Coast AQMD, Dave Modisette from
12 the California Electric Transportation Coalition.

13 Good morning.

14 DR. LIU: Good morning, Dr. Lloyd, Members of The
15 Board.

16 The South Coast AQMD is interested in
17 administering the ZEV incentive program in our area and
18 will continue to support the deployment of zero emission
19 vehicles. The South Coast Mobile Source Air Pollution
20 Reduction Review Committee, the MSRThat has been a pioneer
21 in establishing buy-down incentive programs for zero
22 emission vehicles and developing infrastructure in our
23 area.

24 With the ongoing cooperation of all interested
25 parties including participation in ARB's quarterly working

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79

1 group meetings, we hope the effort will result in a
2 coordinated and efficient program that will minimize the
3 administrative costs.

4 We have the following three comments on the ARB
5 staff proposal. First, in the interest of maximizing
6 incentives for qualifying vehicles, the South Coast AQMD
7 supports the determination of incremental costs based on
8 vehicle manufacturers suggested retail prices, as proposed
9 by the ARB in Appendix That of the guidelines dated
10 November 28, 2000.

11 Second, although funding allocation to local air
12 districts is not fully described in the proposed
13 guidelines, the South Coast AQMD would support an approach
14 of population-based allocations in the beginning to air
15 districts with the ability to redistribute unused funding
16 to areas with greater demonstrated demand for that,
17 because we have a large population and really bad air
18 quality. Also, we have a very well established
19 infrastructure so if there's any unused funds, we'd like
20 to have a mechanism to very really pull it to our
21 direction.

22 Third, while the South Coast staff believes that
23 the ZEV incentive program will help reduce the short-term
24 incremental costs of zero emission vehicles, we're relying
25 heavily on the automakers and the strength of ARB

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80

1 requirements to ensure that full-function zero emission
2 vehicles are made available. We will be glad to work with
3 ARB to make sure that those vehicles will be available. I
4 think that's a major issue on our mind, because it's
5 questionable.

6 Thank you.

7 CHAIRPERSON LLOYD: What part of that is
8 questionable, Chung?

9 DR. LIU: We don't know how soon or how fast
10 those vehicles can be made really available in the market

11 and we don't have that kind of assurance from the OEMs.

12 BOARD MEMBER CALHOUN: When you speak of the
13 vehicle, you're talking about full-functioning electric
14 vehicles?

15 DR. LIU: Yes.

16 CHAIRPERSON LLOYD: I'm sure we'll hear more
17 about that on January 25th.

18 DR. LIU: Right. And for the next two years, at
19 this time, if you go out to purchase EVs, it's not that
20 easy. And so how soon those vehicles will be -- how soon
21 they're going to start to produce again, we really have to
22 work on.

23 CHAIRPERSON LLOYD: We certainly have an interest
24 in that as well as in working with you, so any help we can
25 get, we'd be delighted to accept that.

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81

1 DR. LIU: Thank you.

2 CHAIRPERSON LLOYD: Comments from the Board?

3 Dr. Burke.

4 BOARD MEMBER BURKE: I have to admit, I'm
5 confused. The grant that ARB is giving and the grant that
6 we at South Coast give through MSRThat that one added on
7 top of each other, or can you get both of those or do you
8 just get one of those?

9 ON-ROADS CONTROLS BRANCH CHIEF KITOWSKI: If I
10 may. You could get both of those yes. They are

11 independent grants. And when we talked about having a
12 seamless operation, that is part of the seamless
13 operation. We want to make sure people have the most
14 up-to-date information. The \$9,000 grant will be
15 available statewide. And the local districts may continue
16 the current grant operations that they have.

17 BOARD MEMBER BURKE: We're currently at \$5,000?

18 ON-ROADS CONTROLS BRANCH CHIEF KITOWSKI: Yes.

19 BOARD MEMBER BURKE: So it could be \$14,000 if
20 someone --

21 DR. LIU: The bill does not preclude to have that
22 out. But our understanding is MRSC --

23 BOARD MEMBER BURKE: If you applied that to the
24 lease, has anybody figured out how much a car would be on
25 the lease? I hear Arizona creeping up on me here.

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82

1 (Laughter.)

2 CHAIRPERSON LLOYD: Dr. Burke, I think next
3 speakers probably will be addressing that.

4 BOARD MEMBER BURKE: Okay, fine. Thank you.

5 CHAIRPERSON LLOYD: Thank you Chung.

6 Dave Modisette.

7 MR. MODISETTE: Yes. Thank you, Chairman Lloyd
8 and Members of the Board. I'm Dave Modisette. I'm
9 Director of the California Electric Transportation
10 Coalition. Our organization was one of the co-sponsors of

11 the legislation, Assembly Bill 2061. The other co-sponsor
12 was the Steven And Michelle Kirsch Foundation. And the
13 Kirsch Foundation was not able to send a representative
14 today, but my comments reflect the views of both
15 organizations.

16 We first want to thank --

17 CHAIRPERSON LLOYD: Please. No, he can't --

18 BOARD MEMBER BURKE: Sorry.

19 MR. MODISETTE: We first want to thank the ARB
20 staff for their hard work and thoughtfulness in developing
21 the guidelines. The purpose of AB 2061 was to make the
22 price of a full-service zero emission vehicle comparable
23 to that of a conventionally fueled vehicle. And we are
24 pleased to see that in the introduction to the proposed
25 guidelines the goal is repeated as the purpose for the

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83

1 program.

2 And with that purpose in mind, I guess it is
3 important that you understand that the incentives provided
4 under AB 2061 were designed to be complementary to the
5 existing and planned incentives provided by other State
6 agencies and local air districts.

7 In other words, AB 2061 was not designed as a
8 replacement for other State and local incentives. If it
9 were, we could not achieve our stated purpose, and, in
10 fact, we may have achieved very little in terms of

11 additional benefit to consumers.

12 Let me briefly illustrate this point from the
13 consumer point of view with the two-page chart that's been
14 handed out. There's three columns on the chart. It lists
15 incentives before passage of AB 2061. The next column
16 lists the impact to the consumer when you take the
17 existing incentives, plus the incentives provided by AB
18 2061 and then the last column would be if other State and
19 local agencies were to terminate their incentive program
20 so that the only incentive provided to consumers would be
21 that under AB 2061.

22 And you can see that before passage of AB 2061,
23 the current incentives, which is the incentive that's been
24 described, its a \$5,000 incentive. Half of that money is
25 provided by the California Energy Commission and other

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84

1 half is provided by the local air district with the
2 exception of the South Coast that provides the full \$5,000
3 incentive.

4 The impact of that on the consumer is about \$150
5 reduction in the lease price, three-year lease price. So
6 you can see what I've listed here as a typical monthly
7 lease price without any incentives is \$650, which just as
8 a foot note our organization believes is very, very high.
9 And we've always encouraged automakers to use pricing
10 techniques to try to pull that down. We think that they

11 can do that, they have the power to do that and they
12 should do that.

13 But nevertheless, you begin with that \$650
14 monthly lease price, you take off the \$150 a month that is
15 provided by the current incentive and you end up with a
16 monthly lease price of about \$500, and that's frankly what
17 people are paying today, you know a little more for some
18 vehicles, a little less for some vehicles.

19 And we really think that is too high for the
20 average person. That's not competitive in the world of
21 lease prices. So then in the next column you can see what
22 the impact of AB 2061 was. And our goal was really to cut
23 that \$500 lease price in half, and that's exactly what the
24 bill does. It translates into about a \$250 reduction in
25 the lease price, so that the lease price to the consumer

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85

1 for the vehicle is now only \$250 a month, which we believe
2 is the point when you begin to reach price parody with
3 conventional vehicles.

4 Now, if it turns out that the Energy Commission
5 and local air districts withdraw their incentive programs
6 at some time during the period of this legislation, the
7 third column illustrates what will happen, and that is the
8 benefit to the consumer would be \$250, so that the lease
9 price would go down to \$400, still a significant benefit,
10 but really not where we wanted to be.

11 Now, on the second page, you know, just to make
12 the situation worse, I guess, is if there is a ruling from
13 the IRS that the grants provided under the program
14 constitute taxable income, then a large portion of this
15 grant is going to go away to the federal government and
16 even to the State government, and the impact of that is
17 going to be to greatly reduce the incentive value to the
18 consumer.

19 So on the second page, I illustrate that impact
20 under a scenario where the IRS finds that this is taxable
21 income. And can you see in the last two columns, if
22 that's the case, the incentive provided by AB 2061 alone,
23 that is without the Energy Commission or air district
24 incentive will be \$150 only, the lease price will go down
25 to \$500.

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86

1 Well, that's exactly what it is today under the
2 current Energy Commission and air district program, so we
3 won't have made any headway at all if the other agencies
4 withdraw their incentive programs. If they keep their
5 incentive programs, however, even with tax implication,
6 even with the taxation of the grant program, we can still
7 bring that lease price down to about \$350, which is not as
8 low as we had hoped, but we believe is in the ballpark of
9 what a consumer would pay for a comparable vehicle.

10 So my purpose in explaining this to you today is

11 to really encourage you to meet with the Commissioners at
12 the California Energy Commission, to meet with the Board
13 members of the major urban air districts, to persuade them
14 to continue their existing incentive programs through the
15 life of this program and that would include the Energy
16 Commission's new efficient vehicle incentive program,
17 which they received \$5 million for in the budget and which
18 is currently under design at the Commission.

19 We also want to encourage you to work with
20 automobile manufacturers to encourage them to establish
21 purchase and lease prices for ZEVs that, after accounting
22 for incentives, are comparable to conventional vehicle
23 prices in the marketplace. As part of that effort, you
24 may want to review the results of past actions by the
25 Mobile Source Air Pollution Reduction Committee to

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87

1 establish a maximum MSRP and a maximum monthly lease price
2 as a condition of eligibility for existing ZEV incentives.

3 Lastly, we believe it is critically important
4 that all incentive programs be closely coordinated, so
5 that that prospective ZEV owners don't have to deal with
6 multiple agencies and multiple applications to obtain the
7 benefits of ZEV incentives.

8 Ideally, there would be a single source of
9 information for all ZEV incentives, and a single
10 coordinated application process. We are extremely pleased

11 that the proposed guidelines have adopted this as a goal
12 and have proposed formation of a working group to
13 accomplish this.

14 So, in conclusion, the California Electric
15 Transportation Coalition and the Kirsch Foundation urge
16 adoption of the guideline document before you with a
17 recognition that there is more work that needs to be done
18 with our sister agencies and other stakeholders to get
19 maximum benefits from this program.

20 Thank you.

21 CHAIRPERSON LLOYD: Thank you very much, Dave.

22 Any comments, questions from the Board?

23 Yes, Ms. D'Adamo.

24 I would like to thank you, by the way, you and
25 the Kirsch Foundation for all your efforts, and successful

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88

1 efforts, too.

2 Thank you.

3 BOARD MEMBER D'ADAMO: I'm just wondering, a
4 question of the witness or of staff, are there any other
5 options as to how we could structure it so that we could
6 get around the taxable income issue?

7 GENERAL COUNSEL WALSH: We have consulted with
8 both the federal and state taxing agency. And the advice
9 that we've gotten, as a general rule, these grants would
10 be taxable income to the recipients. There may be

11 individual taxpayers whose circumstances may dictate a
12 different result. But we were not able to come up with
13 anything that would allow us to structure it in a
14 different way, for example, in terms of how the money was
15 paid out to the dealers as opposed directly to the
16 recipients that would have affected the taxability of the
17 grant.

18 BOARD MEMBER D'ADAMO: What is different about AB
19 2061 and the existing incentives that are out there such
20 that the existing incentives apparently there are no
21 taxable income issues, correct, what's different about the
22 two program structures?

23 GENERAL COUNSEL WALSH: I don't know that there
24 are no taxable issues with respect to those programs.

25 MR. MODISETTE: This is actually a difficult

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89

1 issue or a gray area. Under the existing program the
2 \$5,000 grant from the Energy Commission and the air
3 districts goes directly to the vehicle manufacturer, and
4 the vehicle manufacturer then reduces the capital cost of
5 the vehicle and passes that benefit through to the
6 consumer in terms of reduced lease payment.

7 Now, a number of the automakers believe and
8 believe very strongly that because of this structure,
9 there is no tax implication either to them, because they
10 received the grant, or to the consumer. They believe, you

11 know, they are providing the same kind of rebates that
12 they provide for other vehicles. They're reducing the
13 cost of a product that the consumer is buying and
14 therefore there is no tax implication either to them or to
15 the consumer.

16 The only difference with the program is that
17 there is an option here for the consumer to receive the
18 funds directly, that is, a check would go from the Air
19 Resources Board or the State of California directly to the
20 consumer. And some people believe that that option means
21 that there is a tax effect, which apparently, you know, I
22 don't know, may apply, I'm not an attorney, may apply even
23 in a situation where the consumer elects to pass that
24 forward to the vehicle manufacturer.

25 BOARD MEMBER D'ADAMO: Because the option exists

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90

1 in the statute?

2 MR. MODISETTE: That's one of the things that
3 we're investigating.

4 GENERAL COUNSEL WALSH: Right, but in this case
5 the bill is written so that the dollars do, in fact, go to
6 the recipient dealer directly or indirectly through the
7 dealer as opposed to going to the manufacturer.

8 BOARD MEMBER D'ADAMO: Is staff researching the
9 issue or --

10 GENERAL COUNSEL WALSH: Yes.

11 BOARD MEMBER D'ADAMO: Could we hear back when
12 you do resolve that?

13 GENERAL COUNSEL WALSH: Yes.

14 STAFF COUNSEL DAVIS: If I may comment for the
15 benefit of the court reporter and the Board members, I'm
16 Victoria Davis. I'm staff counsel who's been assigned to
17 the program and I'm the person who actually spoke to
18 someone at the IRS. And I was told that there are options
19 for us to request determinations in writing of varying
20 levels of formality and bindingness. And we may, in fact,
21 be limited by our options with how the bill is already
22 written. But if we do request a determination, it may
23 offer guidance should we seek future legislation for
24 future similar programs.

25 Also, it was pointed out to me, especially since

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91

1 these grants will not be issued till next year, any tax
2 consequences won't have to be dealt with concretely until
3 after the end of the year. So we may be able to get
4 information and have accurate information to pass along to
5 the consumers within a few months. It's not completely
6 within our control certainly.

7 BOARD MEMBER D'ADAMO: Mr. Chairman. I'd like to
8 suggest that in your discussion with the IRS if they have
9 a recommendation or if you learn that, perhaps, the
10 legislation could be modified, we may want to pursue a

11 support of a cleanup bill in order to resolve the issue.

12 CHAIRPERSON LLOYD: Good point.

13 Dr. Burke.

14 BOARD MEMBER BURKE: That is exactly what I was
15 getting ready to say. And then in addition we may also
16 want to contact the California delegation, Congressional
17 delegation, and see if, in fact, there may not be a waiver
18 for it under something that they can find.

19 CHAIRPERSON LLOYD: Professor Friedman.

20 BOARD MEMBER HUGH FRIEDMAN: I think we do have a
21 responsibility to clarify the taxability of these grants
22 or anything that's deemed taxable income and received by
23 anyone who's acquiring one of these vehicles. I also
24 think that while we're at it, we might want to consider
25 that to the extent they're using them for business use or

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92

1 other deductible purposes. I mean that could offset
2 partially or entirely the tax consequences.

3 STAFF COUNSEL DAVIS: Yes. Although, you have,
4 in fact, identified one of the problems in our attempting
5 to provide advice, and I'm not a tax attorney and I don't
6 play one at board meetings, and because each applicant's
7 tax picture will be different, we may not be able to give
8 conclusive advice. We can give general advice and repeat
9 what the IRS has told us once they tell us something.

10 BOARD MEMBER HUGH FRIEDMAN: Oh, no you can only

11 give the kind of general analysis or overview that is
12 given in, for example, in an investment prospectus, the
13 taxability of the investment. It's very general and it
14 always ends by saying consult your -- ultimately, it
15 depends on the particular individual. No question of
16 that.

17 STAFF COUNSEL DAVIS: And we will continue to do
18 that.

19 CHAIRPERSON LLOYD: Mr. McKinnon.

20 MR. MODISETTE: I should just add that the author
21 of the legislation, Assemblyman Alan Lowenthal, has also
22 offered the services of legislative counsel to work with
23 ARB legal staff to try to resolve the issue.

24 CHAIRPERSON LLOYD: Mr. McKinnon.

25 BOARD MEMBER McKINNON: Yeah. One of the things

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93

1 that concerns me with the whole ZEV thing is when we get
2 into an uncertainty, uncertainty, you know, kind of
3 hinders the movement. And I guess I'm really inclined to
4 suggest that -- I don't know, you sponsored the
5 legislation, I take it. Do you have any strong objections
6 to kind of doing a legislative fix to it, you know, sooner
7 than later?

8 MR. MODISETTE: If this is, in fact, a way to get
9 around the, you know, the tax liability issue, then, no, I
10 don't have a problem at all, and I think that would be a

11 good thing to do. But when we drafted the legislation, it
12 actually wasn't clear to us that there wasn't a tax
13 implication even with the existing grant program. And we
14 actually thought, at that time, that what was happening
15 was that consumers didn't even realize that the State of
16 California or these air districts were offering incentives
17 at all.

18 They just, you know, they got the monthly lease
19 price from the, you know, from the manufacturer. They had
20 no idea that there was a \$5,000 contribution that was
21 coming to them. And we thought well, gosh, wouldn't it be
22 a more powerful incentive if we could actually send
23 consumers a check for \$3,000 every year in each of the
24 three years the leased a vehicle. Wouldn't that be a more
25 powerful incentive for consumers, and maybe as a side

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94

1 benefit actually put some downward price pressure on these
2 lease prices that are coming from automakers. So that was
3 the thinking at the time.

4 I think it does appear now with greater certainty
5 that the existing structure where consumers don't have a
6 choice does allow you to get around those tax
7 consequences. And if that's the case, then I guess we
8 would certainly support a change to the legislation.

9 CHAIRPERSON LLOYD: Professor Friedman.

10 BOARD MEMBER HUGH FRIEDMAN: Just as a follow up,

11 to the extent that we may be supporting efforts to see a
12 further subsidy in next year's budget, I think it is
13 important that we clarify how it should be structured to
14 minimize or eliminate any tax consequences that we don't
15 wish.

16 CHAIRPERSON LLOYD: Okay, very good point.

17 Thank you very much. We do have one additional
18 witness here, Tom Addison from the Bay Area AQMD.

19 MR. ADDISON: Good morning, Chairman Lloyd and
20 members. My name is Tom Addison. I'm with the Bay Area
21 Air Quality Management District. And I'm here today to
22 convey our support for the staff guidelines that are
23 before you for implementing AB 2061.

24 I think that your staff has worked well to come
25 up with guidelines in a rapid time frame. And we needed

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95

1 that, because the bill took effect not that long ago, and
2 so I think that your staff has done a very good job of
3 putting these guidelines together in a process of
4 consultation with all the affected parties, including
5 local districts like ours, and putting the guidelines
6 together rapidly.

7 We were supporters of this legislation last year.
8 We certainly appreciate the efforts of the previous
9 speaker, the \$18-million-dollar-man, Dave Modisette, who,
10 I think was influential in the good news to us all. And

11 I'd like to say that specifically on the guidelines that
12 your staff have put together, I think there are three
13 things that we agree with quite strongly that are in these
14 guidelines.

15 The first is the first-come first-served
16 allocation for the incentives, and that is, we thought,
17 implicit in the legislation. That's certainly implicit in
18 the guidelines and we think that's the right way to go and
19 we appreciate that direction.

20 The second is the use of the Manufacturers
21 Suggested Retail Price for the incremental cost
22 calculation. We think that is also the appropriate thing
23 to do, and support the guidelines on that point.

24 We also think that the issue of allowing the
25 incentive money to flow through the manufacturer or

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96

1 through the consumer, we hope that that helps with the tax
2 liability issue that you've just been discussing. We're
3 certainly hopeful that the issue will be resolved either
4 with a favorable IRS ruling or some sort of clean-up
5 legislation. But I think giving those two choices,
6 hopefully helps with that.

7 So in conclusion, we certainly agree there are
8 some open issues, but we think those open issues are not
9 with the guidelines that are before you. And we think
10 that the process that is being laid out here for

11 consultation with all the parties including local
12 districts, the Energy Commission and the manufacturers is
13 a good one. And I'm here today to let you know that the
14 Bay Area Air District will be happy to work with your
15 staff in the upcoming months in putting together a program
16 that is as effective as it can be to try to get these
17 vehicles out there and into the hands of the public.

18 CHAIRPERSON LLOYD: Thank you very much, Tom.
19 Thank you for your support.

20 Any other comments from the Board, questions?

21 Mr. Kenny, do you have any further comments?

22 EXECUTIVE DIRECTOR KENNY: No.

23 CHAIRPERSON LLOYD: Since this is not a
24 regulatory item, it is not necessary to officially close
25 the record although we do have a resolution before the

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97

1 Board, so do I have a motion in favor.

2 BOARD MEMBER HUGH FRIEDMAN: So moved.

3 BOARD MEMBER DeSAULNIER: Second.

4 CHAIRPERSON LLOYD: All in favor say aye?

5 (Ayes.)

6 CHAIRPERSON LLOYD: Thank you very much.

7 Thank you.

8 We'll take a few minutes break before we move on
9 to the next agenda item, which is 00-12-3, Proposed
10 Amendments to the Certification Standard for Light- and

11 Medium-duty Vehicles.

12 (Thereupon a brief recess was taken.)

13 CHAIRPERSON LLOYD: Can we continue with the next
14 item.

15 Next item on today's agenda is 00-12-3, proposed
16 amendments to the certification standards for light- and
17 medium-duty vehicles and the alignment of California's
18 heavy-duty gasoline standards with the more stringent
19 federal standards.

20 We often boast in California that we are the
21 leaders of the pack, that no one has more health
22 protective standards in the entire world. Generally
23 speaking, that's absolutely true. But occasionally the
24 federal government gets just a tiny bit ahead of us on
25 certain regulations. When that happens, we need to catch

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98

1 up quickly, so that the most protective standard will
2 apply. That is the purpose of today's agenda item.

3 At this point, I'd like to turn it over to Mr.
4 Kenny to introduce the staff presentation.

5 EXECUTIVE DIRECTOR KENNY: Thank you, Mr.
6 Chairman and Members of the Board. In 1998, the Board
7 adopted the second phase of the Low Emission Vehicle
8 Program, called LEV 2 to extend the original LEV program
9 through 2010 while expanding the benefits provided by the
10 program. This was accomplished by increasing the

11 stringency of the light- and medium-duty emission
12 standards and by further reducing the allowable average
13 emissions from each manufacturer's fleet for 2004 through
14 2010.

15 A noteworthy element of the program that
16 contributes to its success is a requirement that the
17 increasingly popular sport utility vehicles and pickup
18 trucks be subject to the LEV 2 passenger car exhaust
19 emission standards by the 2007 model year.

20 Subsequent to adoption of the LEV 2 program, ARB
21 assisted the US EPA staff in developing a similar program
22 for federal vehicles that would achieve significant
23 emission reductions for vehicles in other states. This
24 federal program is called the Tier 2 program.

25 While the federal Tier 2 program was modeled

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99

1 after California's LEV 2 program, structural differences
2 between the federal and California programs could, in some
3 unusual circumstances, result in higher emitting vehicles
4 being sold in California than some of the federal
5 counterparts.

6 Today's staff proposal would change the LEV 2
7 regulations to say that a manufacturer may not certify a
8 California vehicle model to California standards that are
9 less stringent than its federal counterpart. We believe
10 that the proposal will ensure that California continues to

11 receive the cleanest cars and trucks in the world.

12 The second part of today's staff proposal,
13 reduces the emissions of ozone precursors from heavy-duty
14 auto cycle engines by 60 percent within the 2003/2008
15 timeframe. Heavy-duty auto cycle engines are used in
16 gasoline vehicles with a gross vehicle weight of over
17 14,000 pounds.

18 The emission reductions are achieved for these
19 engines by aligning California's exhaust emission
20 standards for hydrocarbon plus oxides of nitrogen, or HC
21 plus NOx, with those recently promulgated by the US EPA.

22 Reductions in HThat plus NOx from engines used in
23 medium-duty vehicles, between 8,500 and 14,000 pounds
24 gross vehicle weight, are similarly reduced.

25 What I'd like to now do is turn the presentation

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100

1 over to Sarah Carter and we'll go from there.

2 Sarah.

3 (Thereupon an overhead presentation was
4 presented as follows.)

5 AIR RESOURCES ENGINEER CARTER: Thank you, Mike.
6 Good morning Chairman Lloyd and members of the Board.
7 Today I will be presenting staff's proposal for acquiring
8 certain federal Tier 2 vehicles to certify in California
9 and adoption of new federal exhaust emission standards for
10 heavy-duty gasoline engines.

11

--o0o--

12 AIR RESOURCES ENGINEER CARTER: In 1990, the Air
13 Resources Board adopted the low emission vehicle or, LEV 1
14 program, which significantly reduces exhaust emissions
15 from the light- and medium-duty vehicle fleet between 1994
16 and 2003. Both the LEV 1 regulations and the second phase
17 of these regulations, LEV 2, adopted in November 1998,
18 include three primary elements.

19 The first element consists of tiers of exhaust
20 emission standards for increasingly more stringent
21 categories of low emission vehicles.

22 The second is a mechanism requiring each
23 manufacturer to phase in a progressively cleaner mix of
24 vehicles from year to year with the option of credit
25 banking and trading.

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101

1 And the third is a requirement that a specified
2 percentage of passenger cars in light- or light-duty
3 trucks be ZEV's, vehicles with no emissions.

4 --o0o--

5 AIR RESOURCES ENGINEER CARTER: The LEV 2 program
6 continues to reduce emissions from the new vehicle fleet
7 between 2004 and 2010. A major focus of the LEV 2 program
8 is to reduce the emissions from the largest sport utility
9 vehicles and pickup trucks that are being used primarily
10 for personal transportation by requiring them to meet the

11 same emission standards as passenger cars.

12 LEV 2 also lowers the emission standards for all
13 vehicle categories.

14 --o0o--

15 AIR RESOURCES ENGINEER CARTER: These are the
16 emission standards for passenger cars under LEV 2. The
17 benefits of these new standards compared with LEV 1 range
18 from 75 percent reduction in NOx emissions from passenger
19 cars to a 90 percent reduction in NOx emissions from the
20 largest sport utility vehicles and trucks. The LEV 2
21 program also establishes a near zero super ultra low
22 emission vehicle or SULEV emission category.

23 The transitional low emission vehicle or TLEV
24 category is dropped for LEV 2. Elimination of the TLEV
25 category will likely preclude the use of diesels in

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102

1 noncommercial vehicles in California for the foreseeable
2 future.

3 --o0o--

4 AIR RESOURCES ENGINEER CARTER: While the LEV 2
5 program emphasizes NOx reductions, the nonmethane organic
6 gas, or NMOG, fleet average requirements also continue to
7 decrease. As a result, NMOG emissions from new light-duty
8 vehicles will be reduced by about half between 2003 and
9 2010.

10 --o0o--

11 AIR RESOURCES ENGINEER CARTER: Subsequent to the
12 adoption of the LEV 2 program, ARB staff assisted the US
13 EPA in developing a similar program for federal vehicles
14 that would achieve maximum emission reductions for
15 vehicles in other states.

16 ARB staff met with US EPA staff to review the
17 engineering approach taken in our test program, provide
18 them with emission test data, loan them experimental
19 catalysts, and provide other assistance.

20 US EPA staff demonstrated that emission levels
21 adopted in LEV 2 could also be achieved cost effectively
22 on vehicles nationwide. The program that was subsequently
23 adopted by the US EPA is referred to as the Tier 2
24 program.

25 While Tier 2 is patterned after the LEV 2

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103

1 program, it contains some unique features and program
2 elements that differ from the California program. These
3 include setting an NOx fleet average requirement rather
4 than an NMOG fleet average requirement as in California.
5 This was done primarily to allow diesel sport utility
6 vehicles and pickup trucks to emit at higher emission
7 levels than passenger vehicles so they could continue to
8 be sold.

9 Tier 2 requires that their emissions be offset by
10 lower emissions from other vehicles. The need to offset

11 or about three times higher than in California. These
12 higher emissions must be offset by producing enough cars
13 at a much lower NOx level such that the manufacturers
14 federal fleet average NOx requirement of 0.07 grams per
15 mile is met.

16 What staff is proposing today is to take
17 advantage of any cleaner passenger cars produced under
18 Tier 2 and require them to be sold in California as well,
19 which means that California gets both the cleanest cars
20 and the cleanest sport utility vehicles and pickup trucks.

21 --o0o--

22 AIR RESOURCES ENGINEER CARTER: Today's proposal
23 would change the LEV 2 regulations to require that
24 beginning with the 2004 model year, a manufacturer may not
25 certify a California vehicle to a less stringent standard

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105

1 than its federal counterpart. Any such federal vehicles
2 would also be required to comply with California
3 evaporative, on-board diagnostic or OBD II, warranty and
4 label requirements, all of which are more stringent than
5 the federal requirements.

6 However, consistent with lead time requirements
7 of the federal Clean Air Act, which manufacturers are
8 subject to outside of California, the largest sport
9 utility vehicles and trucks would be allowed to comply
10 with the federal evaporative and OBD requirements prior to

11 2005.

12

--o0o--

13 AIR RESOURCES ENGINEER CARTER: In cases where a
14 vehicle model is certified to federal emission standards
15 that are identical to California standards, the
16 manufacturer must certify that model to the California
17 emission standards. A federal vehicle model certified to
18 Tier 2 standards that do not correspond to a California
19 emission category would be counted as certified to the
20 next highest California standard based on a comparison of
21 HThat plus NOx for the purpose of determining compliance
22 with NMOG fleet average requirements, calculating vehicle
23 emission credits and compliance with phase-in
24 requirements.

25

--o0o--

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106

1 AIR RESOURCES ENGINEER CARTER: I will now
2 discuss staff's proposal for heavy-duty auto cycle
3 engines. These are typically gasoline engines used in
4 vehicles over 8,500 pounds gross vehicle weight.

5

--o0o--

6 AIR RESOURCES ENGINEER CARTER: On July 31st,
7 2000, the US EPA adopted new regulations to reduce
8 nonmethane hydrocarbon or NMHC and NOx emissions from
9 heavy-duty gasoline engines.

10

These regulations were developed through a

11 cooperative effort between ARB and US EPA as the result of
12 a 1994 settlement agreement with the environmental groups.
13 While current California regulations are more stringent
14 than the previous federal standard, California would also
15 benefit from the new requirements.

16 Staff is therefore proposing to harmonize
17 California's regulations with the more stringent emission
18 standards recently adopted for federally certified
19 engines. These new standards would apply to heavy-duty
20 gasoline engines used in vehicles greater than 8,500
21 pounds gross vehicle weight.

22 Staff's proposal would reduce NMHThat plus NOx
23 emissions from California heavy-duty gasoline engines by
24 about 60 percent. It will provide an NMHC plus NOx
25 emission benefit of one ton per day. The federal rule

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107

1 also provides two other compliance options in addition to
2 the primary one shown here. These compliance options
3 allow a manufacturer to select the best approach for its
4 product line.

5 Option 3 has been designated as the primary
6 standard at one gram per brake horsepower hour and
7 scheduled for introduction with the 2005 model year.

8 The other two options allow manufacturers to
9 delay compliance with the standard until the 2008 model
10 year by certifying to an interim emission level of 1.5

11 gram per brake horsepower hour prior to 2005. Staff is
12 proposing adoption of all of these options to allow
13 manufacturers that chose to certify to Options 1 or 2
14 federally to do the same for California.

15 --o0o--

16 AIR RESOURCES ENGINEER CARTER: To summarize,
17 staff's proposal will help achieve California's goal of
18 clean air by ensuring that vehicles sold in California are
19 the cleanest available. This can be accomplished by
20 requiring that vehicles sold in California are at least as
21 clean as the federal Tier 2 counterparts and by aligning
22 California's exhaust emission standards of heavy-duty
23 gasoline engines with the more stringent federal
24 standards.

25 The proposal will also help the ARB to meet its

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108

1 commitment under the settlement agreement with the
2 environmental groups.

3 For these reasons, staff recommends the Board
4 adopt the proposal including the 15-day changes available
5 at the back table.

6 Thank you.

7 CHAIRPERSON LLOYD: Thank you very much. Do I
8 understand from that that we get the best of all worlds as
9 to the lowest NOx and the lowest NMHThat

10 DEPUTY EXECUTIVE OFFICER CACKETTE: Yes.

11 CHAIRPERSON LLOYD: Madam Ombudsman, will you
12 please describe the public participation process that
13 occurred while this item was being developed and share any
14 concerns you may have on the process with the Board at
15 this time.

16 OMBUDSMAN TSHOGL: I'd be glad to. Mr. Chairman
17 and members of the Board, ARB staff held a workshop on
18 November 15th of this year to allow industry the
19 opportunity to comment on the proposed regulation before
20 you now. Notification of this workshop was sent to 500
21 people, of which 30 attended the meeting.

22 Staff felt that one workshop was sufficient,
23 since the proposed amendment, as you just heard, adopts
24 emission standards that automakers will be required to
25 meet nationally anyway. Staff incorporated many of the

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109

1 comments they received into the proposal. On October 10th
2 staff mailed the notice for the public hearing to 500
3 people. The staff report became available and was mailed
4 to 500 people on October 20th.

5 Thank you.

6 CHAIRPERSON LLOYD: Thank you. Do board members
7 have any questions, comments?

8 Mrs. Riordan?

9 BOARD MEMBER RIORDAN: Mr. Chairman, I will just
10 wait until Mr. Kenny is finished. I wanted to lend my

11 voice of support for the item, because it seems to me to
12 be a win-win for everybody here in California.

13 CHAIRPERSON LLOYD: Any other comments from the
14 Board?

15 Again, I think it's quite remarkable when we look
16 at those numbers there to see how far we've come. And
17 clearly while the industry may not like the push there,
18 but their response out there, their ability to reach those
19 extremely low numbers, is just remarkable when you look
20 back with that progress in time.

21 So, Mr. Kenny, do you have any further comments?

22 EXECUTIVE DIRECTOR KENNY: No, I don't.

23 CHAIRPERSON LLOYD: I will now close the record
24 on this agenda item. However, the record will be reopened
25 when the 15-day notice of public availability is issued.

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110

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

5 When the record is reopened for a 15-day comment
6 period, the public may submit written comments on the
7 proposed changes, which will be considered and responded
8 to in the final Statement of Reasons for the Regulation.

9 By the way, we had nobody signed up to testify on
10 the item, that's why I skipped that part of it.

11 Just a reminder to board members, if there's any
12 ex parte discussions on the particular item?

13 Seeing none, we'll move ahead and I will -- if
14 the Board has reviewed the resolution.

15 BOARD MEMBER RIORDAN: I'd like to move the
16 resolution. Oh, excuse me, sorry.

17 BOARD MEMBER MCKINNON: I'll be happy to move
18 resolution 00-45.

19 BOARD MEMBER RIORDAN: I'll second it.

20 CHAIRPERSON LLOYD: All in favor say aye?

21 (Ayes.)

22 CHAIRPERSON LLOYD: It's unanimous.

23 Well, thank you all very much and it brings us,
24 actually, faster than I thought to lunch. So we're going
25 to take a break now, for one hour, so at 1:00 o'clock we

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111

1 will start back and begin the final item of the day, which
2 is the school bus item.

3 EXECUTIVE DIRECTOR KENNY: We have a lot of
4 witnesses.

5 CHAIRPERSON LLOYD: Apparently we have a lot of
6 witnesses so it's going to be a long afternoon or evening.

7 (Thereupon a lunch break was taken.)

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PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

112

1 AFTERNOON SESSION

2 CHAIRPERSON LLOYD: If people could take their
3 seats so we can start the afternoon, please.

4 The next item time on our agenda today is 00-12-2
5 proposed guidelines for the lower-emission school bus
6 program.

7 As everyone now knows, Governor Davis provides
8 \$50 million in ARB's 2000/2001 budget to replace older,
9 high-polluting school buses, with newer cleaner models and
10 to retrofit an additional segment of the existing school

11 bus fleet with particulate trap filters.

12 The \$50 million lower-emission school bus program
13 is consistent with the Governor's continuing emphasis on
14 education and on reducing health risks to school children.
15 The need for financial assistance in the area is
16 tremendous. And this is just a start of what we need to
17 do. Public schools clearly need the State's help to clean
18 up their fleets or there wouldn't be so many old buses
19 still out there, actually about 6,000 to 6,600 pre-1987
20 school buses.

21 Fifty million dollars won't solve the entire
22 problem either, but at least it's a good start and the
23 initiative of the Governor is just tremendous. And, in
24 fact, we appreciate very much his willingness to fund the
25 effort. It's a really major step forward for all of us

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113

1 and particularly for the children and their health.

2 I have some additional comments. I will save
3 those till later. Mr. Kenny, would you please begin the
4 presentation of this item to the Board.

5 EXECUTIVE DIRECTOR KENNY: Thank you, Mr.
6 Chairman and members of the Board. There are two
7 components to the \$50 million lower-emission school bus
8 program. Staff has proposed \$40 million for the purchase
9 of new buses and infrastructure and \$10 million to put
10 particulate filters on older buses.

11 Under this program, we expect to replace about
12 400 high polluting pre-1987 buses and to put particulate
13 filters on about 1,500 older, in-use buses.

14 For the bus replacement part of the program, we
15 are proposing that of the \$40 million allocated \$25
16 million be used for new alternative fuel buses and
17 infrastructure and that \$15 million be used for
18 lower-emission diesel buses. We heard from numerous
19 school districts that they wanted a choice between diesel
20 and alternative fuels. Staff's proposal gives them both
21 options.

22 We also heard from school districts that
23 replacing pre-1977 buses should be a priority, since those
24 buses were manufactured prior to federal safety standards.
25 Staff's proposal requires that school districts that

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114

1 receive funding must replace their pre-1977 buses first.
2 Improved air quality, reduced exposure to toxic diesel
3 particulates and safer school transportation would be the
4 immediate results of this program.

5 The ten million dollars for school bus retrofits
6 is the first major step we are taking under the
7 comprehensive diesel risk management program the Board
8 adopted in September. This is an important opportunity to
9 move the Board's diesel retrofit objectives forward. The
10 element of the school bus program also accounts for the

11 largest reduction in particulate matter. It's extremely
12 cost effective.

13 The guidelines we are proposing to you today will
14 advance technology in several areas. First, it will
15 demonstrate the efficiency and durability of particulate
16 traps in California school buses. You will hear from
17 staff about the South Coast Air Quality Management
18 Districts and ARB's joint efforts to demonstrate
19 particulate filters on school buses and to test and
20 certify the systems. We have set a high standard for the
21 retrofits funded by this program.

22 Second, it will expand the use of low sulfur
23 diesel fuel. As you know, the US EPA has proposed to
24 require low sulfur diesel fuel nationwide beginning in
25 2006. School districts that elect to buy lower emission

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115

1 diesel buses or to install the retrofit devices on their
2 existing diesel fleet will get early benefits from using
3 low sulfur diesel fuel.

4 I think the program is a win-win proposal for
5 children's health, for California's schools and for air
6 quality. And with that, I'd like to turn it over to
7 Roberta Hughan to make the staff presentation.

8 Roberta.

9 (Thereupon an overhead presentation was
10 presented as follows.)

11 AIR POLLUTION SPECIALIST HUGHAN: Good afternoon.

12 --o0o--

13 AIR POLLUTION SPECIALIST HUGHAN: Today's
14 presentation will consist of, first, an introduction to
15 the program, and a listing of the goals that are being
16 recommended. Then I will go on to an overview of the
17 program and a description of the two components of the
18 staff proposal. Lastly, a discussion of issues that have
19 been identified will be followed by staff conclusions and
20 recommendations.

21 --o0o--

22 AIR POLLUTION SPECIALIST HUGHAN: First, the
23 introduction and the goals recommended for the program.
24 Last year, Governor Davis provided \$50 million in the
25 State budget to reduce emissions from diesel school buses.

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116

1 This is consistent with his efforts to improve education
2 in California and reduce health risks for students,
3 including these funds in the fiscal year 2000/2001 State
4 budget. This was supported by environmental and health
5 organizations, school district organizations, State
6 legislators and many others.

7 ARB's staff developed the proposed guidelines.
8 We are presenting them to you today for your
9 consideration. The staff's goal is to put together a very
10 positive balanced program that will provide emission

11 In 1998, the ARB identified diesel engine
12 particulates as a toxic air contaminant. Last September
13 the Board adopted the ARB's Risk Reduction Plan for diesel
14 fueled engines and vehicles. The plan calls for the PM
15 retrofit of all diesel engines technically feasible by
16 2010. This includes school buses. So our goal is to make
17 this proposal consistent with that plan.

18 Also, engine and retrofit technology can be
19 advanced by accelerating development of PM retrofit
20 devices meeting stringent reduction standards and by
21 furthering development of diesel engines that meet NOx and
22 PM standards lower than ARB mandatory requirements.

23 --o0o--

24 AIR POLLUTION SPECIALIST HUGHAN: Bottom line,
25 the goal is to get school buses like this either off the

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118

1 road or retrofitted with smoke filters.

2 --o0o--

3 AIR POLLUTION SPECIALIST HUGHAN: The ARB staff
4 is proposing that the \$50 million for the program be used
5 to fund two components, \$40 million would be used to fund
6 part one, the Lower Emission School Bus Replacement and
7 Infrastructure Program. Ten million dollars would be used
8 to fund part two, the School Bus Particulate Matter
9 Retrofit Program.

10 --o0o--

11 manufactured before more stringent NOx engine standards
12 went into effect and before any PM standards were in
13 place. In addition, the school districts place a high
14 priority on replacement of pre-1977 buses as they were
15 built before federal safety standards went into effect.

16 Lower emitting buses are now available and school
17 districts are eager to get buses that are both cleaner and
18 safer. However, school transportation services must be
19 subsidized by school district general funds. Those
20 services must compete for both capital and operating costs
21 with mandated school districts services.

22 There are a few grant programs that are helping
23 out the school districts with some new buses. They
24 include the Small School Districts Program administered by
25 the California Department of Education that funds 25 to 50

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120

1 buses a year. As well, some school districts have secured
2 air quality incentive funds from local air districts
3 through a competitive program. Primarily the air
4 districts pay the incremental cost of alternative fuel
5 buses.

6 Unfortunately, this is not adequate co-funding
7 for many school districts. Additional funds are needed to
8 retire the old buses and Governor Davis has provided some
9 of those funds.

10

--o0o--

11 of lower emission alternative fuel buses, natural gas,
12 propane, electric and others. Natural gas and propane
13 engines are already certified to ARB's optional two and a
14 half gram NOx standard or lower.

15 PM emissions are low for the life of the buses.
16 Electric buses have inherently low emissions. Up to two
17 and a half million or ten percent could be used for
18 infrastructure, fueling or charging stations for
19 alternative fuel buses.

20 The school districts would have to demonstrate a
21 need for any new infrastructure. It is proposed that \$15
22 million go to purchase lower emission diesel buses. As
23 yet, no diesel engines have been certified to the proposed
24 three gram NOx federal remission limit. One manufacturer,
25 who offers what they call a green diesel school bus,

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123

1 states its diesel engines could certify the intermediate
2 level. Low sulfur diesel fuel would be a requirement.
3 Both types of engines emit about the same level of PM.

4 --o0o--

5 AIR POLLUTION SPECIALIST HUGHAN: Staff did a
6 comparative analysis. CNG buses cost more than diesel
7 buses. Per dollar spent more diesel buses can be
8 purchased, as you can see on the chart. The chart shows
9 the relative emission benefits of natural gas buses and
10 diesel buses based on certification levels. So you can

11 see that more reductions of NOx and particulates would
12 occur if both the lower emission alternative and diesel
13 fuel buses were permitted into the program.

14 School districts have expressed a preference for
15 a choice of fuels. Some districts are committed to CNG.
16 Other districts, particularly where using natural gas is
17 problematic, have requested the flexibility to choose
18 diesel buses to meet their needs.

19 --o0o--

20 AIR POLLUTION SPECIALIST HUGHAN: The ARB staff
21 estimates that the proposed school bus replacement program
22 would reduce NOx emissions by 1010 tons and PM emissions
23 by the 90 tons in the years 2001 to 2016. The estimate is
24 based on the ARBs emission inventory, MFACT 2000 and
25 assumes the bus travels 225,000 miles in its lifetime.

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124

1 --o0o--

2 AIR POLLUTION SPECIALIST HUGHAN: That concludes
3 the description of part one of the \$40 million new bus
4 program.

5 Now we will move on to Part 2, the description of
6 the proposed \$10 million school bus PM retrofit program.

7 --o0o--

8 AIR POLLUTION SPECIALIST HUGHAN: In September,
9 the Board approved a plan to reduce exposure to diesel
10 particulate emissions. A key to the plan is the retrofit

11 of heavy-duty diesel fleets in California with particulate
12 filtering devices. The proposal supports that effort.

13 Diesel particulate filters are easily installed,
14 off-the-shelf technology, generally designed as a muffler
15 replacement for an in-line catalytic converter. The
16 filters provide immediate and cost-effective emission
17 reductions, cutting exhaust particulates by 85 percent or
18 more.

19 By providing funds for retrofits, the program can
20 achieve substantially greater PM reduction than a program
21 that funds only new bus purchases. The filters have
22 proven successful in numerous applications, particularly
23 in Europe, and the increased availability of low sulfur
24 diesel fuel in California provides an opportunity for
25 widespread use here as well.

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125

1 The transit bus regulation, adopted by the Board
2 in February, requires particulate filter installation in
3 many diesel transit bus fleets by the end of 2002.

4 --o0o--

5 AIR POLLUTION SPECIALIST HUGHAN: Staff is
6 working with several manufacturers who have applied for
7 ARB certification of diesel particulate filters. The
8 certification process requires an 85 percent conversion
9 efficiency. It also requires a complete demonstration of
10 durability and effectiveness. It requires manufacturers

11 that remaining funds be pooled. The total funds available
12 to a district in the pool would depend on the number of
13 districts applying for funds.

14 --o0o--

15 AIR POLLUTION SPECIALIST HUGHAN: You can see
16 here the amounts allocated to the five largest air
17 districts based on population. There is about one and a
18 half million in the pool for the remaining districts. The
19 number of buses shown retrofitted is based on about \$6,000
20 per retrofit, plus \$500 towards the incremental cost of
21 low sulfur diesel fuel.

22 --o0o--

23 AIR POLLUTION SPECIALIST HUGHAN: Staff proposes
24 broad eligibility guidelines for the retrofit program.
25 California public school districts and Joint Powers

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127

1 Authorities would be eligible. Private contractors that
2 provide transportation for public schools would also be
3 eligible for the retrofit program. To help ensure cost
4 effectiveness and availability of manufacturers' support
5 and training, we propose the program focus initially on
6 larger fleets.

7 And we're working with the air districts to
8 assure that. All 1977 and newer model year in-use diesel
9 powered buses qualify for retrofits provided there is a
10 certified retrofit device available for each engine.

11 these funds are raised. Also, if the allocations were not
12 based on population, those school districts that have used
13 their own funds or excess grant funds to replace their
14 oldest buses, would lose out.

15 As well, many school districts have told us they
16 would prefer that only pre-1977 buses be eligible for
17 replacement. That is because there were no federal safety
18 standards prior to 1977. The proposal does require that
19 pre-1977 buses, in any given fleet, be retired first.

20 --o0o--

21 AIR POLLUTION SPECIALIST HUGHAN: Staff is
22 proposing eligible replacement buses include all pre-1987
23 buses. That's because prior to 1987, PM emissions were
24 not controlled. There were no PM engine emission
25 standards in effect. Also, prior to 1987, NOx emission

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130

1 standards were less stringent, so pre-1977 and 1977 to
2 1986 model year engines are equally dirty.

3 --o0o--

4 AIR POLLUTION SPECIALIST HUGHAN: The staff is
5 proposing a 25 percent with a maximum of \$25,000 match
6 funding requirement for the school districts for the
7 purchase of new buses. During guideline development, some
8 school districts opposed the requirement. However,
9 program funding is limited. Requests for funds will
10 certainly far exceed availability. A required funding

11 match means more buses could be purchased and air quality
12 benefits increased.

13 ARB staff believes that the proposed 75 percent
14 funding level up to about \$100,000 per bus plus CNG
15 fueling infrastructure will assure full school district
16 participation.

17 School districts are encouraged to try to secure
18 match funding from other sources such as local air
19 district's funds and federal grant funds. Another issue
20 is the cost of low sulfur diesel fuel. This is required
21 to assure the effectiveness and durability of Green Diesel
22 engines and PM retrofit devices. ARB staff estimates that
23 the incremental cost to produce the fuel is three to five
24 cents a gallon, and proposes to contribute \$500 per
25 retrofitted bus.

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131

1 This would pay for up to five years of
2 incremental fuel costs. However, in rural areas or with
3 small volume orders, the retail cost could be more.
4 School districts are advised to verify that cost with
5 their fuel suppliers. It may be possible for them to form
6 consortiums with other school districts, transit agencies
7 or other agencies in order to get volume prices.

8 --o0o--

9 AIR POLLUTION SPECIALIST HUGHAN: And last
10 staff's conclusions and recommendations. ARB staff

11 believes that the program is outlined and the proposed
12 guidelines would have a number of beneficial results. By
13 both replacing old buses and cleaning up in-use buses, a
14 balance has been achieved.

15 --o0o--

16 AIR POLLUTION SPECIALIST HUGHAN: First,
17 children's health would benefit. By reducing NOx and PM,
18 ambient air quality would improve, smog would be reduced.
19 Second, children would be less exposed to toxic diesel
20 exhaust. Air pollution has been linked to a range of
21 serious health problems. Children, with their growing
22 lungs and faster respiratory rates, are particularly
23 affected.

24 Second, safer school transportation would result.
25 The new school buses would meet more stringent safety

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132

1 standards than older buses. Additionally, technology
2 would be advanced through the accelerated development of
3 highly effective particulate filters and the early
4 development of lower emission diesel engines. This is an
5 encouraging beginning. Still there are many more old
6 buses to be replaced. A successful and timely program
7 will get us off to a good start.

8 --o0o--

9 AIR POLLUTION SPECIALIST HUGHAN: Under staff's
10 proposal, this is one of the new shiny clean buses that

11 would be eligible for funding. This is a natural gas bus.
12 There about 700 of these buses in use in California. No
13 smoke here, plus NOx reductions.

14 --o0o--

15 AIR POLLUTION SPECIALIST HUGHAN: And this is a
16 demonstration of a Green Diesel school bus, that would be
17 eligible for funding upon certification. No smoke here
18 either, plus NOx reductions.

19 --o0o--

20 AIR POLLUTION SPECIALIST HUGHAN: Finally, the
21 staff recommends approval of the proposed lower emission
22 school bus program guidelines.

23 Thank you.

24 CHAIRPERSON LLOYD: Thank you. Do the Board
25 members have any questions?

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133

1 Supervisor DeSaulnier.

2 BOARD MEMBER DeSAULNIER: I thought Matt was
3 going to get the floor ahead of me. Mike or Roberta, what
4 was the magic of the money split? Is there a magic to
5 Solomon's wisdom here in terms of 25/15?

6 EXECUTIVE DIRECTOR KENNY: I think the real
7 magic -- I wouldn't say -- I'd say there is not a magic to
8 the split, but there is essentially a rationale to it.
9 What we were trying to do is recognize a number of issues.
10 One was the fact that we did have a limited pool of money.

11 And consequently, with a limited pool of money, we could
12 not address the entire 24,000 school bus fleet in the
13 State.

14 And so we were trying to figure out how we could
15 maximize the value to the school districts, to the
16 environmental benefit, to safety, to advancements in
17 technology and to commingled sulfur diesel fuel into the
18 market place.

19 The thought was essentially that we need to
20 ensure that, in fact, we continue the competition between
21 all the technologies, the CNG, the clean diesel and the
22 traps. And so we wanted to essentially spread money
23 across all three categories. We were also trying to do it
24 in a way in which the emissions benefits could be
25 maximized.

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134

1 And we thought essentially by going with the pool
2 of \$25 million for CNG and then another \$25 million pool
3 for diesel as a total, we had a split there and we created
4 the competition between the technologies.

5 We then subdivided the diesel pool into two with
6 the new buses and with the retrofit buses. And the idea
7 there was essentially to ensure that, in fact, we continue
8 to pool the new diesel technology forward and that we also
9 have sufficient money available to put money into traps,
10 because we do see significant advantages both from a

11 technology advancement standpoint and also from a health
12 standpoint in terms of the emission reductions that traps
13 give you.

14 So the rationale was to essentially try to split
15 it up evenly, to split it up fairly, to provide
16 competition among the different fuels, to try to continue
17 the development of the technologies, to pull the low
18 sulfur diesel fuel in and to put as many new buses on the
19 streets as we possibly could.

20 BOARD MEMBER DeSAULNIER: In terms of the,
21 particularly, the NOx standards, I mean do you view that
22 as truly being fuel neutral?

23 EXECUTIVE DIRECTOR KENNY: Yes. And the main
24 reason we consider that is that if you look at the two --
25 looking at the new bus side, the CNG actually has a lower

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135

1 NOx standard. It has a 2.5 grams per brake horsepower
2 hour and the clean diesel has a three gram standard. At
3 the same time, what we were trying to do is look at the
4 context of everything, of the overall smog benefits that
5 we would get. We do get more diesel buses than we would
6 get CNG buses. And so consequently, because we get more
7 diesel buses, even though we have a little dirtier
8 standard, and what ends up happening is that the overall
9 benefit is actually better, really, if you go on to the
10 combination of diesels with the retrofits. At the same

11 time, what we were trying to do is look at the PM side.
12 The PM, the ThatNG is not essentially meeting the same
13 level of standard as the diesels are meeting. And we are
14 trying to look at the practice from a balanced standpoint,
15 where there's both a NOx benefit and there is a PM benefit
16 and we want to maximize both those benefits.

17 BOARD MEMBER DeSAULNIER: And I'll play a little
18 bit unfair here. Hypothetically, if you had more than one
19 year, say if you had multiple years, would this look any
20 different, do you think?

21 EXECUTIVE DIRECTOR KENNY: I think it potentially
22 does. I mean, I think one of the things that we're
23 looking at right now is a very interesting situation in
24 which we are in a one-year scenario. We are going to see
25 cleaner diesel engines really in about 18 months that are

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136

1 down in the two and a half gram levels or lower
2 potentially. And so I think then what ends up happening,
3 potentially is that we look at setting one standard that
4 reflects both low NOx and low PM.

5 Right now the difficulty for us is that one of
6 the technologies has the lower NOx number, the other
7 technology has the lower PM number and we are trying to
8 balance that.

9 BOARD MEMBER DeSAULNIER: And just one last
10 question. Mike, when we did the dual path transit bus

11 rule, that I had Hamlet-like reservations about, it was
12 always my assumption that the clean diesel would be more
13 towards the truck fleet and we would be moving in the
14 fleet, particularly the transit fleet, which we would be
15 trying to get more incentives for alternative fuels.

16 Would you explain, to me at least, sort of how
17 we're evolving from that?

18 EXECUTIVE OFFICER KENNY: What we were trying to
19 do is recognize that the technology has been advancing
20 fairly rapidly on the diesel side and we think that is
21 advantageous. And the main reason for that is what
22 happens is that we can take that technology as it evolves
23 and we can essentially transfer across the entire diesel
24 fleet.

25 We do recognize the benefits of CNG, which is why

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137

1 here what we tried to do is essentially give it the
2 largest portion of the pie, if you looked at it in terms
3 of three segments. And we thought that was actually
4 valuable in terms of continuing the incentives and getting
5 the buses out there that are CNG. We were also, though,
6 taking into account the fact that from an emission
7 reductions standpoint, we got a better emissions reduction
8 return by having the clean diesel vehicles out there,
9 because they were cheaper to purchase and then using the
10 retrofits.

11 BOARD MEMBER DeSAULNIER: I'm sorry. I have one
12 last question, Mr. Chairman. I promise this is the last
13 one. I won't kiss any babies after that either.

14 (Laughter.)

15 BOARD MEMBER DeSAULNIER: But just in terms of,
16 we've talked about it before and maybe I'm a little overly
17 sensitive to it, but the potential capacity of problems
18 for product, and always a challenge for request for
19 variances. I mean, how does that play in here? It seems
20 like there's going to be plenty of market for car
21 certified clean diesel fuel in the future, and we're
22 trying to add more, as we talked about in the ZEV mandate.

23 It seems like, in my mind, that gives us more of
24 a motivation to try to create more alt fuels vehicles out
25 there in general in the whole fleet.

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138

1 What I'm getting at is, and I'm a little bit
2 surprised by the vehemence by some of the -- well, for
3 instance from WSPA. That in my mind, at least, there
4 seems like there's a big market for clean diesel out there
5 and there will continue to be. As we look at trucks in
6 particular, that's where that market will continue to
7 grow.

8 So if that's true, isn't there some motivation,
9 particularly from the That maybe I'm trying to be an
10 Energy Commissioner, to promote alternative fuels in this

11 instance rather than clean diesel?

12 EXECUTIVE DIRECTOR KENNY: I think the answer
13 would be yes. And I think the "tried to do" is that we
14 have basically tried to make it fairly clear that the
15 largest portion of the pie was a CNG portion. We were
16 trying to essentially promote the CNGs out there.

17 The difficulty that we were running into is that
18 from an emissions benefit standpoint, we don't get the
19 same level of health protection if we were to put the
20 greatest chunk of the money into CNG. And so what we were
21 trying to do is balance that desire to provide for
22 diversity of fuels, with the equally important desire of
23 essentially reducing the health benefit that the kids are
24 suffering.

25 And so the combination was, essentially, in a

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139

1 way, kind of our way of splitting the baby up in a way
2 that gave us kind of the best return, we thought, on the
3 number of buses, the fuel and the fuel diversity issues.

4 BOARD MEMBER DeSAULNIER: Thank you, King
5 Solomon.

6 (Laughter.)

7 CHAIRPERSON LLOYD: Before you actually bestow
8 that on him, I would like a correction --

9 (Laughter.)

10 BOARD MEMBER DeSAULNIER: I don't know if I have

11 that authority.

12 (Laughter.)

13 CHAIRPERSON LLOYD: I think King Solomon got a
14 slight of hand. I do not understand why you said natural
15 gas has got the lion's share, when, in fact, I think we're
16 50/50, but maybe that's a lawyers definition. I'm looking
17 at a scientists definition.

18 EXECUTIVE DIRECTOR KENNY: Actually, you are
19 correct. It is a 50/50 split in terms of the total pool,
20 but what I was actually referring to was if you look at
21 the new vehicle pool, what we did there to the pool is
22 larger for CNG.

23 BOARD MEMBER DeSAULNIER: That's what my emphasis
24 was on.

25 CHAIRPERSON LLOYD: Professor Friedman.

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140

1 Wait a minute, maybe Mr. McKinnon will second
2 this.

3 BOARD MEMBER MCKINNON: Yeah, King Solomon, I
4 came at it from a very different perspective. I mean, I
5 started out thinking we ought to do a lot of retrofit and
6 try to affect as many kids as possible when we did it.

7 And I also understand, you know, a lot of the
8 other factors. I mean, we are trying to move cleaning up
9 diesel. And so I appreciate the difficulty in doing the
10 split. I think from my perspective, it probably came out

11 stronger for ThatNG than I would like. So part of what
12 you were dealing with is a board that has different ideas
13 here about how it ought to be done.

14 But I'm going to set that aside, because there's
15 a whole bunch of people I'm sure that have ideas that we
16 should hear about that issue.

17 One thing I'm kind of interested in is that once
18 the split is done, say for instance retrofit, if we do
19 retrofit carefully, such as we're doing right now, we have
20 some of the large districts working with retrofit, and we
21 figure out the configurations of the buses and make sure
22 that there's kind of an efficient setup to do retrofit,
23 rather than kind of just handing everybody money and
24 saying go give it a try. It may take us some time.

25 And let's say, for example, it takes us a good

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141

1 bit of time to get that done, and in the meantime we are
2 fortunate enough to get another year, another two years or
3 whatever allocated to doing this project, can we, after
4 the fact, move around this money? For instance, if
5 retrofit money is not getting spent, then can we shift
6 money to CNG or shift money to new diesel and take care of
7 the retrofit next year or something like that?

8 EXECUTIVE DIRECTOR KENNY: Actually, right now
9 it's not set up that way. It is set up essentially as
10 kind of three pots. What we would do is if we ran into

11 that particular circumstance, we would bring it back
12 before you.

13 BOARD MEMBER McKINNON: That's it. Thanks.

14 CHAIRPERSON LLOYD: Professor Friedman.

15 BOARD MEMBER HUGH FRIEDMAN: I just want to ask
16 some questions and get answers. I'll save my comments
17 until I've heard all the testimony. But I do have a few
18 questions that I'd appreciate staff clarification on.

19 First of all, just picking up from Mr. McKinnon,
20 at least one piece of correspondence indicated the
21 understanding that the traps are not now available and
22 won't be until 2002 or later. Is that true, that is the
23 particular traps are not available and therefore the money
24 ought to go for something else now.

25 DEPUTY EXECUTIVE OFFICER CACKETTE: No, I think

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142

1 the traps are available now. We're putting them on
2 demonstration school buses right at this time. They are
3 not a development product, but they are not a product that
4 has, you know, widespread commercial experience yet. So
5 there is, you know, some difference in time here, but the
6 basic product is available and we think that particularly
7 when we finish the demonstration program, that they'll be
8 available in mass in 2001.

9 BOARD MEMBER HUGH FRIEDMAN: Okay. Another
10 question is is there anything in the enabling legislation

11 that provides the pool of money that limits us to
12 replacement buses as opposed to allocating some of it for
13 retrofits. There's a number of pieces of correspondence
14 which seem to indicate the assumption, and if it's a
15 misapprehension, I'd like to know it, that we really can't
16 retrofit. What we've got to do is replace, that was the
17 Governor's intent if that's how they understood it.

18 GENERAL COUNSEL WALSH: No. We do not believe
19 that the language that created the program would limit us
20 to replacements, that we can do the retrofit program.

21 BOARD MEMBER HUGH FRIEDMAN: And alternative
22 fuels includes cleaner diesel as opposed to -- the
23 alternative being what we now have, is that right, or is
24 the only definition or meaning of alternative something
25 other than gasoline and diesel.

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143

1 EXECUTIVE DIRECTOR KENNY: Well, I think
2 historically, when people have talked about alternative
3 fuels, they have been looking at essentially propane, CNG,
4 liquid propane, things like that.

5 BOARD MEMBER HUGH FRIEDMAN: So, again, is there
6 anything that limits allocating funds to something other
7 than natural gas or liquid propane?

8 EXECUTIVE DIRECTOR KENNY: We don't believe so.

9 GENERAL COUNSEL WALSH: No.

10 BOARD MEMBER HUGH FRIEDMAN: I assumed that

11 that's why you made the proposal, but I wanted to clarify,
12 because I see a lot of that raised in the literature.

13 The allocation gives priority to replacing pre-77
14 units, because they are the most polluting, although,
15 apparently, the pre-87 are equally polluting, but you
16 begin with the oldest and then work up.

17 Is it the case that particularly in rural areas,
18 that there are a lot of older buses that would need
19 replacing where they don't have the infrastructure, and it
20 wouldn't be economically feasible to establish
21 infrastructure for CNG or for -- at least for CNG.

22 EXECUTIVE DIRECTOR KENNY: There are school
23 districts that are like that and they may have very small
24 numbers of buses. They may even be single bus fleets.
25 And they do not believe that it would be economically

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144

1 feasible for them to go to the CNG because of the
2 infrastructure costs, and so they are the types of
3 districts that have actually been at least mentioning very
4 specifically that they would prefer to have the option.

5 BOARD MEMBER HUGH FRIEDMAN: Arguing for the
6 diesel, the dual path.

7 EXECUTIVE DIRECTOR KENNY: Yes.

8 BOARD MEMBER HUGH FRIEDMAN: Has Green Diesel
9 even been certified?

10 EXECUTIVE DIRECTOR KENNY: The bus itself has not

11 yet been certified. And in fact, what we are asking the
12 Board to do is look at the three gram NOx .01 gram PM and
13 establish that as a standard. And if the bus was not
14 certified to meet those numbers, then it could not receive
15 any funding.

16 BOARD MEMBER HUGH FRIEDMAN: And how about in-use
17 as opposed to certification. I guess there is some
18 information to support the argument that certified
19 standards aren't in-use standards.

20 DEPUTY EXECUTIVE OFFICER CACKETTE: Well, in the
21 case with the particulate filter on the bus, we've
22 actually tested it on many other in-use cycles or tested
23 the whole bus rather than just the engine. And it
24 maintains its performance pretty much regardless of the
25 way it's driven. So in-use we expect it to be similar

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145

1 reductions to what we see from the certification values.

2 And we also don't expect that there will be any
3 in-use problems, like failures. If there is a failure, I
4 think you'd be able to know it right away from the back
5 pressure or lack thereof on the trap.

6 MOBILE SOURCE CONTROL DIVISION CHIEF CROSS: I
7 might add that fuel -- in-use deterioration is not a fuel
8 issue. In other words, it's an engine issue, so it's
9 going to happen whether it's a natural gas bus or a diesel
10 bus. I think the filters of the kinds of devices you

11 could put on an engine to clean them up, the filters, are
12 one of the more reliable ones, if you will, in terms of
13 being able to identify a problem with it.

14 BOARD MEMBER HUGH FRIEDMAN: Do we know yet the
15 extent to which there are any significant differences in
16 the toxicity, the elements that make it toxic, or the
17 degree of toxicity in the emissions comparatively with
18 natural gas and with the new Green Diesel?

19 EXECUTIVE DIRECTOR KENNY: Actually what we have
20 been doing is using PM as basically a surrogate for the
21 toxicity. And as we reduce the PM, we presume that, in
22 fact, we are reducing the toxicity. When we are looking
23 at these two fuels in the two buses, we are then looking
24 at the PM numbers and using those PM numbers as, kind of,
25 a surrogate for what kind of toxic numbers we're getting

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

146

1 out of these particular buses.

2 We believe that, in fact, that's a reasonable way
3 to go about it, and we believe that when you look at a .03
4 on the CNG and a .01 on the diesel, that we are reducing
5 the toxicity levels down to low levels.

6 Actually, one other question -- actually, one
7 other answer, I guess, I'd like to ask is -- or I'd like
8 to answer in addition was, Mr. Cackette just informed me
9 that as we look basically back at how the money may be
10 distributed, if, in fact, there was any undistributed

11 money, is essentially the proposal does have it as a
12 reallocation by staff, that I think what we would prefer
13 to do in that situation is bring it back to you.

14 BOARD MEMBER HUGH FRIEDMAN: And just the final
15 question, if I may, and it really again keys off of
16 Supervisor DeSaulnier's question, if we were able to get
17 similar funding next year to keep it going, this program
18 going of replacing and/or retrofitting, would this, if you
19 knew now if you had another X million, would this proposal
20 be any different?

21 EXECUTIVE DIRECTOR KENNY: If we had basically
22 the exact same factual situation then as we have now I
23 think the proposal would be identical. I think the thing
24 that would potentially change the proposal, assuming more
25 money in the future, is that we may have a different set

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147

1 of factual circumstances which may modify what we would
2 propose to you.

3 BOARD MEMBER HUGH FRIEDMAN: And you'd have more
4 experience with both Green Diesel and with retrofits as
5 well.

6 EXECUTIVE DIRECTOR KENNY: Yes.

7 BOARD MEMBER HUGH FRIEDMAN: Thank you.

8 CHAIRPERSON LLOYD: Questions of board members on
9 my left?

10 I had a question of staff. As I recollect,

11 you're saying the average life of a bus is expected to be
12 225,000 miles. The traps are warrantied to 150,000 miles.
13 What happens between the additional 75,000 miles?

14 ON-ROADS CONTROLS BRANCH CHIEF KITOWSKI: I can
15 speak to that slightly, but we also have several trap
16 manufacturers coming up later that may address it more
17 definitively.

18 CHAIRPERSON LLOYD: They're going to say that
19 it's going to be better than 150,000 miles.

20 ON-ROADS CONTROLS BRANCH CHIEF KITOWSKI: I think
21 they'll say it's going to be better than 150,000 miles.
22 And in addition, the traps are made in a rather modular
23 format so that the substrata inside could be removed and
24 replaced if needed and that would minimize any cost.

25 MOBILE SOURCE CONTROL DIVISION CHIEF CROSS: And

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

148

1 they're typically in place in the muffler, which means
2 that they're easy to access and change or do things to and
3 they are cleanable, typically. So if the trap
4 deteriorates due to modest plugging from aging, it's
5 possible in many, many cases to clean it up. So I think
6 that maybe the 150,000 miles is right for the original
7 piece, but then I think there are things you can do to
8 extend the life of the trap.

9 DEPUTY EXECUTIVE OFFICER CACKETTE: I'd like to
10 add one comment is that the experience in Europe is

11 there's traps that are already well beyond 150,000 miles
12 durability. So there's some evidence that they will go a
13 lot longer than the warranty period.

14 CHAIRPERSON LLOYD: Thank you very much. We've
15 got 52 witnesses signed up so far. So we're going to
16 limit those to three minutes apiece. But a couple of
17 things before we start. I'd like to say a few words here.

18 Again, bear in mind, when you come to testify
19 that the Board is very familiar with the problems of
20 diesel particulate, obviously having identified as a
21 diesel toxic air contaminant there. So please, if you
22 want to use your three minutes telling us about that,
23 fine, but remember in three minutes you'll be gone.

24 (Laughter.)

25 CHAIRPERSON LLOYD: The other part of it, too, I

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149

1 think that here we're not talking about buying dirty
2 diesel. I've seen stuff in the press and quite honestly I
3 get a bit irritated that this is being mischaracterized.
4 And, in fact, if there's any evidence that the Board is
5 proposing to buy dirty diesel technology, I'd like to know
6 and I'm sure my colleagues would too.

7 I'd like to hear about the match issue from the
8 schools, clearly, that's a critical one here, and how that
9 impacts us there. I'd also like to hear if there are any
10 other manufacturers out there that can, in fact, match the

11 achievements of international with a Green Diesel
12 technology, because, again, we've been accused here of
13 favoring one manufacturer. If anybody else is out there
14 that's available, please, and let us know if there's any
15 other manufacturers, I'd like to know. I'm sure the Board
16 would, too, about the availability and cost of low sulfur
17 diesel. I'm sure that's going to be in there, it's just a
18 reminder.

19 And the other thing, if there's any information
20 out there that diesel traps do not work, I'd like to have
21 evidence of that as well.

22 So I think those things I'm looking for in some
23 of the testimony here as we proceed in the afternoon. So
24 with that, I'd like to call up the first three witnesses.
25 We have Brian White, Todd Campbell and Dr. Chung Lieu.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

150

1 MR. WHITE: Good afternoon, Chairman Lloyd, Air
2 Board Members and staff. I'd like to thank the staff for
3 providing the scheduled time for me. I have a time
4 constraint. It's kind of hard to be in San Francisco and
5 Sacramento at the same time, so I thank you for that.

6 CHAIRPERSON LLOYD: Thank you for your testimony.

7 (Laughter.)

8 MR. WHITE: That was my three minutes, right?

9 (Laughter.)

10 BOARD MEMBER DeSAULNIER: We'll help you to get

11 to San Francisco.

12 (Laughter.)

13 MR. WHITE: My name is Brian White. I'm the
14 Director of Education and Environmental issues for the
15 California Chamber of Commerce. On behalf of Californians
16 For a Sound Fuel Strategy, which is a California Chamber
17 led coalition of labor groups, of trade associations,
18 business groups and agricultural groups et cetera, we are
19 here to provide some brief comments on the Air Board's low
20 emission school bus program guidelines.

21 Over the last two years, Californians For a Sound
22 Fuel Strategy and its member companies have worked with
23 several state and local agencies to develop reasonable and
24 cost-effective approaches to regulating emissions from
25 stationary, portable, and mobile source diesel fuel

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151

1 engines.

2 All along our message has been simple. We
3 support federal, State and local efforts to reduce
4 exposure to diesel exhaust. However, these efforts must
5 be fuel neutral while providing flexibility and choices
6 that enable all technologies to compete in the quest to
7 reduce both particulate matter and NOx emissions.

8 Earlier in the year, the Board recognized the
9 importance of adopting a fuel neutral policy when it
10 adopted a plan allowing transit operators to choose either

11 a clean diesel path or a natural gas path to reduce
12 emissions from urban transit buses.

13 The coalition appreciates the Board's action on
14 the effort and hopes that the Board will continue to adopt
15 policies in the future that are consistent with the
16 approach. It will allow operators to choose the fuel path
17 as most cost effective to meet their local needs.

18 With that in mind, we respectfully urge the Board
19 to approve the staff proposal for lowering school bus
20 emissions which allocates half of the available 50 million
21 for the purchase of clean diesel or alternative fuels.
22 While some have argued about which technology is cleaner,
23 we do not plan to get into that debate.

24 However, the fact of the matter is that both
25 natural gas and clean diesel should have a stake in

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152

1 reducing exposure to diesel exhaust. Each technology has
2 its benefits, and the decision to choose those
3 technologies should be left to local school districts to
4 prevent, in particular, the school districts that have
5 budget constraints or are cash strapped, and they should
6 not have to choose between books or buses.

7 No one disputes that clean diesel technology with
8 the use of particulate traps and cleaner engines costs far
9 less to purchase than alternative fuels. Additionally, as
10 you know, diesel fueling and repair infrastructure is

11 already widely in use, but the natural gas is also a
12 viable technology.

13 This is important because the goal of the program
14 should be to reduce exposure to diesel exhaust while using
15 the limited resources available in the most cost-effective
16 manner. During the year's budget hearing, there was a big
17 debate about which technology was going to get the funds.
18 Due to the politics of the situation, the Legislature
19 punted the issue to the Air Board and here we are.

20 But it was believed, at that time, that both
21 clean diesel and natural gas would have a role to play.
22 Our coalition strongly proposed in the budget negotiations
23 that fuel neutrality be an important issue and outcome of
24 whatever the Board decides. And we appreciate that the
25 Air Board staff has followed through given the dynamics of

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153

1 the situation. The concept is simple, encourage all
2 engine and fuel technologies to become cleaner.

3 The state of California has wisely chosen to
4 focus its efforts on both fronts, encouraging greater use
5 of natural gas, where feasible, and encouraging continued
6 improvements to diesel technology. Again, we urge you to
7 continue down the path and thank you for allowing us to
8 express our views.

9 CHAIRPERSON LLOYD: Thank you very much, Brian.

10 Question, Mr. McKinnon.

11 BOARD MEMBER McKINNON: Yeah. I don't have a big
12 difference with you. However, I'm not sure what labor
13 group means, but what labor organizations are involved in
14 your coalition?

15 MR. WHITE: The Labor Council, Council of
16 Laborers.

17 BOARD MEMBER McKINNON: That's two different
18 things. The State Council of Laborers Union?

19 MR. WHITE: Yes.

20 BOARD MEMBER McKINNON: Thank you.

21 CHAIRPERSON LLOYD: Thank you very much, Brian.

22 MR. WHITE: Thank you.

23 Todd Campbell, Chung Liu, then Robina Suwol and
24 Nicholas Buber.

25 (Thereupon an overhead presentation was

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154

1 presented as follows.)

2 MR. CAMPBELL: Good afternoon, Chairman Lloyd,
3 members of the Board. My name is Todd Campbell. I'm the
4 Policy Director for the Coalition For Clean Air. And I
5 feel that the program is win-win for the State of
6 California and for the children who ride school buses.

7 However, I feel that it could be more of a
8 win-win with amendments that we are going to suggest to
9 you today. I'm the first of many environmentalists that
10 will be coming to you. Can I have the next slide please

11 and can I have the lights dimmed down a little bit so
12 everybody can see the Board.

13 --o0o--

14 MR. CAMPBELL: We have a wide coalition
15 supporting using the cleanest buses available, under this
16 program.

17 Next slide, please.

18 --o0o--

19 MR. CAMPBELL: I'd like to remind you that
20 under -- the ARB has a historical pattern of rewarding or
21 trying to encourage the cleanest options available. ARB
22 adopted a resolution, 9849, that stated that they would
23 replace diesel fuel school buses and public transit buses
24 with cleaner alternative fuels. You also have put in
25 place an optional low NOx standard that has been set in

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155

1 1995. It has been used in the Moyer Program. It has also
2 been used for mobile source reduction credits, as well as
3 the mobile source air pollution reduction review
4 committee.

5 In fact, I have a letter here today from the
6 Speaker Emeritus of the Assembly, Antonio Villaraigosa who
7 also urges Chairman Lloyd and the Board to consider or to
8 uphold the optional low NOx standard as it has advanced
9 technology throughout the years. And I will make it
10 available to you if you do not have a copy of that.

11 their lifetime they may actually -- they will deteriorate,
12 that's the combustion engine.

13 Next slide, please.

14 --o0o--

15 MR. CAMPBELL: Oh, step back. Also, ARB should
16 advance these, not allow it to backslide. We believe that
17 the US Environmental Protection Agency rule will advance
18 diesel. We do not believe that the school bus rule should
19 do that or could do that. In fact, we believe accepting a
20 3.0 NOx standard doesn't advance diesel, that
21 International is not required to advance their products to
22 2.5 grams or meet the optional low NOx standard by October
23 2002, even though they are under the commitment or under
24 the lawsuit about defeat devices under United States
25 versus Navistar International.

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157

1 And we also believe that they are a significant
2 portion of the market share, representing 60 percent of
3 school bus sales. And it's incredibly important to
4 encourage them and not reward them at the outset, but
5 encourage them to get to 2.5 grams. We think this is
6 showing the environment by allowing an engine
7 manufacturer, one engine manufacturer, to receive funds
8 without meeting the optional low NOx standard.

9 Next slide, please.

10 --o0o--

11 MR. CAMPBELL: This is also to show you why we
12 think the optional low NOx standards is important because
13 it does advance the technology. As you can see in the out
14 years in October 2002, the optional low NOx standard does
15 move down to 1.8 grams. And we feel that if we follow the
16 path, like we have in the last five years, we'll not only
17 advance diesel, but also natural gas and other alternative
18 fuels will continue to reduce their emissions.

19 Next slide, please.

20 --o0o--

21 CHAIRPERSON LLOYD: Todd, what's the color on the
22 lights there, on your timer?

23 MR. CAMPBELL: I've got no lights.

24 CHAIRPERSON LLOYD: Why is it not working?

25 I think you've had three minutes, so if you've --

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158

1 can you wrap up?

2 MR. CAMPBELL: Sure. I'll just go quickly. I
3 just wanted to touch on toxics. I don't believe that
4 staff can come to you with a credible case today
5 considering in-use emissions and say with any certainty
6 that PM is less on the diesel path versus the alternative
7 fuel path. And if they were equivalent, the diesel
8 particulate is a toxic air contaminant. It has been
9 listed with 30 human epidemiology studies, and there are
10 no studies linking CNG particulate to lung cancer.

11 are not. We are in favor of the after-treatment. We
12 believe that existing buses do need to be addressed. And
13 the after treatment can play a role. We're hoping -- I
14 mean the problem is that there's so much money being spent
15 on untested and, you know, noncertified equipment. And we
16 want to make sure that we're really going to be protecting
17 children's health by spending it in the -- you know, in
18 the areas that we know we'll succeed on the road.

19 BOARD MEMBER McKINNON: Well, I know that we all
20 have the same objective. We may end up with slightly
21 different solutions, but I want to kind of bring down the
22 level of, kind of, a promotion like a bus that's spewing
23 when, you know -- let's have a conversation about what
24 we're really talking about. And I don't think any of the
25 buses we're talking about are going to look like that.

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160

1 They better not.

2 MR. CAMPBELL: I also think that waving a white
3 handkerchief in front of a tailpipe really doesn't tell
4 you anything either.

5 BOARD MEMBER McKINNON: Well, I'll make the same
6 comment if that happens, too.

7 Thanks.

8 CHAIRPERSON LLOYD: Mr. Calhoun.

9 BOARD MEMBER CALHOUN: Yeah. Would your
10 testimony be different if the green diesel had been

11 certified to the two and a half NOx.

12 MR. CAMPBELL: I believe that that would be the
13 case, yes. I believe you should reward engines that meet
14 the standards that the Air Resources Board put forward.
15 And by backsliding and stepping back in our standards,
16 then we have a sincere problem, because now do we really
17 mean what we say when we set a standard?

18 I mean, if this was a standard adopted last year,
19 there may be some flexibility. But this is a standard
20 adopted in 1995. We're almost to the next low optional
21 NOx standard. We should be going, you know, to zero, not
22 the other way around.

23 CHAIRPERSON LLOYD: Thanks.

24 Dr. Chung Liu.

25 DR. CHUNG LIU: Chairman Lloyd, Members of the

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161

1 Board, the South Coast AQMD has long recognized the
2 adverse air quality and health impacts of diesel exhaust
3 on children. In January 1999, under the initiative of our
4 government Board Chairman Burke, the South Coast District
5 adopted the Children's Air Quality Agenda to pursue
6 additional measures to protect children from the
7 disapportionment impacts from diesel exhaust.

8 More recently our board started to adopt a school
9 bus program. The foundation is to provide funding
10 assistance for purchasing cleaner school buses and

11 retrofitting the existing fleet with the emission
12 controls.

13 The South Coast District considers a proposed
14 lower emission school bus program guidelines for
15 replacement and retrofit of older diesel buses to be of
16 the utmost importance, since there isn't enough funding
17 available from local and State sources at this time, but
18 we do have a few comments here to make about both the
19 retrofit program and also the bus replacement program.

20 On the retrofit part, the South Coast district
21 strongly supported a funding level of \$20 million as
22 originally proposed by your staff, rather than the last
23 minute change to \$10 million for existing school bus
24 retrofits. We believe that \$20 million allocation in
25 funds for installation of a particular trap will yield

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

162

1 immediate and much, much bigger benefits. And so for that
2 matter, we really don't see the rationale of reducing from
3 our original proposal.

4 About the replacement program, the South Coast
5 District strongly opposes the NOx emission of three grams
6 per brake horsepower hour for new replacement buses. I
7 have to point out, the standard site for CNG buses in the
8 staff guidelines, 2.5 grams and .03 gram for PM, is not
9 the CNG performance at this time at all. And this is by
10 far better than that.

11 And the ARB continues using the optional standard
12 of 2.5 grams for all other heavy-duty vehicles. And
13 that's combined for PM and NOx -- I'm sorry for PM and
14 hydrocarbons. And actually the option standard is
15 expected to achieve 1.8 grams of NOx. And the three grams
16 really is lax, particularly considering that now the ARB
17 is going to certify themselves and rely on EPA FEL's
18 certification process. We just don't know the rationale
19 for doing that. And so we propose that we should stick to
20 a higher standard on the one.

21 Secondly, we propose the guideline of the school
22 bus replacement program to include the replacement of
23 diesel school buses with large size pool when powered by
24 gasoline, which mean much lower amount of NOx, particulate
25 matter and air toxics.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

163

1 The special education problem calls for greater
2 demand on mid-sized vehicles than full-sized buses in a
3 large number of school districts. We propose the type of
4 vehicle be allocated in the petroleum-based new vehicle
5 portion of the program.

6 Lastly, the South Coast AQMD supports allocation
7 by population, but we also believe that each air district
8 should retain needed flexibility which will enable them to
9 very effectively distribute funds for the new bus
10 replacement program to achieve the clean air goals. South

11 Coast proposed that the special types of replacement buses
12 be determined locally. In case of eligibility of new
13 Diesel replacement buses, the maximum amount of a local
14 match should not exceed the cost of a particulate trap,
15 because that's what it's mainly about.

16 That concludes my comments.

17 CHAIRPERSON LLOYD: Thank you, Doctor. I'd like
18 to ask staff to respond to the question of certification
19 of the three gram.

20 EXECUTIVE DIRECTOR KENNY: With regard to
21 certifications, what we were doing is essentially
22 recognizing that the three gram engine is cleaner than the
23 current four gram certification standard that actually
24 does exist. There are optional standards, and 2.5 is
25 where the current optional standards are.

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164

1 However, we were trying to also reflect -- what
2 we were trying to also reflect in the proposal that we
3 were making to the Board is that there is a differential
4 in the cost of the buses, whether it's a diesel or a CNG
5 bus.

6 And take into account that the cost of the CNG
7 bus is roughly 30 percent higher than the cost of a diesel
8 bus, and then you take into account the fact that you have
9 a two and a half gram standard and you have the three gram
10 standard. In effect, what you can do is you can buy three

11 cleaner diesels for the price of two cleaner CNGs. And we
12 thought there was, therefore, a value from a health
13 standpoint to bring the cleaner diesels into the
14 marketplace.

15 The other thing I would mention, also, is that
16 the current standard is four grams. And so they are
17 essentially certifying to a lower standard than the
18 current standard. And then the other thing that we talked
19 about was the fact that on the PM side, the PM levels that
20 we were talking about for the diesel are lower than the PM
21 levels we were talking about for the CNG.

22 And so when we balanced all of those things
23 together, the certification numbers, it seemed to be
24 reasonable to essentially allow the clean diesel into the
25 marketplace because we got lower PM and then in aggregate

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165

1 we got lower NOx.

2 CHAIRPERSON LLOYD: What about the issue with
3 certification by us vis-a-vis EPA, the difference there.

4 EXECUTIVE DIRECTOR KENNY: Well, these are FEL
5 and those are EPA certification standards.

6 CHAIRPERSON LLOYD: Any questions from the Board?
7 Thank you, Dr. Lieu.

8 We have Robina Suwol, Sandy Silberstein, Bruce
9 Bertelsen, Kevin Hallstrom and Henry Hippert.

10 MS. SUWOL: Hi. Thank you very much. I want to

11 take the opportunity to thank the Board for your
12 consistent and continual efforts to protect the public.
13 My name is Robina Suwol. I'm a parent of a son, Nicholas,
14 who's here with me today, who has asthma.

15 I have no vested interest in the financial
16 outcome of this hearing today. And I don't know if anyone
17 present, I certainly hope not, has ever had to witness a
18 child gasping for air from an asthma attack. It's
19 particularly horrifying, particularly when the cause is
20 oftentimes trapped behind a school bus that's spewing
21 toxic diesel.

22 Asthma, as we all know, is the number one
23 childhood illness in the United States right now. And
24 we're all familiar with the studies that link cancer and
25 asthma to diesel. I'm here today and I've come up at my

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166

1 own expense with my son to request that this Board please
2 not weaken the standards of public health. The Green
3 Diesel proposal for which you are all being heavily
4 lobbied proposes that \$15 million of taxpayer's money be
5 used to, hopefully, repair, and I say hopefully, because
6 there's no guarantee that these buses will run any
7 cleaner.

8 In fact, past tests have proved that companies
9 sold engines that, yes, they could pass laboratory smog
10 tests, but in reality they spewed pollution equivalent to

11 65 million additional cars.

12 Therefore, I do not believe that the public
13 supports a \$15 million payment to International Truck with
14 the condition that they're going to try to poison children
15 and community members just a little bit less.

16 I request that the use of the \$15 million of
17 taxpayer money please be used to purchase proven cleaner
18 alternatives. And I'll end by saying that I thank you for
19 the time.

20 My son asked how government worked. And I
21 explained to him that everyone is given the opportunity to
22 speak. And he said even a nine-year old. And I said yes,
23 and so if he can just take one moment.

24 CHAIRPERSON LLOYD: Certainly.

25 MR. BUBER: Hi. My name is Nicholas and I have

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167

1 asthma. Kids are getting sick and dying from diesel.

2 Please help us.

3 CHAIRPERSON LLOYD: Thank you.

4 MS. SUWOL: Thank you very much.

5 CHAIRPERSON LLOYD: I just want to reiterate that
6 this Board has no intention of -- we intend to clean up
7 the air and not make it worse.

8 MS. SUWOL: Thank you very much.

9 CHAIRPERSON LLOYD: Thank you. Sandy
10 Silberstein, Bruce Bertelsen, Kevin Hallstrom.

11 MS. SILBERSTEIN: I'm Sandy Silberstein and I'm
12 representing the Riverside County Schools Advocacy
13 Association, which is comprised of all school districts of
14 Riverside County. And we are in support of the staff
15 recommendation. We are especially pleased that -- first
16 of all, we're very pleased to have \$50 million for school
17 buses. We are especially pleased with the fuel neutral
18 policy and having the choice of fuels. We're pleased with
19 no match on the retrofit program. And we are pleased that
20 you are proposing to allocate the money on a population
21 basis.

22 However, we do ask for one amendment and it
23 speaks to Chairman's Lloyd request that we speak to the
24 match issue. We would request that the Board consider
25 amending the proposal to either reduce or eliminate the

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168

1 match or to, at least, maybe tie it to a district's
2 ability -- a school district's ability to pay tied to
3 their -- and, excuse me, and their transportation costs.

4 I think you're all probably aware that we are --
5 the public schools are the largest suppliers of public
6 transportation in the State of California. And I would
7 argue that that system is in crisis and is at risk. And
8 the Air Resources Board has an opportunity here, and I
9 would say even more so in the future to somehow save that
10 system.

11 We're asking for a reduction in the match for
12 purely economic reasons, obviously. We have in Riverside
13 county 23 school districts. One of them has already
14 totally eliminated home-to-school transportation for its
15 students. Another has severely reduced home-to-school
16 transportation, providing it only to special education
17 students and those that live very, very far away in rural
18 areas. A third district is considering eliminating
19 home-to-school transportation altogether.

20 That is a crisis for clean air in the State if it
21 continues. It's my understanding we have somewhere upward
22 of 60 school districts in the state now that have already
23 eliminated home-to-school transportation because of the
24 costs of the program. We have, as an example, the Murieta
25 Valley School District in Riverside county that, since

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169

1 1983, has grown 4,000 percent in population.

2 Their funding for home-to-school transportation
3 has grown only marginally and now they -- back in 1983
4 they received roughly \$70,000 a year for home-to-school
5 transportation. Now, with 4,000 percent more students,
6 they receive \$78,000 a year. That's a \$1.2 million
7 encroachment on their budget. They will have to make the
8 hard economic decision very soon whether to continue to
9 bus their students at all.

10 The 50 million is a wonderful start. We're

11 asking you to consider reducing the match so more of us
12 can play and to consider our ability to pay when you do
13 allocate, if you do impose a match.

14 And finally, we would ask that the Air Resources
15 Board step forward and assist us in getting more State
16 funding in the future for home-to-school transportation.
17 We believe the system is worth saving.

18 Thank you.

19 CHAIRPERSON LLOYD: Thank you very much.

20 Dr. Burke.

21 BOARD MEMBER BURKE: Before you go.

22 CHAIRPERSON LLOYD: One question.

23 BOARD MEMBER BURKE: Some school districts have
24 voiced an opposition to retrofit. Is your school district
25 one of those?

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170

1 MS. SILBERSTEIN: No, we're not. None of the 23
2 are.

3 BOARD MEMBER BURKE: So you have no problem with
4 retrofit?

5 MS. SILBERSTEIN: We think retrofitting is a
6 great idea.

7 BOARD MEMBER BURKE: What if all the money was
8 retrofit?

9 MS. SILBERSTEIN: I guess that sort of gets into
10 the issue of, and that's not my area of expertise, of how

11 much clean air we get out of this, okay.

12 BOARD MEMBER BURKE: Well, we get more clean air
13 out of retrofit immediately than we get out of all the
14 other, but we don't advance technology, so it's a trade
15 off.

16 MS. SILBERSTEIN: Okay.

17 BOARD MEMBER BURKE: I just was trying to get to
18 the bottom of why some school districts are opposed to
19 retrofit. I thought maybe you could --

20 MS. SILBERSTEIN: They aren't ours and I don't
21 know the answer.

22 BOARD MEMBER BURKE: Thank you very much.

23 CHAIRPERSON LLOYD: Thank you.

24 Bruce Bertelsen, Kevin Hallstrom and Henry
25 Hippert.

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171

1 MR. BERTELSEN: Good afternoon. My name is Bruce
2 Bertelsen, the Executive Director of Manufacturers of
3 Emission Controls Association. And following me will be
4 individuals from Englehard, Johnson-Matthey and Ceryx,
5 three of our member companies who are manufacturing diesel
6 particulate filter control technology.

7 We're here today to express our strong support
8 for the proposed guidelines. We recognize that the Board
9 and the staff faces very difficult choices in trying to
10 design and establish the funding allocations, but we think

11 that the program, as outlined, fairly balances a lot of
12 competing and important considerations and it will achieve
13 important objectives.

14 First, it will significantly reduce the exposure
15 of school children and others to diesel PM exhaust.
16 Second, it will achieve NOx reductions. And third, it
17 provides critical support for three important strategies
18 that, I think, in the long range are going to play an
19 incredibly important role in reducing overall diesel PM
20 emissions, alternative fuel technology, lower diesel
21 engine technology -- excuse me, lower diesel PM engine
22 technology and retrofit strategies.

23 Because there were some questions asked, I want
24 to use the rest of my time to touch on some things that
25 were mentioned previously. First of all, with regard to

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172

1 diesel particulate filters, that's a technology that is
2 available today. It's been demonstrated. Actually,
3 worldwide there are about 40,000 engines that have been
4 equipped with filter technology.

5 I had an opportunity at the advisory committee
6 meeting earlier this year where experts from Switzerland,
7 Sweden, and Germany came and shared with members of the
8 advisory committee, the retrofit advisory committee,
9 experience with filter technology in Europe. And all I
10 can say is it was an extremely strong endorsement of the

11 technology.

12 The durability has been well established, as was
13 mentioned previously. There are filters that have been on
14 vehicles for literally hundreds of thousands of miles and
15 are performing effectively. A question was raised about
16 toxic emissions. We did a study about a year and a half
17 ago where we demonstrated about an 80 percent reduction in
18 PAH emissions, total PAH emissions. There have been a
19 number of other studies that have shown similar results.

20 Another factor which hasn't really been touched
21 on here is that in addition to achieving PM mass emission
22 reductions of 90 percent or more, filter technology is
23 extremely effective in controlling the ultra-fine
24 particles, the carbon based ultra-fine particles. A
25 number of test programs around the world have demonstrated

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173

1 that filter technology can control up to 99 plus percent
2 of these ultra-fine particulates.

3 So I think it's a technology that will serve the
4 citizens and the school children of California well.

5 Thank you very much.

6 CHAIRPERSON LLOYD: Thank you, Bruce.

7 BOARD MEMBER BURKE: One question. Forty
8 thousand units are currently being used in various
9 products for traps. Can you tell me where they are?

10 MR. BERTELSEN: Where they are?

11 BOARD MEMBER BURKE: Yeah.

12 MR. BERTELSEN: They're in Europe. They're in
13 the United States. They're in Asia. There are some in
14 Latin America.

15 BOARD MEMBER BURKE: So you feel most of them are
16 in Europe?

17 MR. BERTELSEN: I'll defer to the members, but I
18 would believe that the majority of them are in Europe.

19 BOARD MEMBER BURKE: What has me, you know -- and
20 I'm a trap advocate, you know, so I don't want you to
21 misunderstand me, but what I don't understand is how
22 Europe got so far ahead of California. I don't understand
23 that. And I don't understand how all these traps, forty
24 thousand is a lot of traps when you start to think about
25 it, how they got -- what's the certification process used

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174

1 for wherever these 40,000 traps are? And how come if they
2 were certified in those countries, why weren't they
3 certified in California?

4 MR. BERTELSEN: I guess I'd make two comments.
5 First of all, one of the reasons that filter technology
6 got the jump in Europe was because there was availability
7 of low sulfur fuel. And what we've seen is where low
8 sulfur fuel is available, is technologies perform
9 extraordinarily well. And California has taken a big step
10 in that direction. And you're absolutely right, Europe

11 may be -- this may be the one instance where Europe got
12 ahead of us, but I think with the California program
13 they're going to be a distant second in a couple of years.

14 But that was one of the major reasons in terms of
15 the on-road experience. But there also have been filters
16 put on off-road equipment all over the world as well. So
17 it's not like -- I don't know, maybe one of our members
18 can give us --

19 BOARD MEMBER BURKE: You know, they don't have
20 Green Diesel fuel in Japan and in Asia and a lot of these
21 other countries you're talking about where these traps are
22 operating. I don't want to prolong this. We're going to
23 be here all day anyway. But these are questions that I'm
24 sure are ruminating through the minds of all my
25 colleagues, so I just wanted to --

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175

1 CHAIRPERSON LLOYD: Well, I know from attending
2 the meeting down in LA on the retrofit, I can speak from
3 talking to people in Europe. I think what Bruce reflects
4 there is definitely correct. Again, I don't know about
5 that, there may be spot markets in Asia and things. But,
6 again, I think we look to Englehard and Johnson-Matthey to
7 maybe address those.

8 Yes, Mr. McKinnon.

9 BOARD MEMBER MCKINNON: Yeah, two things. I
10 think one of the questions earlier talked about the

11 150,000 miles versus a 225,000-mile life of the bus.
12 Don't diesel engines run cooler and isn't there kind of
13 evidence that given low sulfur diesel that's consistent,
14 the traps should last longer than say a gasoline vehicle
15 because of heat?

16 MR. BERTELSEN: Well, what will happen -- if you
17 have low sulfur fuel, if you have an engine that operates
18 with a relatively lower temperature or an engine that
19 operates in an area with a cold ambient temperature, the
20 availability of low sulfur fuel facilitates the
21 regeneration or cleaning of the filter. And you're
22 absolutely right, as long as that continues to occur,
23 which it will occur with low sulfur fuel, these filters
24 will last for an incredibly long time.

25 I mean, there have been engines that have run

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176

1 600,000 kilometers or more with filters and low sulfur
2 fuel. The reason that you have filter technology in other
3 parts of the world is that if the engine in its particular
4 application runs very, very hot, for example, mining
5 equipment, which is full load operational all the time,
6 the fact that you're using slightly higher sulfur is not
7 going to be a factor, because you're reaching such high
8 temperatures that that filter is going to regenerate
9 anyway.

10 When you're looking at the on-road experience

11 where the temperatures may be lower due to the design of
12 the engine or the operating condition, then it's far more
13 important, in fact it's critical, to have low sulfur fuel
14 to ensure that regeneration, that cleaning of the filter.

15 BOARD MEMBER McKINNON: How many years would you
16 guess or estimate have particulate traps been protecting
17 miners and firemen in fire houses?

18 MR. BERTELSEN: I believe filter technology was
19 introduced in mine applications in the early eighties.

20 BOARD MEMBER McKINNON: I guess my last question
21 you were talking about Europe, and it kind of reminds me
22 of where we really want to go. I mean buses are a small
23 percentage of the diesel emissions that we experience in
24 the state. A lot of it is trucking.

25 And you talked about Europe. What's happening

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177

1 with trucking and diesel and particulate traps in Europe?

2 MR. BERTELSEN: I'm going to let some of our
3 individual members give you some information on that, but
4 obviously the first target for filter technology in Europe
5 were buses because they operated almost exclusively in
6 high population zones, but there has been some work done
7 with trucks as well.

8 And there is absolutely no reason why the
9 technology can't be applied as effectively to trucks as it
10 has been to buses.

11 CHAIRPERSON LLOYD: Or the other way around.

12 MR. BERTELSEN: Or the other way around.

13 CHAIRPERSON LLOYD: Thank you. Thank you, Bruce.

14 I guess Kevin Hallstrom, Henry Hippert, Gerald
15 Smith.

16 MR. HALLSTROM: Good afternoon. My name is Kevin
17 Hallstrom and I'm the technical manager for the
18 Environmental Technologies Group at Englehard Corporation.
19 Englehard is pleased to testify in support of the proposed
20 school bus guidelines.

21 The proposal would provide significant emission
22 reductions on vehicles that carry our most precious
23 resource, our children. Englehard is a Fortune 500
24 Corporation that is a leader in the development of
25 emission control catalyst technologies. Englehard

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178

1 commends the Air Resources Board for focusing the program
2 on the emission that is deemed most harmful, that is the
3 particulates.

4 The program will significantly reduce the
5 particulate emissions of the California school bus fleet.
6 Englehard supports the effort to utilize the best
7 available technology to obtain the maximum emission
8 reductions cost effectively. By utilizing vehicle
9 replacements with both alternative fuels and clean diesel
10 and along with retrofits, the program is designed to offer

11 the school districts the options they need to make the
12 program a success.

13 Englehard supports the fuel neutrality of this
14 program and the precedent it sets by utilizing the best
15 technology currently available, new clean diesel buses,
16 new clean alternative fuel buses with catalysts that
17 address formaldehyde and carbon monoxide and buses
18 retrofitted with particulate traps using ultra low sulfur
19 diesel fuel.

20 At this time, Englehard has already designed
21 muffler replacement kits for ten different vehicles using
22 seven different types of engines of various ages. And we
23 are continuing to develop new designs in conjunction with
24 the original equipment muffler manufacturers.

25 Upon ARB certification, the current designs will

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179

1 be available for large-scale production in the first
2 quarter of 2001 and include designs for pre-1994 and
3 post-1994 buses. The retrofit kits using Englehard's
4 proven DPF technology will provide over 95 percent
5 particulate reductions and over 80 percent reduction of
6 carbon monoxide and hydrocarbons.

7 The retrofit kits will allow the school bus
8 districts to continue to utilize their existing bus fleets
9 but meet the emission requirements set forth in the
10 proposal, for a minimal cost while maximizing the emission

11 reductions per benefit per dollar.

12 Again, Englehard supports the school bus proposal
13 and commends the ARB for its continued pollution control
14 leadership.

15 Thank you.

16 CHAIRPERSON LLOYD: Thank you very much.

17 Questions?

18 Yes.

19 BOARD MEMBER RIORDAN: A question. Going back to
20 some of the prior conversation, do you have any existing
21 work that you've been party to in Europe, for instance,
22 now on a bus or a truck there, with your --

23 MR. HALLSTROM: Yes.

24 BOARD MEMBER RIORDAN: And the experience is
25 good?

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180

1 MR. HALLSTROM: Mostly good, yes.

2 BOARD MEMBER RIORDAN: And duration is, what, in
3 terms of the --

4 MR. HALLSTROM: Three years up to about 200,000
5 miles. We've also had a fleet demonstration in New Jersey
6 on their transit vehicles for the last five years. We've
7 been doing the ARCO program. And I believe the initial
8 vehicles that were installed there were school buses from
9 San Diego that were installed about 16 months ago and
10 already have 30,000 miles.

11 Some of the tanker trucks for ARCO and Ralph's
12 are now a hundred, a hundred twenty thousand miles and
13 still operating.

14 BOARD MEMBER RIORDAN: Thank you.

15 CHAIRPERSON LLOYD: Yes. Dr. Friedman.

16 BOARD MEMBER WILLIAM FRIEDMAN: Tell me, what
17 does it actually cost in real dollars to do one bus?

18 MR. HALLSTROM: The estimated cost is between
19 four and six thousand dollars per bus. It depends a
20 little bit on the size of the engine that's used in the
21 vehicle and the packaging that's necessary to install it.

22 BOARD MEMBER WILLIAM FRIEDMAN: That's with
23 installation?

24 MR. HALLSTROM: It's with installation.

25 CHAIRPERSON LLOYD: Thank you very much.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

181

1 BOARD MEMBER CALHOUN: What about the longevity,
2 I'm talking about the mileage? What do you estimate is
3 the life of the catalyst in terms of miles?

4 MR. HALLSTROM: I mean if you look at the
5 questions that have come before, you talk 150,000 miles,
6 that's the warranty. That is an emission warranty. It's
7 just like your car. You don't expect the catalytic
8 converter to stop working after 100,000 miles. That's
9 just when the warranty expires.

10 I would expect these to last well in excess of

11 150,000 miles. On a school bus it's a little difficult,
12 because they do not operate that many miles, 225,000 miles
13 is probably 15 years. So on a school bus, we probably
14 expect it to last the life of the vehicle where on a
15 transit vehicle, like on a transportation truck, 300,000,
16 400,000 miles would not be unexpected.

17 BOARD MEMBER CALHOUN: What about the efficiency
18 at this extended mileage?

19 MR. HALLSTROM: Okay. Well, you have to look at
20 the filter. There's a physical mechanism of the filter.
21 And that physical mechanism reduces 99 percent of the
22 carbon particles, which is 80 plus percent of the diesel
23 particulate that is coming out of the vehicle. And in
24 addition to that, you have a catalyst on there that will
25 reduce the remaining portion and is used for both reducing

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182

1 the soluble organic fraction and for providing the method
2 of regeneration.

3 So that catalyst is the same type of technology
4 that's used currently on urban bus catalysts. And life on
5 those type of catalysts is improved in excess of 500,000
6 miles. So the catalyst technology is very much expected
7 to be very similar reductions, 90 to 100 percent. And
8 there's been some SAE papers that have shown that even
9 after 300,000 miles of operation.

10 CHAIRPERSON LLOYD: Thank you.

11 Kevin Hallstrom, Henry Hippert, Gerald Smith,
12 Jeff Redoutey.

13 MR. HIPPERT: Good afternoon, Chairman Lloyd,
14 Board Members and staff. My name is Henry Hippert. I'm
15 From Johnson-Matthey. I appreciate the chance to address
16 the Board regarding the proposal for retrofitting of
17 school buses.

18 The technology that Johnson-Matthey is proposing
19 to use for the program is a ThatRT patented PM emission
20 control device. This technology is in use worldwide and
21 is available for a wide range of applications. The
22 product is currently being manufactured in California. It
23 is available today for production quantities.

24 And just on behalf Of Johnson-Matthey I want to
25 express our support for the program. I'm sorry to say our

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183

1 diesel expert was unavailable to be here today, so I will
2 bring back any questions you have, but don't think I will
3 be able to answer them as best as we could.

4 CHAIRPERSON LLOYD: Where are they manufactured
5 you say?

6 The completed manufacturing is done in
7 California.

8 CHAIRPERSON LLOYD: But where?

9 MR. HIPPERT: In Southern California, Rancho
10 Santa Margarita.

11 CHAIRPERSON LLOYD: Okay. Any questions?

12 Thank you.

13 MR. HIPPERT: Thanks.

14 CHAIRPERSON LLOYD: Jeff Redoutey. I don't think
15 Gerald Smith is here. He's not here.

16 MR. REDOUTEY: Gerald had to catch a plane.

17 Good afternoon. I am Jeff Redoutey. I'm the
18 vice president of sales and marketing for Ceryx. Ceryx is
19 a Ventura County, California based company that develops,
20 manufactures and markets division emission control --
21 excuse me, diesel emission control devices. These devices
22 control particulate matter, carbon monoxide, hydrocarbons,
23 and oxides of nitrogen.

24 I wanted to spend a few moments today lending
25 Ceryx's support to this program. We are very excited with

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184

1 the opportunity to participate in cleaning school bus
2 emission in the State of California. I think this is a
3 great example of California's leadership throughout the
4 nation. I would expect other states to follow suit when
5 they realize the success of this program. We believe that
6 retrofits are very cost effective methods to reduce diesel
7 emissions very quickly in a wide variety of school buses.
8 We applaud the Board for including significant dollars for
9 retrofits and we feel that it is money exceptionally well
10 used.

11 I would like to inform the Board of some of the
12 activities the Ceryx is undergoing at this point in time
13 to prepare for the effort. Specifically, a significant
14 number of our resources at Ceryx are devoted towards
15 participation in the program. We look at it as three
16 particular things that we need to accomplish. The first
17 is to demonstrate the technology.

18 And we are doing that currently in the South
19 Coast demonstration program. And we feel that we will be
20 demonstrating very quickly, as the bus gets tested, that
21 we will see simultaneous reduction of particulate matter
22 and NOx on those vehicles.

23 The second thing that we are spending a great
24 deal of resources on is verification here in California
25 under -- working very closely with Scott Roland and his

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185

1 staff in order to become a verified technology here in the
2 State of California.

3 The third thing that is consuming a significant
4 number of resources is preparation for manufacturing here
5 in the State of California. Given the program, we have
6 found that there are a great deal of manufacturers here in
7 the State of California that are very interested in
8 working with Ceryx to accelerate manufacturing. They do
9 not feel it is going to be a problem to deliver the
10 quantities the program calls for.

11 We look forward to contributing, in any way that
12 we can, towards making the area that these children
13 breathe that much cleaner and being able to tackle some of
14 these difficult applications.

15 Any questions?

16 BOARD MEMBER RIORDAN: Mr. Chairman, if I might?

17 CHAIRPERSON LLOYD: Yes, Mrs. Riordan.

18 BOARD MEMBER RIORDAN: You testified that you're
19 currently a part of the program of testing with the South
20 Coast and the ARB.

21 MR. REDOUTEY: Yes, we are.

22 BOARD MEMBER RIORDAN: And so you've actually got
23 some of your equipment on a particular bus or engine, I
24 don't know how they do that?

25 MR. REDOUTEY: Yes, we do. We participated with

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186

1 three vehicles at the point in time, a 1978 vehicle, I
2 believe a 1987 vehicle and a 1999 vehicle.

3 BOARD MEMBER RIORDAN: And when will the testing
4 be completed?

5 MR. REDOUTEY: The first vehicle is scheduled to
6 be tested the latter part of next week and it will
7 probably go into the following week. And that will be the
8 1978 vehicle. We have monitored that vehicle very closely
9 since we installed the device. And we feel very
10 comfortable that the device is doing exactly what it's

11 intended to do.

12 BOARD MEMBER BURKE: I think Mrs. Riordan also
13 wanted to know about the durability testing.

14 MR. REDOUTEY: Yeah. The durability testing
15 right now is ongoing literally 24 hour days, seven days a
16 week at the Ceryx facility. What we are doing is we are
17 testing the longevity of the catalysts involved by putting
18 in an awful lot of hours on the devices. We feel that is
19 the most cost effective and efficient way to demonstrate
20 the longevity of the catalysts that are involved in our
21 system.

22 BOARD MEMBER BURKE: But is that being done on a
23 vehicle?

24 MR. REDOUTEY: There are vehicles currently --

25 BOARD MEMBER BURKE: Is that being done on a

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187

1 vehicle?

2 MR. REDOUTEY: That particular -- Dr. Burke, that
3 particular demonstration is not done on a vehicle. It is
4 done on a generator set. We have vehicles here in
5 Sacramento on school -- we have devices on school buses
6 that are in use, as well as approximately 20 other
7 vehicles throughout the world that are in use every day.

8 CHAIRPERSON LLOYD: Thank you.

9 Tom Trueblood, Lelon Forlines, then we've got
10 Greg Vlasek and Chris Brown.

11 MR. TRUEBLOOD: Good afternoon, Dr. Lloyd,
12 members of the Board and members of the staff. My name is
13 Tom Trueblood. I am manager of Public Affairs
14 International at International Truck and Engine
15 Corporation in Chicago.

16 I'm not going to read the written statements that
17 we passed out, because I know Dr. Lloyd would give me the
18 hook after about the third paragraph. But I do want to
19 summarize the main points of the testimony.

20 And that is, first of all, we support the staff's
21 proposal. We think it's a fair compromise. We realize
22 they're trying to balance a lot of pressures and a lot of
23 different interests coming from different directions.
24 And, frankly, we would have preferred that all the money
25 went to Green Diesel technology, but we know that, you

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188

1 know, the world isn't perfect.

2 (Laughter.)

3 CHAIRPERSON LLOYD: Don't be greedy.

4 (Laughter.)

5 MR. TRUEBLOOD: We believe that the staff's
6 proposal really tries to provide the most environmental
7 cleanup for the money that's being spent. And I wanted,
8 in case you haven't seen it, I want to direct your
9 attention to page 35 of the staff report, because I think
10 that's really the heart of the matter.

11 Basically, what that shows is that what the staff
12 did basically is to say if you spent \$30 million on Green
13 Diesel technology, what International calls Green Diesel
14 technology, what the staff calls intermediate diesel
15 technology, I realize I don't want to go with the brand
16 name, you actually get emissions benefit and you get more
17 old buses off the road than if you spend the same \$30
18 million on natural gas buses.

19 I won't actually go through the numbers, but
20 they're there in the report and it's quite dramatic. And
21 that's also reflected in the body of the report. Now,
22 there is criticism of these figures. And the criticism is
23 that these are based on certification emission levels
24 rather than in-use emission levels. And I'd like to put
25 that one to rest.

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189

1 First of all, the advocates of natural gas have
2 cited in-use emissions data comparisons between natural
3 gas and old diesel, but they haven't compared in-use data
4 of what we call clean diesel or Green Diesel with natural
5 gas engines. The latest information that we have comes
6 from the BP/ARCO EThat Diesel program, in which in-use
7 buses were tested on an in-use gram per mile chassis
8 dynamometer test in the San Diego Unified School District.

9 And they actually found that the in-use emissions
10 were better than we would have expected from the

11 certification numbers. They actually came up, in the case
12 of the buses, with no detectable hydrocarbon or
13 particulate emissions. So we think that that pretty much
14 lays to rest the in-use emissions problem or issue. And I
15 think the staff has also addressed that in their answer to
16 the earlier question about that.

17 The bottom line is that --

18 CHAIRPERSON LLOYD: Roughly three minutes.
19 You've taken roughly three minutes, can you wrap up?

20 MR. TRUEBLOOD: Yes. Children are going to be
21 better served by Green Diesel technology, because they're
22 going to be exposed to less NOx overall and less
23 particulates. And they're going to be riding in more
24 cleaner new buses.

25 So I'd like just to address Nicholas. I don't

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190

1 know whether he's still here or not, but I'd like to tell
2 him and all of you, Nicholas, we're on your side. I'm a
3 father too. We're trying to do our part to speed the
4 cleanup of California's air.

5 CHAIRPERSON LLOYD: Can he get a ride in your
6 bus?

7 MR. TRUEBLOOD: Yes, absolutely.

8 CHAIRPERSON LLOYD: Professor Friedman.

9 BOARD MEMBER HUGH FRIEDMAN: A quick question, if
10 I may, Mr. Trueblood. In your written materials that you

11 just handed out, you indicate that, "The 2001 Green Diesel
12 technology bus will emit 3.0 grams of NOx per brake
13 horsepower hour, but in just three years by 2004," I'm
14 quoting, "We will have further reduced that NOx emission
15 to less than 2.5 grams, matching the emissions of the
16 natural gas powered buses." Can you tell me why that
17 can't be accomplished any sooner?

18 MR. TRUEBLOOD: The reason it can't be
19 accomplished any sooner is that our product plans are
20 basically on target for 2004, a January 2004 compliance
21 with the EPA and ARB standard. And unlike many of the
22 other engine manufacturers, we were not required to pull
23 forward the compliance technology, and we set our product
24 plans on that basis. And there simply isn't time now for
25 us to get there by October 2002, which is their deadline.

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191

1 BOARD MEMBER HUGH FRIEDMAN: So while you've been
2 the first to develop a so-called clean or intermediate
3 diesel engine, you're not able to accomplish that until
4 2004?

5 MR. TRUEBLOOD: Right. We're actually bringing
6 in a whole new line of engines. All of our engines will
7 be completely new in January 2004. And that's basically
8 what we're concentrating on. And, you know, we simply
9 don't have the manpower or the money to try to pull
10 forward the technology with the old engines.

11 CHAIRPERSON LLOYD: Mr. McKinnon.

12 BOARD MEMBER CALHOUN: I have one question I
13 forgot to ask.

14 CHAIRPERSON LLOYD: Well, Mr. McKinnon and then
15 Mr. Calhoun.

16 BOARD MEMBER McKINNON: So International was able
17 to keep off a Federal Consent Decree pushing them to 2.5,
18 in that you were not under that Consent Decree, you made
19 product plans, your plan to switch over the engines in
20 2004. I think I get it now. Is that because -- were you
21 able to stay out of the Federal Consent Decree because
22 your company was performing better at cleaning up the
23 emissions to date?

24 MR. TRUEBLOOD: Yes.

25 BOARD MEMBER McKINNON: So, in effect, if we

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192

1 impose the 2.5 on your company, it would be kind of along
2 the lines no good deed goes unrewarded. We would --

3 (Laughter.)

4 MR. TRUEBLOOD: You took the words right out of
5 my mouth.

6 BOARD MEMBER McKINNON: Okay.

7 BOARD MEMBER DeSAULNIER: He put them right in.

8 (Laughter.)

9 BOARD MEMBER McKINNON: I also want to --

10 CHAIRPERSON LLOYD: I think on that one after

11 that we need to go back to King Solomon.

12 (Laughter.)

13 EXECUTIVE DIRECTOR KENNY: Actually, if I could
14 just maybe add one thing. International is part of the
15 Federal Consent Decree. It's just the remedy associated
16 with International is different than the remedy that was
17 associated with, for example, some of the other companies
18 in which the other companies had to pull ahead on a
19 tighter timeframe.

20 BOARD MEMBER McKINNON: I also want to compliment
21 you. I was a brand new Board member when you came to
22 California with the Green Diesel bus. And I'm very clear
23 that you were a lot of the push that we needed to get a
24 discussion going hard and fast about moving the 15 PPM
25 diesel. I mean BP moved and lots of other people, WSPA, a

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193

1 bunch of people moved. But I think when you brought that
2 bus around, that kind of ended up providing a focal point
3 to push that discussion. And I want to thank you for
4 that.

5 MR. TRUEBLOOD: Well, thank you.

6 CHAIRPERSON LLOYD: Mr. Calhoun.

7 BOARD MEMBER CALHOUN: I'll pass.

8 CHAIRPERSON LLOYD: Given the fact it's going to
9 take you until 2004 to meet the 2.5 standard, do you
10 anticipate any competitors taking advantage of the market

11 you've got here now.

12 MR. TRUEBLOOD: That's something that has
13 occurred to us might happen. There's no reason that other
14 manufacturers couldn't pull forward, couldn't put a
15 product on the market. The technology, as you just heard
16 from the after-treatment manufacturers is readily
17 available, and you know, any of our competitors can put
18 together the package and compete with us.

19 BOARD MEMBER CALHOUN: Now, I'll ask my question.
20 What if that happens? Could International pull ahead
21 their --

22 MR. TRUEBLOOD: Well, we'd have to make that
23 decision of whether it was -- you know, whether it made
24 sense for us to go to the effort and expense. I think
25 with the timeframe we're talking about, it would be

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194

1 awfully difficult for us.

2 CHAIRPERSON LLOYD: I think given the question,
3 you're saying well, the 2.5 doesn't fit in with your
4 current market plan. The other part of that is that well,
5 should the school children, in fact, also wait around
6 until you can get to 2.5. Now that's the other side of
7 that, so market plans change and whatnot.

8 MR. TRUEBLOOD: Sure.

9 CHAIRPERSON LLOYD: Mr. McKinnon.

10 BOARD MEMBER McKINNON: Is it a market plan or is

11 it a production of a new engine plan? Those are sort of
12 different things.

13 CHAIRPERSON LLOYD: Yeah, I agree.

14 MR. TRUEBLOOD: Yeah, you're right. And really
15 we're talking about a whole new product in 2004, not
16 just --

17 BOARD MEMBER MCKINNON: If you can bring the
18 production of those engines through earlier, you ought to,
19 you know. I just don't think we ought to make you do it
20 because you stayed out of trouble.

21 CHAIRPERSON LLOYD: No, you're right, Mr.
22 McKinnon, that rather we'll say product time.

23 Dr. Burke.

24 BOARD MEMBER BURKE: Is it really money or is it
25 really a marketing plan? Is it a function of money,

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195

1 because it would seem like we would then consider maybe an
2 alternative if it's really just a function of money, as
3 you say, to move the production of these engines forward?

4 MR. TRUEBLOOD: Well, it isn't just a function of
5 money. It's resources in the larger sense. We have lead
6 times.

7 CHAIRPERSON LLOYD: And one of those is standing
8 behind you.

9 MR. TRUEBLOOD: We have lead times that we have
10 to -- you know, the product development process is a long

11 one. And, you know, we've set those product development
12 processes into motion. And, you know, that's basically
13 where we're going to come out. We don't know how we could
14 speed them up.

15 CHAIRPERSON LLOYD: Warren did you want to --

16 MR. SLIDOLSKY: Yes, I'm from engine engineering,
17 so I'm a little more closely to the issue.

18 CHAIRPERSON LLOYD: Maybe you could identify
19 yourself for the court reporter.

20 MR. SLIDOLSKY: Yes. I'm Warren Slidolsky. I'm
21 from International Truck and Engine Corporation. I'm
22 Manager of Environmental Staff. And I think Tom has
23 gotten at a lot of the issues and gotten it quite right.
24 But the real critical issue of pushing forward to the 2.5
25 NOx level is associated with the technologies that are

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196

1 needed. And a critical technology in the reduction of NOx
2 is EGR.

3 And for EGR, we need to develop that technology,
4 so we can be assured that it will do all the things that
5 are intended. There will not be customer dissatisfaction
6 issues. And clearly in 2004, we will have the EGR
7 systems. It's just that, in our case, because we didn't
8 have the pull ahead, we haven't started that program, so
9 we're in a position to add EGR next year. So that's the
10 dilemma we find ourselves.

11 It isn't marketing and money -- well, in a sense
12 it's money. But to drop everything, to ensure for just
13 the school bus to get that EGR in, many of our other
14 programs would suffer dramatically. So I'll stop with
15 that and if you have some additional questions.

16 BOARD MEMBER RIORDAN: Mr. Chairman?

17 CHAIRPERSON LLOYD: Yes, Mrs. Riordan.

18 BOARD MEMBER RIORDAN: Help me with EGR?

19 MR. SLIDOLSKY: Exhaust Gas Recirculation.

20 Basically, what that does is cool down the combustion
21 temperature, because the cooler the combustion
22 temperature, the less tendency you have to produce NOx.

23 BOARD MEMBER RIORDAN: Thank you.

24 MR. SLIDOLSKY: I'm sorry.

25 BOARD MEMBER RIORDAN: No, that's all right.

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197

1 CHAIRPERSON LLOYD: Thank you. Do you have
2 another person from International testifying?

3 I've got Lelon Forlines.

4 MR. FORLINES: I would like to make a comment
5 that -- Tom has already covered one of the issues that I
6 was going to address. Dr. Lloyd and ladies and gentlemen
7 of the Board, I very much appreciate the efforts not only
8 of your input, but that of the staff. I think it was very
9 wise in the decision that you have made.

10 And I was going to make one comment about San

11 Diego Unified School District has been one that we have
12 like 30 units that have been operating there for a year
13 the past September, without any failure, without any
14 downtime whatsoever. And if you're looking to have
15 someone to call to inquire from a source outside of
16 International, Mr. Roger Hanson, I'm sure as well as
17 Englehard and Johnson-Matthey would address any questions
18 you may have with regard to the operational status of
19 those units.

20 CHAIRPERSON LLOYD: What's the total accumulated
21 mileage on those buses?

22 MR. FORLINES: The mileage right now would have
23 to be somewhere in the neighborhood of 35,000 to 50,000
24 miles. And that would vary depending on the bus and the
25 routing that they had taken. But I stay in touch with

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198

1 Roger on a pretty regular basis. And yesterday afternoon
2 he assured me that he -- as a matter of fact, he asked
3 that I assure you that there is no down time. There has
4 not been any failure or affiliation to a failure with
5 these products being installed.

6 CHAIRPERSON LLOYD: Thank you.

7 MR. FORLINES: Thanks again for your time.

8 CHAIRPERSON LLOYD: We have to have Greg Valsek
9 and Chris Brown, then we're going to take a break. I know
10 both of these gentlemen have time constraints, so we'll

11 take them out of order.

12 MR. VLASEK: Thank you very much, Chairman Lloyd
13 and members of the Board. I'm Greg Vlasek with the
14 California Natural Gas Vehicle Coalition.

15 There's a lot to like and a lot of hard work
16 that's gone into these proposed guidelines. We have one
17 key issue to bring before you today and urge you to change
18 it, and that is the \$15 million carve out for the
19 International diesel engines that don't meet the 2.5 gram
20 NOx standard. And you've heard a lot about that. You're
21 going to hear more about it, so I don't want to belabor
22 too much, but I do have a couple of key points to make.

23 I'm sure the staff has told you that there are
24 currently natural gas engines certified to the .01 PM
25 standard. So this is not a case where necessarily natural

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199

1 gas engines aren't going to be there. In fact, they're
2 already there. They're just not available for the school
3 bus market. There are four engines certified to .01 PM as
4 well as to the 2.5 NOx standard. So it would meet both of
5 the criteria that staff has set up to get funding in the
6 program.

7 The question is do you really, really mean to
8 carve out the money just for diesel, because that is
9 clearly not a fuel neutral policy. There's a bus right
10 outside the building here, there's actually two, a CNG bus

11 that meets 2.5. There's a propane bus that meets -- it's
12 actually not even required to certify to low PM standard,
13 because it's a gasoline derived engine from IMPCO.

14 So in addition to the four engines diesel-derived
15 engines certified on natural gas, to the very, very, very
16 low PM level, you have some other ones that are gasoline
17 derived engines, that are available for school buses
18 today. And they, because of the way the standards are set
19 up, they are so low in PM that ARB doesn't even really
20 test for the PM when they go through the emissions testing
21 program.

22 The message you send if you give this whole \$15
23 million to International for their Green Diesel technology
24 to the other engine manufacturers that serve the market,
25 which include Cummins, Detroit Diesel, IMPCO, Baytech and

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200

1 so on, is that you're carving out the money for diesel.
2 It's not because you really want the PM reductions, okay.

3 You're going to hear from at least one
4 manufacturer today who is going to, or plans to, hopes to
5 develop their natural gas engine to meet an extremely low
6 NOx standard and the .01 PM in the same timeframe as the
7 International Green Diesel engine is going to be
8 available. Do you really want to tell that manufacturer
9 don't bother because you can't get any share of this \$15
10 million that's earmarked for International Green Diesel?

11 International was just up here and they said they
12 welcome the competition. If that's true -- I think what
13 they meant was we welcome competition from other diesel
14 engine manufacturers of diesel engines. But if they
15 really welcome competition and if you all really want to
16 be fair and develop a market that's fair and encourages
17 different technologies to come and try and get the
18 absolute cleanest products into the marketplace for school
19 children and transit buses and everyone else, then you
20 really ought to be setting this up as performance
21 standards.

22 Keep the \$25 million pot with the 2.5 gram NOx
23 cap for that part and keep a \$15 million pot for .01 PM,
24 and then throw it open and let everybody play. That would
25 be the fair way to do it, but that's not the way staff has

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201

1 proposed it today, okay.

2 You're going to hear a lot more about that.
3 Thank you for the opportunity to speak and that's all I
4 have unless you have any questions.

5 CHAIRPERSON LLOYD: Thanks, Greg. Any questions?

6 I know we'll hear some more.

7 Thank you.

8 MR. BROWN: I'm Chris Brown. I'm with Mendocino
9 Air Quality. Thank you for taking me out of order.

10 CHAIRPERSON LLOYD: What is the note I've got,

11 that you can't work more than 12 hours a day. You can't
12 get paid for more than 12 hours a day.

13 MR. BROWN: Actually, I'm not supposed to be
14 driving a county vehicle for insurance reasons more than
15 12 hours a day, or after being up for more than 12 hours.

16 So I'm going to greatly abbreviate my
17 presentation.

18 CHAIRPERSON LLOYD: We suggest that you take a
19 nap and then --

20 (Laughter.)

21 MR. BROWN: There were times today where I was
22 thinking about that. I'm going to greatly abbreviate my
23 presentation to everyone's enjoyment, I'm sure.

24 You do have a copy of a letter from our board
25 directed to yourselves, which is dated last month. And

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202

1 there is also a copy of my presentation you should have
2 all gotten. One thing on the letter from our board, at
3 the time I was operating under the information I had
4 received at the incentive implementation manager's meeting
5 that the split was going to be a 50 percent population
6 split and a 50 percent needs-base split, specifically what
7 is your pre-1977 school bus fleet.

8 (Thereupon an overhead presentation was
9 presented as follows.)

10 MR. BROWN: With that in mind, here's some of our

11 pre-1977 school bus fleet. That is a 1968 Ford bus
12 powered by gasoline. It would be eligible. With staff's
13 help, we were able to include gasoline into it. There are
14 two gasoline buses that I know of for sure in Mendocino
15 County that are still in daily service. And I just saw a
16 third one yesterday. And I quickly wrote down the bus
17 number and I'm going to research that as well.

18 The particular bus is 1968. It's got more than
19 300,000 miles on it. It has absolutely no emissions
20 devices other than a PCV valve and a PCV system. It has
21 very high emissions of benzene, I can almost guarantee
22 you. I don't need to go into the issues of what benzene
23 will do. The particular bus is at the Willets Unified
24 School District. As I said, it's in daily service.

25 And what I'd like to point out is Willets Unified

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203

1 is my third largest school district. I have 11 districts
2 in my county. They do not have on-site refueling. They
3 have to buy their fuel from a retail establishment. Their
4 district, back in the early nineties, when they had
5 on-site refueling, said, you know, there's a lot of
6 liability, there's a lot of environmental concern, and a
7 lot of maintenance that goes with aboveground and
8 underground tanks, so we want to take those tanks out and
9 we will rely on the market to provide our fuel.

10 They are not large enough -- they don't have the

11 space to put that facility back. So really they can't
12 promise ARB that they're going to take low sulfur diesel,
13 because they are contingent on what's going to be sold
14 down the street at the two dealers in town.

15 And that is my third largest school district. I
16 have seven others that are much smaller. And also my
17 second largest school district, which is in the City of
18 Fort Bragg on the coast. Second largest school district
19 in the county does not have natural gas service anywhere
20 within their boundaries. And so despite what you hear
21 about natural gas, that's not an option for them. The
22 option that's available for them in terms of a straight
23 traditional alternative fuel is propane. And I'm glad to
24 see that propane bus out there, again, today. I should
25 take it to A-Z Bus Sales, I have a couple people who would

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204

1 like me to drive it back for them.

2 But that's not going -- CNG is not going to be an
3 option for us. And so the diesel does have to stay part
4 of the equation. Regardless of what standards you set for
5 it, diesel has to be an option, because you're looking at
6 11 grams per brake horsepower hour on a lot of these older
7 diesel engines. And despite what staff says, I would take
8 great exception to the idea that a 1987 engine is just as
9 clean as a 1967 engine. That's just not true.

10 The miles alone change the emission factors. And

11 if we went out there and checked those vehicles out, I
12 guarantee you you'd see a 1967 two-stroke is going to have
13 a lot worse emissions than a 1987. Now, what the
14 standards might have been may be different, but the real
15 world, there is a different emissions factor involved
16 there. And I have those engines. I have a lot of those
17 two-strokes.

18 CHAIRPERSON LLOYD: Chris, three minutes, what
19 can we do for you?

20 MR. BROWN: Real quick, I'd like to point out two
21 things. One is a document, this is from the Legislative
22 Analyst's Office, dated January of this year. And it
23 states, "Older school bus replacement program." I can
24 give a copy of this to staff. I didn't provide copies for
25 you. "Governor proposes a new \$50 million older school

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205

1 bus replacement program to be administered by ARB.
2 According to the budget," and, again, this is from the
3 Legislative Analyst's Office, "the intent of this program
4 is to provide grants to school districts to replace
5 pre-1977 buses with safe clean alternative fuel buses."

6 The 1987 number has been pulled out of the air by
7 staff. And I understand that that is a cutoff point for
8 diesel emissions. And I understand that there's a lot of
9 districts with newer buses that want to get those buses
10 replaced. I think that the Board should take the position

11 that they want to get pre-1977 buses off the road before
12 any pre-1987 bus gets taken off the road. The emissions
13 factors are much greater for those older buses.

14 And I'd also like to point out a statement made
15 by the Governor.

16 CHAIRPERSON LLOYD: Is this the last one?

17 MR. BROWN: I will have -- actually, if we could
18 switch to the last slide.

19 --o0o--

20 MR. BROWN: But the statement made by the
21 Governor is, "One of the reasons I ran for Governor is
22 because I wanted to help every child in California,
23 regardless of race, gender or geography, live up to their
24 God-given potential." And to me that includes breathing
25 clean air. And funding really should be based on need,

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206

1 not population. There's plenty of programs where the
2 Board has said it's based on need and that it's benefited
3 the larger districts, particularly South Coast, and that
4 includes CMAC funding.

5 Our district does not get CMAC funding. We
6 believe we don't have an ozone problem. Our children are
7 exposed to toxics from the buses. We have the same type
8 of problems as anyone else, even older buses.

9 The other points are in my presentation, and I
10 encourage you to take a look at that and read the letter

11 from our board addressed to all of you.

12 Thank you.

13 CHAIRPERSON LLOYD: Thank you very much.

14 Any questions?

15 Thank you. We're going to take a 10-minute
16 break. The court reporter needs a break.

17 (Thereupon a brief recess was taken.)

18 CHAIRPERSON LLOYD: I'd like to continue and I
19 understand there's some time constraints, so I'm going to
20 call Paul DeLong from Deere Power Systems.

21 MR. DeLONG: Shall we wait till everybody is
22 here?

23 BOARD MEMBER BURKE: No, they can hear you in the
24 back.

25 CHAIRPERSON LLOYD: Yeah, they can hear in the

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207

1 back.

2 MR. DeLONG: Good afternoon. My name is Paul
3 DeLong. I'm manager of Natural Gas Engines for the Deere
4 Power Systems Group. I appreciate the Board giving us the
5 opportunity to express our gratitude for the particular
6 program, because it will help our natural gas engine
7 program.

8 We generally support the program. We believe it
9 will reduce the exposure of school children to exhaust
10 emissions. And we do believe that it is a very good

11 program.

12 There are some disturbing comments that have been
13 made in the staff report and in the other comments by the
14 staff that natural gas engines do not have the capability
15 or do not have the capability to meet the emission levels
16 of clean diesel as far as particulate matter.

17 We do have an executive order from CARB for an
18 engine that's certified at .01 gram particulate and 1.8
19 gram NOx. That does not happen to be on the web site yet,
20 but it is an engine that we can do for school buses and it
21 is a capable engine.

22 You do have my written comments. We also mention
23 in there that by this time next year, we will be down
24 around 1.5 gram NOx with a new control system that we will
25 be putting on the engine. So those capabilities are

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208

1 there.

2 CHAIRPERSON LLOYD: When was the executive order
3 written?

4 MR. DeLONG: I believe it was July, July or
5 August, somewhere in that neighborhood. It just isn't on
6 the web site yet.

7 The other concern we have is the
8 misrepresentation of costs of natural gas engine versus a
9 diesel. As far as the emission goes, you have a
10 presentation of mine. If you look at page four, you'll

11 see that our certified engine 1.8 gram NOx, .01 gram
12 particulate and the clean diesel engine against the
13 regulations.

14 I'm not going to go through all of those slides,
15 but as you go through to page four, you can see that to
16 reduce the particulate matter on a diesel, you have to
17 actually increase the particulates and then put a trap on
18 it to reduce it to get the NOx down. That trap costs
19 between \$6,000 and \$7,000 on the high side for installed.

20 We've reduced the particulates with a simple
21 oxidation catalyst at approximately a high side of a
22 \$1,000 installed. There is a method to get to low NOx on
23 a diesel engine. It's being tested in Europe and some
24 tests are running in the United States, that's injecting
25 selective catalyst reduction. Those units are low volume,

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209

1 just as a natural gas engine is and they run around
2 \$25,000 installed. They were 35, they're coming down.

3 That system is being used in transit buses in
4 Europe. So if you compare the costs, if you go to page
5 six, you can see for comparable exhaust emissions, the
6 cost up for a natural gas school bus is approximately
7 \$26,000, with the tanks, the engine costs and a simple
8 oxidation catalyst.

9 You can see that with diesel today, that engine
10 would be a cost up of \$32,000 for that vehicle. So

11 actually there's some money left over at the same emission
12 level for a little infrastructure. So we think these
13 costs are being misrepresented and the emission
14 capabilities of natural gas and other alternative fuels
15 are also being misrepresented.

16 Again, we'd like to express our gratitude for
17 allowing us to make our comments and I will entertain any
18 questions at this time.

19 CHAIRPERSON LLOYD: Now, Deere makes both diesel
20 and natural gas engines?

21 MR. DeLONG: That's correct, but we don't make
22 any on-road diesel. All our diesels are off-road.

23 CHAIRPERSON LLOYD: Professor Friedman.

24 BOARD MEMBER HUGH FRIEDMAN: I don't like the
25 word misrepresented. I don't mind in error or erroneous,

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210

1 but misrepresented to me suggests somebody is deliberately
2 misstating with the intent to deceive or confuse. Who is
3 it that you feel has misrepresented the costs?

4 MR. DeLONG: I'm saying some of the comments --
5 the costs where they're saying that the cost is higher, 33
6 percent?

7 BOARD MEMBER HUGH FRIEDMAN: I heard that from
8 the staff. I'd like the staff to have the opportunity to
9 respond.

10 The figures we were presented indicated that the

11 cost of a natural gas bus was somewhere about \$30,000 more
12 -- 130 in that range versus a 100 or so for the diesel,
13 about 30 percent higher overall cost. The figures you're
14 showing here don't include the bus.

15 MR. DeLONG: The bus would be the same for both
16 of them; is that correct? I mean, the bus would be the
17 same as the chassis.

18 BOARD MEMBER HUGH FRIEDMAN: Well, I don't know
19 you're assuming that.

20 BOARD MEMBER WILLIAM FRIEDMAN: Well, you don't
21 have to buy all the diesel buses.

22 BOARD MEMBER RIORDAN: Mr. Cackette, I think, is
23 going to answer that.

24 BOARD MEMBER HUGH FRIEDMAN: Yeah, I was waiting
25 for the staff. They were conferring.

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211

1 DEPUTY EXECUTIVE OFFICER CACKETTE: The numbers
2 that we used in the staff report are for the current two
3 and a half gram like natural gas bus, which is on the
4 State bid, you can go procure one for that price, versus
5 the trap equipped Green Diesel bus, which has also been
6 quoted on the State bid list. So we know what the two
7 cost today, but they're at those different NOx levels.

8 What this chart on page six shows is what would
9 it take to get the diesel bus's NOx down from three to
10 two. In that case, the witness says it's going to take an

11 SThatR system at the cost of \$25 thousand. But that's not
12 what we think any of the manufacturers are doing for 2002
13 to get the numbers down. They're all using what was said
14 in the previous testimony, EGR, which has a cost that's
15 more in the order of \$1,000 than \$25,000.

16 BOARD MEMBER HUGH FRIEDMAN: So you're
17 presenting --

18 DEPUTY EXECUTIVE OFFICER CACKETTE: This
19 comparison, I don't think is one that would, at least for
20 a majority of the manufacturers wouldn't be what we think
21 will happen in 2002 to put them on the same two and a half
22 gram level playing field.

23 BOARD MEMBER HUGH FRIEDMAN: So you're presenting
24 an assumed bus that doesn't yet -- diesel bus that doesn't
25 exist?

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212

1 MR. DeLONG: I'm presenting a diesel bus that
2 does exist in Europe and that system that does work in
3 Europe, just as we're presenting traps that are being
4 tested in Europe and tested in the United States. And I'm
5 also presenting data from two consultants, Southwest
6 Research and AVL, that both attest that this is the most
7 viable alternative today. And that also the natural gas
8 engines --

9 BOARD MEMBER HUGH FRIEDMAN: But you don't make
10 that?

11 MR. DeLONG: We don't make that.

12 BOARD MEMBER HUGH FRIEDMAN: You're not offering
13 that. You're saying others ought to or somebody ought to
14 be doing, but you're not?

15 MR. DeLONG: I'm saying that to say that the cost
16 of a natural gas engine or bus is that much higher than a
17 diesel, we're comparing apples to oranges here, when we're
18 talking different emission levels, because we're --

19 BOARD MEMBER HUGH FRIEDMAN: It sounds like
20 you're like comparing European and American, what's
21 presently available here, which is what the staff has
22 explained they've compared and you're comparing something
23 very different. So it is apples and oranges.

24 MR. DeLONG: It is apples and oranges, because we
25 are giving you -- offering you an opportunity to use an

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213

1 engine that is a low NOx and .01 gram particulate that
2 meets two gram NOx standard and .01 gram particulate.

3 CHAIRPERSON LLOYD: So you can buy those today.
4 You're offering that, you're saying, with the oxygen
5 catalyst on there?

6 MR. DeLONG: That engine was certified in year
7 2000. We can make it available for these school buses by
8 July 1st.

9 CHAIRPERSON LLOYD: Mr. McKinnon.

10 BOARD MEMBER McKINNON: And you are clear, we've

11 budgeted \$25 million for buying your type of --

12 MR. DeLONG: I'm just saying that there was some
13 misrepresentation on what a natural gas engine can do as
14 far as being at .01 gram particulate today. There's also
15 some propane engines also certified at that level by CARB
16 at .01 gram particulate, alt fuels.

17 I'm also saying that the costs that the latest
18 school bus study cost out -- I was at a meeting at South
19 Coast yesterday for \$25 thousand dollars cost out, not 30.
20 It's coming down. Tanks are getting less expensive and
21 we're driving the engines down as well.

22 BOARD MEMBER McKINNON: I don't know if you heard
23 my opening remarks, but my starting point was zero for CNG
24 and zero for Green Diesel. It was all retrofit. That's
25 where I started. And I think you're at \$25 million right

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214

1 now.

2 MR. DeLONG: Okay, any other questions?

3 CHAIRPERSON LLOYD: Thank you very much.

4 MR. DeLONG: Thank you.

5 CHAIRPERSON LLOYD: I think we have Michael
6 Applegate.

7 MR. APPLGATE: Good afternoon. My name is
8 Michael Applegate, and I'm the owner of Applegate Dredge
9 Company and the president-elect of the California Trucking
10 Association. My company is based here in the Sacramento

11 area.

12 We run a fleet of 50 trucks, ten percent of which
13 are powered by International's new Green Diesel
14 technology. I'm a small business owner. And I'm
15 committed to two things. First, I work hard to protect
16 the jobs of my 130 employees. I know the families depend
17 on me to keep them working.

18 Second, I believe it's essential to do my part to
19 protect the environment. I consider myself somewhat
20 unique. As a trucker, I purchase and operate heavy-duty
21 diesel trucks. And I'm constantly searching and
22 experimenting with cleaner fuels and cleaner engines.
23 I've run aqueous diesel mixtures. I've run CNG. I've had
24 magnets on my fuel lines. I've run fuel heaters. I've
25 chemically treated air to cool it. I take some pride in

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215

1 operating some of the cleanest trucks on the road today.

2 I can tell you today that diesel users will help
3 us reach the Federal Clean Air Act health-based standards
4 for ozone and for PM, because of Green Diesel technology.
5 That is why this year we invested in five Green Diesel
6 technology powered trucks.

7 Diesel engines have the performance, fuel
8 efficiency and reliability that I need to operate my
9 business successfully. Not only do they cost less than
10 the exotic experimental engines out there, but we can

11 always count on them to run safely and run for decades.

12 The new Green Diesel technology trucks run as
13 well as any of my traditional diesel engines and without
14 the exhaust that we commonly associate with diesel.
15 They're pretty remarkable. It would be difficult to have
16 to choose between lower priced vehicles and a cleaner
17 environment. Decisions like that would force us to weigh
18 the long-term benefits of a cleaner planet with difficult
19 or impossible economic costs of some of the more exotic
20 type of technologies.

21 I'm a firm believer in caring for our
22 environment. And as a business owner, I understand the
23 dilemma too well. With the advent of International's
24 Green Diesel technology we're spared from having to make
25 that difficult decision.

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216

1 We can make the right economic choice and right
2 environmental decision at the same time now. As I can
3 attest, clean diesel is truly a win-win situation. Clean
4 diesel provides us with a cleaner environment at a
5 practical cost and eliminates soot by over 90 percent.

6 As your staff report illustrates, it was referred
7 to earlier on page 35, "Dollar for dollar intermediate
8 diesel buses will result in far fewer pollutants than
9 natural gas powered buses."

10 As the State agency responsible for clean air, I

11 can see no better outcome than the cleanest air for the
12 fewest taxpayer dollars. In fact, your staff report shows
13 that if the State spent \$30 million on the diesel buses,
14 we would have 24 tons less particulates in the air and 172
15 tons less NOx than if the State spent the 30 million on
16 natural gas buses.

17 That seems like a no-brainer to me. In fact, I
18 don't know why we don't spend the whole 50 million bucks
19 on clean diesel. It's a much better deal for the
20 taxpayers and better health -- and better health benefit
21 for school children.

22 The trucking industry's position is to put all of
23 the money where the most ozone and particulate emissions
24 can be reduced for the least cost. That means using clean
25 diesel and practical diesel and diesel retrofit

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217

1 technologies.

2 One final comment, the technology works on all
3 diesel engines. It's not just for International's diesel
4 engines. I can put any particulate trap on any of my
5 diesel engines in conjunction with ultra-low sulfur diesel
6 fuel and have the same benefit, emissions benefit, that we
7 get from today's Green Diesel technology.

8 CHAIRPERSON LLOYD: Thank you.

9 MR. APPLGATE: Any questions?

10 CHAIRPERSON LLOYD: Thank you.

11 Now, we've got Nina Young, Peter Whittingham and
12 Ted Holcombe.

13 MS. YOUNG: Good afternoon, Chairman Lloyd and
14 members of the Board. Thank you for taking me out of
15 order, I appreciate that.

16 My name is Nina Young. I'm the Director of
17 Purchasing Contracts and facilities for the Orange County
18 Department of Education. I'm a member of the South Coast
19 Clean Air Partnership and a recent appointee to the South
20 Coast Air Quality Management District's Adopt a School
21 Board District.

22 I'm here --

23 CHAIRPERSON LLOYD: Adopt a School Board?

24 MS. YOUNG: Excuse me, Adopt a School Bus Board.

25 (Laughter.)

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218

1 CHAIRPERSON LLOYD: I don't think Dr. Burke wants
2 to adopt anymore school boards.

3 (Laughter.)

4 MS. YOUNG: I'm giving your board a new name, Dr.
5 Burke.

6 I'm here today representing Orange County School
7 Districts regarding the staff recommendation for the
8 proposed implementation of the low emission school bus
9 program. The Orange County Department of Education and
10 the school districts within Orange County support the

11 staff recommendations for the allocation of the \$15
12 million for Green Diesel, the \$25 million for CNG and the
13 \$10 million for particulate traps with additional language
14 that after the application process any remaining funds in
15 the areas of the split be rolled over to supplement
16 shortfalls in the other approved technologies. We would
17 hope that this would not have to come back to the Board to
18 expedite the process.

19 Additionally, we encourage the Board to eliminate
20 the school district match. The Governor's proposal did
21 not require a match. And school districts were not
22 informed of a potential match when they were developing
23 budgets last spring and prior to local board adoptions the
24 past summer.

25 With school district budgets as tight as they are

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219

1 in the areas of unrestricted funds, it is an unrealistic
2 expectation that school districts would be able to find
3 the match required in their budgets. If our priority is
4 truly healthy children, safe transportation and clean air,
5 let's not prohibit participation due to unnecessary
6 financial restraints.

7 I encourage you to continue to work with the
8 educational community and local districts to get the
9 results we are all trying to achieve. Your staff has done
10 a really good job at the public hearings that they held

11 this past fall. And they listened to the districts and
12 their concerns with regards to the many issues that were
13 raised.

14 We would encourage the Board to seek continuing
15 funding beginning with additional monies that we
16 anticipate will be a surplus in the State's General Fund
17 this year and a minimum of \$100 million allocated annually
18 until all pre-1987 buses have been either replaced or
19 retrofitted.

20 In closing, we support complete fuel neutrality
21 and support the Board's concern in that area. We
22 respectfully request you to allow school districts to
23 choose the clean bus technology that not only meets State
24 guidelines, but also is economically best for their
25 districts.

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220

1 CHAIRPERSON LLOYD: Thank you.

2 MS. YOUNG: Thank you very much.

3 CHAIRPERSON LLOYD: Will you be eligible for
4 funding from the South Coast AQMD if, in fact, you get
5 that match so it wouldn't have to come out of your funds?

6 MS. YOUNG: Possibly, I'm not sure. Are you
7 talking about with regards to the Adopt A School Bus
8 Program?

9 CHAIRPERSON LLOYD: No. In terms of the match,
10 the point is if you couldn't afford the match there,

11 presumably we'd send a fair amount of money down to South
12 Coast, and maybe they could chip in there.

13 MS. YOUNG: That's a possibility. But the basin
14 being as big as it is, with the number of buses there are,
15 there's not going to be enough money to go around.

16 CHAIRPERSON LLOYD: Okay.

17 BOARD MEMBER CALHOUN: Let's me ask the staff a
18 question. Ms. Young raised the same question that one of
19 the other school districts raised. Is this generally true
20 of the match problem for school districts in general?

21 EXECUTIVE DIRECTOR KENNY: We have heard from a
22 number of school districts that prefer that the Board
23 eliminate the match. The difficulty there is that we do
24 have a limited pot of money here. We do have 24,000
25 school buses statewide and so we know that, in fact, the

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221

1 money will be oversubscribed.

2 By having the match, we thought it was a
3 reasonable way of essentially extending the money, getting
4 more new school buses into the fleet. I think one issue
5 that she does raise, that we have to look at, is
6 essentially the fact that we are in the midst of their
7 budget year, and how do we essentially provide some level
8 of flexibility for them to provide that match.

9 But, again, we think the match actually does
10 provide benefits in terms of additional buses and

11 additional health benefits.

12 CHAIRPERSON LLOYD: Dr. Burke.

13 BOARD MEMBER BURKE: I wanted to say on this
14 maybe what we could do is make the matching portion in the
15 next fiscal year, so, you know, they give as a commitment
16 to do it, then we can work out an arrangement with the bus
17 company, so that if they want to buy it in 2001 they can
18 pay them in 2002.

19 EXECUTIVE DIRECTOR KENNY: Well, fortunately we
20 may actually have that working for us, because generally
21 what happens is that it does take at least some period of
22 time to get the bus once an order is put in for it. And
23 so, you know, we are in a situation which the fiscal year
24 would start and there would be an opportunity to
25 essentially, you know, budget monies for it prior probably

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222

1 to the actual delivery of the bus.

2 So I think there's a way of potentially working
3 the particular issue out. And that's why, you know, we
4 were looking at at least maintaining the match and pulling
5 some additional buses in.

6 CHAIRPERSON LLOYD: Yes, Mr. McKinnon.

7 BOARD MEMBER MCKINNON: Yeah. Kind of on the
8 subject, I sort of -- I'm sympathetic to this too. If it
9 was not in the budget, I'm kind of worried about it. I
10 want to stretch it and get as much done as we can. But if

11 it wasn't in the budget, what worries me is that if we do
12 a population-based test and you don't have to match this
13 year, but then we know where it's all going and the
14 Mendocino that was just here doesn't get addressed.

15 And so if we're going to change the match
16 question this year and go to matches next year, we have to
17 think about how we equitably distribute the buses.

18 BOARD MEMBER BURKE: I wasn't saying -- you know,
19 what I was saying was, you know, give them a little
20 credit, demand it this year, but when you pay the match
21 can be adjusted.

22 BOARD MEMBER McKINNON: Got it.

23 BOARD MEMBER RIORDAN: So they would put it in
24 their next budget year, because realistically you're not
25 going to take delivery on probably these school buses

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223

1 maybe not in the year that you ordered them. I don't know
2 how fast those buses come on line, but I can tell you some
3 big equipment items, fire engines, you order them one year
4 and they don't arrive until another year out.

5 BOARD MEMBER McKINNON: Thank you. That
6 clarified it, because I think, generally, I felt we're not
7 the school bus buying agency of California. That's not
8 our job. And so they should cost something. But if we've
9 been unfair vis-a-vis the budget, maybe we straighten it
10 out. But that clarified it a whole lot for me.

11 CHAIRPERSON LLOYD: Thank you very much.

12 Peter Whittingham, Ted Holcombe, Mike Murray.

13 MR. WHITTINGHAM: Good afternoon, Chairman Lloyd
14 and Board members. My name is Peter Whittingham. I'm
15 speaking today on behalf of Cummins Incorporated. As you
16 may be aware, Cummins is both the world's largest producer
17 of commercial engines over 50 horsepower and offers the
18 largest portfolio of low emission and alternative fuel
19 vehicles of any manufacturer.

20 Cummins greatly appreciates the State's effort to
21 protect the health of our young people through this
22 ambitious and unprecedented program, a commitment that we
23 shared and have been working towards as well. However, we
24 do believe that the proposal before you deviates from your
25 Board's long-standing commitment to flexibility through

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224

1 true technology neutrality.

2 It is our understanding, as has been mentioned
3 here previously, that only one manufacturer can currently
4 provide a three gram brake horsepower hour NOx level
5 diesel engine. So we share the concerns voiced by others
6 that this approach presents school districts statewide
7 with a lack of appropriate options.

8 Cummins proposes that your Board consider the
9 following, in conjunction with the current staff proposal.
10 One, to push back the proposed date whereby districts must

11 take receipt of new buses to June 30th, 2003.
12 California's procurement guidelines call for a period of
13 up to two years between the time funding agreements are
14 signed to initiate procurement and the actual delivery of
15 the product. Cummins, and quite possibly other engine
16 manufacturers, will be offering diesel school bus engines
17 certified to 2.5 grams brake horsepower hour NOx level in
18 the 2002/2003 timeframe.

19 Given that if your Board were to make no
20 revisions to the proposal, actual delivery of these
21 buses will still take up to 18 months from the date of
22 purchase. We believe this amendment will provide greater
23 flexibility to school district administrators and may
24 yield even greater emissions reductions.

25 Two, remove all references to technology as it

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225

1 relates to funding under the replacement program. This
2 allows the agency to provide funding for either alternate
3 fuel or diesel where appropriate and compatible. That
4 would keep your Board in line with previous CARB
5 rulemaking efforts that emphasize a true technology
6 neutral approach.

7 The step in conjunction with the previous
8 amendment would also eliminate any potential concerns
9 regarding sole sourcing and provides incentives for
10 alternate fuel infrastructure development and procurement.

11 Though it's not directly related to the proposal before
12 you, we would urge your Board to enthusiastically pursue a
13 similar grant within the upcoming 2001/2002 State budget,
14 as you have mentioned previously.

15 While the funding allocated to this program is
16 considerable, the 400 buses proposed to be replaced and
17 the 1,500 buses proposed to be retrofitted, the value of
18 the program represented only a small percentage of the
19 more than 24,000 school buses statewide.

20 With nearly one-tenth, 2,250 of these buses
21 currently in operation of the pre-1977 variety, the need
22 for additional funding is obvious. Cummins stands ready
23 and committed today to work with you and other
24 stakeholders in achieving the goal.

25 In closing, we appreciate your primary commitment

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226

1 to the health of the State's youngest residents as well as
2 the recognition of the real world constraints and
3 pressures facing both school boards and bus providers. We
4 thank you for your consideration. And I'd be happy to
5 answer any questions you may have.

6 CHAIRPERSON LLOYD: Thank you. Maybe I got it
7 wrong, but you're suggesting that we slow the program down
8 so competition can catch up?

9 MR. WHITTINGHAM: We're suggesting that you offer
10 school districts the opportunity to choose which engine

11 they would like to provide. If they choose to select a
12 two and a half gram NOx diesel engine, that that
13 opportunity be provided to them.

14 CHAIRPERSON LLOYD: But do you have a three-gram
15 engine at the moment?

16 MR. WHITTINGHAM: No. Cummins does not
17 manufacture a three-gram NOx.

18 CHAIRPERSON LLOYD: What about the particulates
19 when you're offering a 2.5 gram NOx, what's your
20 particulate number?

21 MR. WHITTINGHAM: Cummins would be meeting the
22 particulate level of the program.

23 CHAIRPERSON LLOYD: Which is?

24 MR. WHITTINGHAM: Well, for diesel you've got
25 .01.

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227

1 CHAIRPERSON LLOYD: Comments from staff?

2 DEPUTY EXECUTIVE OFFICER CACKETTE: Just that,
3 you know, we thought there was pretty clear direction in
4 the program to try to get the money out and get the
5 cleaner, safer buses on the road right away, and we'd have
6 to wait another year or more for these buses to come along
7 compared to the ones that are available now. It just
8 seemed like it's better to put the energy into another
9 shot of money in the future budgets and get the money that
10 we do have now to get cleaner buses for the kids.

11 BOARD MEMBER ROBERTS: Allan.

12 CHAIRPERSON LLOYD: Supervisor Roberts.

13 BOARD MEMBER ROBERTS: I want to just pursue is
14 like going out to a car lot and buying a bus. Okay, there
15 is going to be some time involved here in the number of
16 buses you're talking about. There's going to be some
17 period of time the program is going to unfold over. I'm
18 kind of interested in what I'm hearing here, because what
19 I'm hearing is set the standard and let's figure out how
20 to meet the standard.

21 And I'm wondering under those -- if we were to do
22 that, how that program unfolds as compared to how it might
23 unfold if we were to adopt the 3.0 standard, which, I'll
24 just tell you, bothers me right now, so I'm trying to
25 figure out how we're going to make it work. And I'm not

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228

1 sure that, I don't know what the time difference is,
2 because realistically, you're not going to run out
3 tomorrow and buy all these buses.

4 I mean they're not going to be delivered. You
5 might buy them, but they're not going to be delivered for
6 a long time. So somebody ought to be looking at it,
7 because this is the first person I've heard that stood up
8 and talked about diesel and saying that we can work with
9 you on the standard, instead of compromising the standard,
10 so that we have somebody that can place orders and we're

11 still going to wait for quite awhile before those buses
12 are being delivered.

13 I want staff to be thinking about this a little
14 more, because this is the first time that I've heard
15 anything that gives me a little bit of comfort on what we
16 ought to be doing with respect to diesels, because I'm not
17 going to support a 3.0 standard.

18 CHAIRPERSON LLOYD: I think --

19 MR. WHITTINGHAM: Can I speak to that? I
20 appreciate Supervisor Roberts' comments. And we generally
21 agree that given a, perhaps, six month difference in
22 actual delivery, why compromise?

23 CHAIRPERSON LLOYD: I think there's a little bit
24 of a difference when you talk about setting standards and
25 whatnot. In this case this is not a regulatory program.

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229

1 We're trying to honor what the Governor wanted to do, get
2 product on the road so that we can actually reduce the
3 children's exposure to the diesel particulate as soon as
4 possible.

5 And while you're saying maybe six months, and I
6 understand Supervisor Roberts where you're coming from, a
7 lot of this is, you know, it's expectations. So I think
8 the tough spot -- I'm delighted to see Cummins coming
9 forward also. And in this particular case moving forward,
10 we are looking at a time differential. Now, you're

11 estimating six months. I'm not sure that we can guarantee
12 that. Plus the fact that if we look forward and we're
13 hoping that this is basically a drop in the bucket, that
14 we're going to move ahead, clearly Cummins is going to be
15 there for the longer term.

16 DEPUTY EXECUTIVE OFFICER CACKETTE: Just a
17 comment on the timing. Of course, natural gas engines are
18 certified now, so when you put in an order they have to
19 know whether they can get an engine for that bus. And the
20 answer would be yes, you can get one right now. And then
21 the lead time is just however long it takes for that
22 company to produce a bus.

23 The Green Diesel International engine is going to
24 be certified in the Spring, so that would be first quarter
25 of 2001.

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230

1 You'll have to ask the gentlemen from Cummins
2 exactly when they plan on certifying their Green two and a
3 half gram diesel. But, you know, from what I know, it's
4 going to be not spring of '01, but it's going to be a year
5 and half or so later.

6 So the timeframe -- you can't -- you know, you
7 can put an order in, but they can't build the bus until
8 the engine is certified, is produced and then goes in the
9 bus. So if he's talking about, you know, around the first
10 of '03 then that means you'd be getting buses sometime

11 late in '03 versus being able to get buses late in '01
12 right now. That would be the way we sort of understand
13 the timing.

14 BOARD MEMBER ROBERTS: I guess the issue, I mean
15 if it were six months and if you're telling me we're going
16 to put money in, the buses are going to be at 2.5 rather
17 than 3.0 and I'm going to look at the lifespan of those
18 buses, I'd rather take a little bit more time in getting
19 those on the road and have the 2.5. There's no question
20 about it, because I think you're going to make up that
21 savings real quick over those given years that you're
22 operating that kind of equipment.

23 DEPUTY EXECUTIVE OFFICER CACKETTE: We agree with
24 you, but I don't think -- the point is I don't think it's
25 six months.

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231

1 BOARD MEMBER ROBERTS: Well, that's what we need
2 to -- he's saying it is and you're saying it's not, so
3 maybe you guys can get together and come up with an
4 answer. I don't know what it is.

5 BOARD MEMBER HUGH FRIEDMAN: Well, why don't you
6 ask him and let's get an answer.

7 MR. WHITTINGHAM: I do know that Mr. Cackette has
8 conversations with Tina Voyavich of Cummins regarding the
9 product outline and when that would become available.
10 Cummins is under the Consent Decree requirements to have a

11 two and a half gram NOx engine by October of 2002
12 providing different platforms in that timeframe and then
13 only amounts subsequent to that.

14 CHAIRPERSON LLOYD: It's about two years away.

15 This is probably not the most adequate forum to
16 discuss product rollout. But again, they are in the
17 Consent Decree and would be providing those in accordance
18 with the EPA guidelines.

19 CHAIRPERSON LLOYD: Professor Friedman.

20 BOARD MEMBER HUGH FRIEDMAN: Well, yeah, I wish
21 in a perfect world diesel would be as clean, in all
22 respects, as CNG. And we would have 2.5 or less. And I
23 don't know if you were here when International trucks
24 spoke. They, in their plan, were going to have 2.5 or
25 less in 2004.

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232

1 But I do think we have an obligation to allocate
2 funds that have been appropriated so that they can be
3 spent for these purposes as soon as possible and get buses
4 on the road that are going to, in any case, dramatically
5 reduce emissions to the extent they replace existing very
6 old polluting buses, which is where most of the money is
7 going to go or to the extent that they retrofit the
8 existing polluting buses.

9 We're going to achieve good reductions from the
10 300 to 400 units that we're able to cover here. And my

11 hope is that we can get more money for next year. And
12 assuming it works, we'll go through the same kind of
13 process and maybe by then we'll have Cummins accelerating
14 ahead of that Consent Decree. We may have International.
15 We may find there are competitive forces at work that
16 greatly facilitate our struggle here.

17 And it is true, when these investments are made,
18 they're long haul, they're long-term, and I guess they're
19 not easily then retrofitted again or reduced from three to
20 two and half and so forth.

21 But it's not a perfect world. And sometimes, to
22 me, the worst thing we can do is delay unduly. And I
23 think we have an obligation to make a decision, however we
24 wish it might be a little easier.

25 BOARD MEMBER ROBERTS: Could I -- I don't want to

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233

1 rebut, but I want to -- I'm not --

2 BOARD MEMBER HUGH FRIEDMAN: I invite it.

3 BOARD MEMBER ROBERTS: -- necessarily suggesting
4 that we delay, but, again, what's bothering me here is
5 this dual standards. And I've been on this Board for a
6 fair number of years now, and it seems like since day one
7 we've been setting dual standards for diesel. I mean
8 diesel has, in spite of the way the world has changed,
9 diesel has been kind of ignoring the reality. It wasn't
10 our staff that said we ought to declare diesel a toxic. I

11 mean, there were a few members of this Board that decided
12 to do that. That was not the staff recommendation, and
13 we're all, you know, it's so accepted today.

14 It concerns me that there's a different standard
15 there, but I mean we could still get the money out in the
16 buses. Just as a for instance, instead of having the 15
17 million there with a different standard, you could have a
18 single standard and say there's going to be 30 million or
19 35 million in that and you're going to put more in the
20 retrofit, you can increase the retrofit. If you want to
21 have a real impact, increase the retrofit and you'll get
22 all the money out and you'll get buses and you'll take
23 care of this year, but you'll have one standard.

24 CHAIRPERSON LLOYD: The only comment I was
25 making, Supervisor, was that when you sit on the

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234

1 regulatory side, you usually give quite a bit of lead
2 time. We've got now 50 million which we need to dispense
3 over a very short period of time. Sometimes we don't have
4 the same luxury or different -- slightly different
5 viewpoint why we're trying to maybe deviate that from the
6 standard procedure.

7 At least during most of the nineties, we didn't
8 have the luxury of giving money way, certainly \$50 million
9 away. The Moyer monies were, I guess, starting up part of
10 that program. But I hear you.

11 BOARD MEMBER HUGH FRIEDMAN: If I could just add
12 my concern, though, with that is if you have a single
13 standard and it is below anything that is presently
14 achievable, other than by natural gas, then you don't have
15 a double standard, you have a single standard. And those
16 districts who aren't for a variety of reasons in a
17 position to take natural gas, they don't have the
18 infrastructure, they can't go down the street and buy it,
19 what are they to do except retrofit? And they can't
20 replace the old buses with anything.

21 And so as a practical necessity, we've taken the
22 next best thing, which is going to achieve great
23 reductions, at least as I see what the staff is proposing,
24 and we're going to take a slight variance from the
25 standard that we did establish and that we wish -- and

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235

1 this is what I meant by a perfect world, that we wish we
2 could insist on, but we don't have the time, unless we
3 want to wait for technology to catch up. And I don't know
4 what we do to these small rural districts, small ones.

5 CHAIRPERSON LLOYD: Yes. Mr. McKinnon.

6 BOARD MEMBER McKINNON: I guess I also want to be
7 careful. I think that we're moving very strongly towards
8 changing the way diesel affects our air, I think, if you
9 look at the direction we've been headed in. And, yeah,
10 maybe it appears that we're being more flexible than we

11 should be in the early going, but it seems to me some of
12 it is trying to help -- I mean, I have a real problem
13 punishing a manufacturer that wasn't forced to do
14 something and planned their production a particular way
15 when they weren't forced.

16 And I also think that low sulfur diesel was
17 produced and created without there being a huge fight and
18 battle in the State, you know. Things are moving in place
19 that we can do something significant here. And if we have
20 a little bit of flexibility, I'm willing, you know, to
21 take the criticism. I think somebody in the LA Times
22 called us sell outs last week. And I was a little
23 offended by it, because my position has always been we
24 should retrofit. I've never said we ought to do, you
25 know, 100 percent CNG and fix 300 buses and leave, you

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236

1 know, 23,600 of them unfixed, which is the other extreme
2 view.

3 So I think you're right to hold us to being
4 staunch about the numbers. And if we're not, we're not
5 because we're consciously trying to move. And I, for me,
6 that's where it's coming from, is that I think we're
7 moving diesel and it's worth some flexibility.

8 CHAIRPERSON LLOYD: Thank you, Peter. You
9 stimulated some good discussion.

10 MR. WHITTINGHAM: Thank you.

11 CHAIRPERSON LLOYD: We have Ted Holcombe, Mike
12 Murray, Jim O'Connell, Dave Smith, Ed Manning.

13 MR. HOLCOMBE: Hello. I'm Ted Holcombe with
14 PG&E. Let me know if it starts to squeak here. Is that
15 better?

16 Okay. First of all, there are times when I'm
17 gladder to be here than over there. This might be one of
18 them. But you have a delicate balancing act to do, and I
19 appreciate the time and effort you're putting into it.

20 I do sympathize with the idea that I'd rather see
21 money for diesels going to retrofits than to new diesels
22 that will be around for 20 years. I'm a little concerned
23 that some of those retrofits then might lead to repowering
24 the engine, in essence, and keeping them for 20 years,
25 too. So it's not a done deal that that's a win.

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237

1 I'm a little concerned, too, about the concept
2 of, you know, creating a special standard for the class of
3 vehicles. The 2.5 standard is not an alternative fuel
4 standard only. It's basically available to conventional
5 fuels too, is it not? I guess it is. So that a diesel
6 could meet that. The standard has been there for five
7 years. They could have planned to meet it. They just
8 didn't want to.

9 One of the things that makes the 3.0 real
10 reasonable is the staff's analysis, which says that, gee

11 whiz, you're going to actually reduce emissions if you do
12 that. But please recognize the footnotes, certification
13 emissions, and not actual certification emissions, maximum
14 allowed certification emissions.

15 If you change that number to 3.3 as the maximum
16 allowed, and you're still certified to three, that
17 equation would change just because of where you put the
18 certification levels. If you drop the 2.5 down to 1.8, it
19 would change again. Look at the actual in-use numbers.
20 And when you look at them, look to see what's the
21 composition of the PM that comes out, how toxic is it,
22 what's the composition of the NOx that comes out, what's
23 the NO2 to NO ratio? NO2 causes more ozone, NO causes
24 less, or at least initially. I know it goes -- it's an
25 equation.

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238

1 CHAIRPERSON LLOYD: Be careful.

2 MR. HOLCOMBE: But there is still an initial
3 effect. And that effect is what causes the highest
4 concentrations potentially, so it's something to think
5 about.

6 That's most of what I had to say. I did say
7 that --

8 CHAIRPERSON LLOYD: Three minutes is good timing.

9 MR. HOLCOMBE: I'll let it end there.

10 CHAIRPERSON LLOYD: Could you just address the

11 price and availability of natural gas?

12 (Laughter.)

13 MR. HOLCOMBE: Well, you know, it's probably one
14 of the things that PG&E doesn't want to brag about too
15 much, but I think we still have some natural gas rates
16 that are embodied in there. And just like electric rates,
17 you can get them cheaper than the actual cost to us.

18 But seriously, it's always the law of supply and
19 demand. And we have plenty of capacity to deliver natural
20 gas. We have probably surplus capacity to deliver natural
21 gas to California. And the pricing situation seems odd to
22 me, but that may be reflective of our great success in
23 bringing down SO2 levels on the east coast and by
24 increasing natural gas, and also increased natural gas
25 even here in California used for producing power.

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239

1 CHAIRPERSON LLOYD: What about the price?

2 MR. HOLCOMBE: The price will equalize out. It
3 will come back to where it was.

4 CHAIRPERSON LLOYD: What's the typical increase,
5 percentagewise, that's all I'm looking at?

6 MR. HOLCOMBE: I'm not an expert in that and I
7 really can't tell you precisely.

8 CHAIRPERSON LLOYD: Maybe Mr. Murray can answer.

9 MR. HOLCOMBE: Maybe Mr. Murray will know better
10 than I will. I don't keep track of that. I'm an

11 environmentalist. I'm not a gas pricer.

12 Sorry.

13 (Laughter.)

14 CHAIRPERSON LLOYD: Thank you. Mike Murray, Jim
15 O'Connell, Dave Smith, Ed Manning, and then Stephanie
16 Williams.

17 MR. MURRAY: Well, after Chairman Lloyd's
18 questions, I'm not sure if I should tell you who I work
19 for. But my name is Mike Murray and I work for Sempra
20 Energy, which is the parent company of Southern California
21 Gas Company and San Diego Gas and Electric.

22 And I can tell you, if this was about electric
23 restructuring and natural gas issues, we would be here for
24 a lot longer than the four or five hours we're going to be
25 here today.

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240

1 But this isn't about that fortunately, and so
2 I'll defer those questions to a later date. And I
3 guarantee you, they're going to be debated at length by
4 the best and the brightest in the state over the next 12
5 months.

6 I am kind of wearing two hats today. One, I'm
7 wearing a Sempra Energy and we did submit a number of
8 written comments to staff during the drafting of the
9 guidelines. And I want to thank the staff, because a
10 number of those comments were incorporated and we

11 appreciate their efforts in putting together the
12 guidelines documents.

13 We are also a member of a coalition called the
14 Clean Machine For Kids, which I believe you have a letter
15 from us today along with four bullet points. And it lists
16 the coalition members. They are a broad-based coalition
17 representing engine manufacturers, natural gas fuel
18 providers, refueling station manufacturers and a number of
19 transit agencies. And I just want to briefly go over the
20 four points, because a lot of it's been discussed today
21 and I want to really try to keep my comments to less than
22 a couple minutes.

23 One is we do believe that the NOx standard ought
24 to be kept at 2.5. I think that that's a fuel neutrality
25 issue. We believe that the standards should be set and

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241

1 that everyone should be able to compete to those
2 standards. So we feel that that levels the playing field.

3 In response to Board Member Friedman's comment
4 about the rural areas and about the areas where natural
5 gas may not be available because the infrastructure is not
6 there, there might be other fuels out there besides clean
7 diesel that can meet -- liquid fuels that can meet the
8 2.5. It's my understanding that propane can do that now.
9 So you're not just precluded in these rural areas to clean
10 diesel. There might be some liquid fuels that you could

11 store out there and meet those numbers.

12 The second issue is the certification of diesel
13 engines. And this is more a question. On the staff
14 report on page 21, there is a comment made that said,
15 "Although rarely done to secure eligibility for State
16 grant funds, it would be possible to certify these 3.0
17 gram horsepower engine levels using the federal process."

18 And I guess our question was in that caveat about
19 "although rarely used", we question what is the need to
20 use that process or the urgency and just -- that was more
21 of a clarification question from staff.

22 The third thing we'd like to talk a little bit
23 about is the process for the funding allocations. One of
24 the things we have been promoting is that you have the
25 three pots of money and that there will be an ability that

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242

1 if funds are undersubscribed in one particular fund, they
2 could flow over to funds that are oversubscribed. We see
3 that in the staff report that that is, in fact, the case.
4 But a couple questions arise that we would kind of like
5 discussed.

6 One is what happens if the clean diesel is not
7 certified by next April 1st, which is, I believe, the
8 deadline on the staff report? I believe it's on page six
9 when the actual schools have to apply for the funding. In
10 other words, if it's not certified by next April 1st, does

11 that \$15 million automatically roll over into the other
12 pots? That's not clear.

13 And then there appears to be some bit of
14 confusion on the actual time the funding is reallocated.
15 On the table on page six, it appears that it's January 1st
16 2002 when the That gets to reallocate the funds. And in
17 the staff report on page 15, it's July 15th, 2001. So I
18 think we need to clarify that point, as well.

19 And then the final comment I'd just like to talk
20 about is the CNG cap on the infrastructure. The staff
21 recommends in a number of places in the report that they
22 suggest a ten percent cap on the infrastructure, in other
23 words, about two and a half million dollars. And we would
24 suggest that that would be more as a guideline. There
25 might be sessions where you may need a little more money

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243

1 to get the infrastructure built. There might be a little
2 less. And setting it at ten percent may preclude some
3 very good projects from going forward.

4 So we would just suggest that rather than set the
5 cash at 2.5 million or ten percent, that it would be based
6 on a case-by-case basis, and the administering agency
7 would make a determination based on whatever
8 considerations on how much should be allocated for
9 infrastructure.

10 CHAIRPERSON LLOYD: Thank you. Maybe staff could

11 address at least two of the points there. That's on the
12 federal certification compared to ARB and then the other
13 issue about the timing.

14 ON-ROADS CONTROLS BRANCH CHIEF KITOWSKI: Yeah,
15 on the federal certification, the emission standards that
16 the Air Resources have is that four grams is our
17 conventional standard and then the optional standards
18 start at two and a half. However, the federal government
19 does have federal emission level standards at various
20 levels. And we can tap into those and we can make them
21 enforceable in contracts.

22 The point about, although rarely used, was simply
23 a reference to the fact that in Moyer and in other
24 incentive funds, we've always fundamentally relied on the
25 optional emission standards that would start at two and a

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244

1 half. And we have not done that in the past, although we
2 can do it.

3 BOARD MEMBER CALHOUN: Let me ask another
4 question in connection with that.

5 CHAIRPERSON LLOYD: Yes, Mr. Calhoun.

6 BOARD MEMBER CALHOUN: Are we tracking the
7 certification of this particulate? That was one of the
8 questions that went through my mind is what happens if the
9 medium doesn't get -- how do we know they're going to
10 certify, are we tracking the certification of this engine?

11 ON-ROADS CONTROLS BRANCH CHIEF KITOWSKI: We are
12 tracking it. Every indication we have so far is that it
13 will be certified prior to -- well, prior to that time and
14 that maybe -- I think Mike is going to add a point here.

15 EXECUTIVE DIRECTOR KENNY: The question with
16 regard to if they're not certified by April 1st, what we
17 would do is we would actually take the \$15 million and
18 bring it back to this Board for redistribution.

19 CHAIRPERSON LLOYD: Thank you.

20 Yes, Professor Friedman.

21 BOARD MEMBER HUGH FRIEDMAN: Just a quick
22 question. I'm a long time customer of Semptra and I'm
23 curious about why you're down here as neutral. You don't
24 make diesel, but you do make natural gas. And you're
25 potentially benefiting from the half that's been allocated

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245

1 from natural gas. The only part you're opposed to is the
2 part that wasn't out there.

3 MR. MURRAY: What I would have done is put down
4 support if amended. I just didn't see that opportunity,
5 so I --

6 BOARD MEMBER HUGH FRIEDMAN: I wanted to be sure
7 I understood where you were coming from.

8 CHAIRPERSON LLOYD: The next is Jim O'Connell,
9 Dave Smith, Ed Manning, Stephanie Williams and Pam Jones.

10 MR. O'CONNELL: Chairman Lloyd, good afternoon,

11 members of the Board. I'm Jim O'Connell. I'm vice
12 president of A-Z Bus Sales.

13 And, first off, I'd like to say that I think
14 staff has done a remarkable job of trying to pull all the
15 factors together here and really bring some things to you.
16 We support the Governor's program and we'd like to see it
17 continue. Obviously, we sell buses and that's a very
18 important part of what we do.

19 We're concerned by the ARB's position to vacate
20 the long-standing approach to optional low NOx, concerned
21 that acceptance of a federal standard rather than
22 maintaining California's more stringent expectations for
23 emission levels and air quality exists within the
24 decision. Now, we think that the 2.5 NOx position is the
25 appropriate one, and that even though we do sell diesel

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246

1 engines the International engine is not available to us.
2 It's proprietary on their part at 3.0. And so you're
3 going to have one manufacturer who's going to be able to
4 provide that.

5 We feel that there's a lot of competition on the
6 alternative fuel side, in terms of CNG. We offer to you a
7 1.5 gram NOx propane engine on the vehicle that's outside,
8 and two and a half standards for other propane engines
9 that are also available in school bus use through Cummins.

10 So there are certainly competitive engines and

11 other kinds of things on the alternatively fueled side.
12 And I think Cummins engine company's representative said
13 it best when he said that they'd like to come to the
14 party, they're just not able to do it now. I'd like you
15 also to consider that John Deere, other manufacturers,
16 including Cummins on the alternative fuel sides, did
17 accelerate to a 2.5 optional low NOx, and did accelerate
18 their, whether you want to call it a market or their
19 process in terms of bringing engines forward and they
20 spent million of dollars in doing it.

21 They are not reaping any reward for doing that at
22 the point in time based on your decisions here. The other
23 thing is that with a \$30 million, \$20 million split as you
24 had originally decided with regard to particulate traps
25 and other PM traps, that your original proposal provided

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247

1 for some very interesting opportunities, a 30/20 split.

2 What I'd also like to tell you, so I'm kind of
3 floating a balloon here, but there's about 55 million
4 gallons of diesel fuel used in school buses each year.
5 And if you take the differential between ultra-low NOx --
6 or ultra-low emissions -- or I'm sorry, ultra-low sulfur
7 diesel at a nickel to seven cents taxed, that you might
8 end up with about a \$4 million a year price tag to mandate
9 all districts to use low sulfur diesel. That might be a
10 part of your program.

11 Thank you.

12 CHAIRPERSON LLOYD: Thank you.

13 Ms. D'Adamo.

14 BOARD MEMBER D'ADAMO: How does propane compare
15 to CNG in terms of infrastructure costs?

16 MR. O'CONNELL: It's significantly less. In
17 fact, there are some propane suppliers that will actually
18 supply the infrastructure to you so that you can simply
19 put a fuel tank there and refuel your vehicle right on
20 site at very low cost.

21 BOARD MEMBER D'ADAMO: Does staff have anything
22 to add to that?

23 You'd agree with that?

24 I think when Chris spoke from Mendocino, he's as
25 unique perhaps as Santa Barbara Air Pollution Control

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248

1 District. They both have strong interests in propane
2 fuel. And actually the IMCO certification from the
3 Executive Order is .9 grams per brake horsepower.

4 CHAIRPERSON LLOYD: What about particulate?

5 MR. O'CONNELL: It's a gasoline engine. I do not
6 know the particulate at this point in time.

7 ON-ROADS CONTROLS BRANCH CHIEF KITOWSKI:
8 Particulates have generally been very low, with the
9 propane at or lower than CNG levels.

10 CHAIRPERSON LLOYD: So it's a good alternative as

11 well.

12 MR. O'CONNELL: It definitely is.

13 CHAIRPERSON LLOYD: What about A-Z Bus Sales,
14 what sort of part of the market do you have?

15 MR. O'CONNELL: We have a significant part of the
16 market. We represent Bluebird Body Company. They're the
17 largest complete manufacturer of school buses. They use a
18 lot of International chassis for their production.

19 However, the particular engine is not going to be
20 available in the size of chassis that we use, so that I
21 don't think we've got that opportunity to use it.

22 We have delivered nearly 700 alternatively fueled
23 CNG school buses to California. We have a significant --
24 well, we have the near total share of the CNG school bus
25 market at this point in time. We're really proud of that.

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249

1 We started earlier, took our lumps and we continue to work
2 with several of the air districts to continue to develop
3 that technology.

4 CHAIRPERSON LLOYD: Would you say you can't get
5 the International Green Diesel engine to put in your
6 chassis?

7 MR. O'CONNELL: That's correct, not for the
8 particular platform.

9 CHAIRPERSON LLOYD: Okay. Yes, Ms. D'Adamo.

10 BOARD MEMBER D'ADAMO: Perhaps I should have

11 explored this further. If staff could respond on the
12 difference between propane and CNG in terms of cost of the
13 bus, and also where would it fit in? It's not CNG, it's
14 not Green Diesel.

15 ON-ROADS CONTROLS BRANCH CHIEF KITOWSKI: It
16 would fit in with the two and a half category. It was an
17 alternative fuel requirement, so it would fit in there.
18 And you may be in a better position to talk about the cost
19 specifically on the propane.

20 MR. O'CONNELL: Sure. The cost differential is
21 probably under \$10,000.

22 BOARD MEMBER RIORDAN: More or less.

23 MR. O'CONNELL: More or less.

24 BOARD MEMBER RIORDAN: No, more or less?

25 MR. O'CONNELL: Ten thousand dollars less, I'm

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250

1 sorry, than it would be for -- it would \$10,000 additional
2 over a diesel installation.

3 ON-ROADS CONTROLS BRANCH CHIEF KITOWSKI: About
4 half in between a diesel and a CNG.

5 BOARD MEMBER D'ADAMO: And what about in terms of
6 availability throughout the State, are there certain
7 regions where propane would be more available or is it
8 pretty much equal throughout the State?

9 MR. O'CONNELL: There are certain areas where
10 propane would be more available than less available.

11 Propane is a great alternative. It's typically available
12 just about anywhere. The problem is motor fuel and there
13 are some significant issues with regard to motor fuel.
14 But I think staff would have to take a look at that. And
15 I can't speak to that. I can only tell you that I got the
16 vehicle.

17 CHAIRPERSON LLOYD: I'm aware of the issue.

18 MR. O'CONNELL: One other thing, and I'm sorry to
19 take -- I've been up here three minutes, but I would like
20 to say that we have worked with several of the air quality
21 management districts and they work closely with the
22 California Energy Commission. We would advocate that
23 those districts be allowed to continue to work and perhaps
24 administer some of these programs in their areas and that
25 they might also have some innovative options in terms of

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251

1 actually extending some of these funds.

2 I mean, to say that some of our air districts
3 don't have matching funds available, but they might
4 incentivize school districts to utilize some of their
5 monies for other options. So we'd like you to consider
6 that.

7 CHAIRPERSON LLOYD: Thank you very much.

8 Dave Smith.

9 MR. SMITH: Mr. Chairman and board members, I'm
10 Dave Smith. I work for BP/ARCO and I'm here in a

11 favorable position, as compared to last month, and support
12 your proposal.

13 (Laughter.)

14 CHAIRPERSON LLOYD: You were an hour last month,
15 so don't count on it again.

16 (Laughter.)

17 MR. SMITH: I won't. Actually, I'm just here to
18 answer one of the questions you asked, Mr. Chairman, about
19 the availability of low sulfur diesel fuel. BP continues
20 to make available over a million gallons a day of
21 low-sulfur diesel fuel. Within the last couple of months,
22 we moved over 50,000 gallons or two million gallons of the
23 low-sulfur diesel fuel up from the San Francisco Bay Area,
24 so it's commercially available in northern California as
25 well as southern California now.

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252

1 CHAIRPERSON LLOYD: Roughly, Dave, what
2 percentage of your total sales are roughly?

3 MR. SMITH: Well, currently, percentages are very
4 small. But that production rate can be up to about 40 or
5 50 percent of our overall production. We can't maintain
6 that, but there is a demand for it right now. We do have
7 contracts with transit and school systems, and we've been
8 getting quite a bit of interest in northern California
9 transit districts in going the diesel pathway on your
10 urban bus rule.

11 So just to conclude, we're supportive of your
12 rule. We're supportive of the guidelines. And given the
13 guidelines, we look forward to working with you next year
14 in trying to get additional funds in the Legislature to
15 continue this program.

16 Thank you.

17 CHAIRPERSON LLOYD: That support is much
18 appreciated.

19 Does the staff capture the price differential?

20 I think they said three to five cents or five
21 cents. Inasmuch as there really isn't a market, price and
22 demand, BP agreed we're selling low-sulfur diesel at five
23 cents over CARB. We're agreeing to that for at least a
24 year in our contracts with people. Hopefully, within the
25 next year, other oil companies will come into a market and

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253

1 there will be a real market price supply issue.

2 CHAIRPERSON LLOYD: Thank you.

3 BOARD MEMBER CALHOUN: I've got a question.

4 CHAIRPERSON LLOYD: Yes, Mr. Calhoun.

5 BOARD MEMBER CALHOUN: As a fuel supplier, does
6 it matter to you whether the standard is two and half or
7 three grams?

8 MR. SMITH: Mr. Calhoun that's a dangerous
9 question. We understand the complexities and the balances
10 that the staff was trying to meet and we certainly support

11 the way they've approached it.

12 I'd like to mention that BP is one of the largest
13 suppliers of natural gas to the State of California, I
14 found out just a few weeks ago, which surprised me. So
15 we're glad to see that all fuels are being given a chance
16 through the program.

17 BOARD MEMBER CALHOUN: Thank you.

18 (Laughter.)

19 CHAIRPERSON LLOYD: So you're, in fact -- you
20 support both --

21 MR. SMITH: That's right. We're very supportive
22 of that.

23 (Laughter.)

24 MR. SMITH: And Dr. Burke isn't here, I don't
25 know what's wrong.

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254

1 (Laughter.)

2 CHAIRPERSON LLOYD: When did you see the light?

3 (Laughter.)

4 MR. SMITH: Tuesday when I met with Dr. Burke.

5 (Laughter.)

6 CHAIRPERSON LLOYD: Thank you very much.

7 Ed Manning, Stephanie Williams, Pam Jones, Scott
8 MacDonald.

9 MR. MANNING: Thank you, Mr. Chairman, members of
10 the Board. It's nice to be here again.

11 After hearing Dave's testimony, I'm reminded of
12 John Lennon's statement, "Give peace a chance."

13 (Laughter.)

14 MR. MANNING: There has been an acrimonious
15 debate, part of an ongoing acrimonious debate. But I
16 think when you step back and look over the last two years
17 after diesel particulate was listed as a toxic air
18 contaminant, to where we are today, actually, there's been
19 pretty monumental progress. And I think you have to look
20 at the program quite frankly as part of that progress.

21 Last year, the Board took a major first step on
22 the transit bus rule in doing two things really, advancing
23 clean diesel technology and allowing alternative fuels to
24 participate at the same time, all towards the goal of
25 driving down emissions in both PM and NOx emissions.

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255

1 And I think in response to some of the questions
2 posed by Supervisor Roberts and some of the debate, if you
3 look at the transit bus rule, I think it has a lot of
4 parallels to the rule. In the transit bus rule, you had
5 fuel neutrality. You had both clean diesel and CNG
6 participating, as well as fuel cells and other
7 technologies. You had local choice, which this rule also
8 has.

9 The other thing is you look at the emissions
10 comparison. In that rule there are times when diesel

11 pulls ahead of CNG and times when CNG pulled ahead of
12 diesel as part of that proposal. That is not dissimilar
13 in many respects to what's in front of you today.

14 Under the proposal, the certification level for
15 clean diesel for particulate is lower than for CNG. That
16 is significant. And in our view, going back to one of the
17 questions Professor Friedman asked earlier, there was an
18 extensive discussion in the budget process last year, the
19 details of which I and other people could bore you with
20 and perhaps entertain you with, but you don't really need
21 to get into, except to say that it was understood that A,
22 in our mind, this was first and foremost a particulate
23 reduction program, and I think politically was sold as
24 that. Not that NOx issues weren't important as part of
25 the debate, they clearly were, as global climate changes

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256

1 issues and other issues have been loaded onto this over
2 time, but primarily we viewed it, and think a lot of other
3 people did, as a way to reduce PM reduction -- to achieve
4 PM reduction and also NOx reduction.

5 The other thing that I think you look at in the
6 proposal is this is a zero sum game, in that you have
7 finite dollars to allocate and you're looking at how to
8 get the most effect for the dollars that you have. And
9 you can debate whether it should all go to retrofits,
10 whether it should all go to CNG, which would give you the

11 least amount of benefit, whether it should all go to new
12 clean diesel buses. A lot of school districts want new
13 buses.

14 But this is what we have described as an elegant
15 compromise, one that probably equally offends all, which
16 means it's probably on to something not unlike other
17 compromises that have come before the Board. And that is
18 not meant to be -- it's not meant to be trite. I mean,
19 it's a difficult issue with complex -- you know, you're
20 looking to balance fuel sources, achieve reductions for
21 particulate specifically, but also for others while you're
22 there, and how do you do all that. And that is not easy
23 to do.

24 I participated, as did others from the business
25 community, in extensive discussions about the 3.0 NOx

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257

1 level. I will say that, you know, no good deed goes
2 unpunished. Navistar was the only one that I saw to step
3 up. And, you know, I think you're trying to achieve
4 progress immediately and this is perhaps the best way to
5 do it.

6 And our companies, WSPA member companies who I'm
7 here representing, have been participating on an
8 individual basis with Air Resources Board staff to make
9 the commitment to provide the clean diesel fuel. And you
10 just heard Dave Smith's testimony on that, so we will

11 continue to participate in the process. We think this is
12 one step along the way really towards implementing a much
13 more ambitious goal, which is really your diesel control
14 plan, which we think will present other challenges as we
15 move forward.

16 But we and others I know in the business
17 community, the Chamber, the agricultural community, the
18 engine manufacturers, are at the table and are going to
19 continue to be at the table to make it work.

20 Thank you very much.

21 CHAIRPERSON LLOYD: Thank you very much.

22 Comments, questions?

23 Thank you.

24 Stephanie Williams, Pam Jones, Scott MacDonald
25 and then V. John White.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

258

1 MS. WILLIAMS: Good afternoon. My name is
2 Stephanie Williams. I'm the Director of Environmental
3 Affairs for the California Trucking Association.

4 (Thereupon an overhead presentation was
5 presented as follows.)

6 MS. WILLIAMS: We are opposed to this proposal
7 today, but tomorrow we're supporting MTE, so we hope you
8 understand.

9 CHAIRPERSON LLOYD: No.

10 (Laughter.)

11 MS. WILLIAMS: I have to be smarter than the
12 button and I'm not, what do I do?

13 --o0o--

14 MS. WILLIAMS: The trucking overview. The CTA
15 members have not been politically active on school bus
16 issues and will be not in the future. There was a Los
17 Angeles Times article which upset our members and brought
18 our President Elect here today for the hearing. And that
19 is the article and the editorial which inaccurately
20 depicted natural gas engines as necessary to reduce ozone
21 and particulate matter in the South Coast basin.

22 Our members want to set the record straight
23 regarding federal criteria pollutants addressed in this
24 proposal, particulate matter and ozone precursors. That's
25 what the fed expects us to do, meet these health-based

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259

1 standards. That's why we're all here.

2 The precedent of letting natural gas pollute more
3 particulate and ozone precursors threatens attainment of
4 our health-based standard in the State.

5 The South Coast AQMD, based on diesel particulate
6 being bad and natural gas particulate assumed to be, you
7 know, good for you, has proposals like the 54 percent
8 reduction in NOx beyond what natural gas is, and a 71
9 percent more reduction in PM emissions. It discriminates
10 against clean diesel technology and allows CNG engines to

11 emit four grams NOx and be subsidized under the program.

12 We have a problem with that.

13 --o0o--

14 MR. WILLIAMS: Also, when the California document
15 was finalized listing diesel as attacked, the National
16 Resource Defense Counsel sued four of the largest grocery
17 stores in southern California. Did the settlement reduce
18 particular emissions, overall particulate emissions, those
19 emissions that federal EPA will say yes, you met your
20 health-based particulate standards.

21 No. This suit was settled almost two years
22 later. They were required to purchase dual-fueled LNG
23 diesel engines to reduce particulate because of the
24 listing, but the PM emissions on these new engines that
25 cost \$35,000 more were no different than the 1994 diesel

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260

1 particulate emissions. And they had to pay \$800,000 in
2 attorney's fees. That would buy a lot of diesel trucks,
3 clean diesel trucks.

4 We have a problem when proposals are not fuel
5 neutral. We urge you to move to fuel neutrality.
6 Promoting higher emission standards for an emerging
7 technology, be it natural gas, propane, you know, fuel
8 cell for ozone is a problem, because ozone precursors are
9 nonmethane hydrocarbons and oxides of nitrogen.

10 The federal standards for diesel and anyone

11 competing in that area for 2004, are nonmethane --
12 nonmethane hydrocarbons plus NOx. You've got to meet that
13 standard to reduce ozone. That provides an incomplete
14 comparison of the health and environmental risk. It
15 ignores respiratory, cardiovascular, global warming,
16 carbon monoxide. Spark ignition technology is no panacea.
17 It emits a lot more ThatO between 10 and 16 times. Six
18 times would be the low level that we'll using in the slide
19 coming to you, not to mention ThatH4 potential greenhouse
20 gases. It ignores nonmethane hydrocarbons, which is our
21 biggest problem today.

22 --o0o--

23 MS. WILLIAMS: Here we have a slide that shows
24 natural gas versus diesel engine. You have a 600 percent
25 increase in carbon monoxide and 200 percent increase in

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261

1 nonmethane hydrocarbons. And a recent Department of
2 Energy study shows that ozone increases in Los Angeles on
3 the weekends. Because trucks are off the road, NOx
4 becomes lower and the nonmethane hydrocarbons reacting
5 with the sunlight actually increase our ozone, which we
6 are measured for federally. We get measured on ozone, not
7 NOx, not nonmethane hydrocarbons.

8 --o0o--

9 MS. WILLIAMS: There was recent studies that show
10 that diesel particulate is no more toxic than the natural

11 gas particulate in Sweden.

12 CHAIRPERSON LLOYD: Three minutes has passed
13 awhile ago.

14 MS. WILLIAMS: A lot of people have seen this
15 Swedish study, CNG at best. Diesel plus the particulate
16 is lower.

17 Our conclusion, we support EPA's promulgated
18 standards for diesel for 2006. We are fighting for them
19 nationwide. Please make natural gas meet that same .01
20 and add nonmethane hydrocarbons into the NOx standard to
21 be consistent with the federal government.

22 Thank you.

23 CHAIRPERSON LLOYD: Any questions from the Board?

24 Comments from staff?

25 Pam Jones, Scott MacDonald, V. John White and

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262

1 Bonnie Holmes-Gen.

2 MS. JONES: Good afternoon. My name is Pam Jones
3 and I'm here representing the diesel technology forum,
4 which is leading manufacturers of engines, both diesel and
5 CNG, as well as fuel and after-treatment emissions control
6 devices.

7 I'd like to ask for your consideration of four
8 areas. Number one, continue to include clean diesel in
9 the mix to solve the problems with the school buses. The
10 main thing is to get the older buses off the streets and

11 to clean up the emissions of those existing buses.

12 The school district should have the flexibility
13 to decide what their needs are for durability, reliability
14 and cost. And you've heard from your own staff that clean
15 diesel does meet the requirements, it does it at a cost
16 that will allow the school districts to add filters to 16
17 buses for the cost of one new bus. That's not
18 insignificant to these school buses -- to these school
19 boards.

20 Number two, continue to acknowledge the progress
21 that the clean diesel industry has made. I don't think
22 you should be considered sell-outs for accepting your
23 staff's proposal in looking at the aggregate benefit of a
24 combination of these two fuel choices.

25 Very often the CNG proponents are critical of the

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263

1 diesel industry and compare CNG emissions to old diesel
2 technology. That's not the case today. You heard about a
3 study of in-use traps in San Diego that reduced emissions
4 levels to near zero. There's another study, recently, by
5 the National Renewable Energies Laboratory and ARCO that
6 concluded the same thing, that's in-use RealTime.

7 Third, don't sanction a monopoly either of the
8 bus companies or the fuel choice. Don't endorse a funding
9 program that limits money awards to just one company.

10 There are other players as you heard who do want to

11 participate. And while they're not there now, they will
12 be. Encourage competition as more companies meet those
13 standards.

14 Additionally, I would urge you to be cautious
15 about endorsing a system that awards money and allows
16 southern California to promote a monopoly of only one
17 choice, that being CNG.

18 Diesel engine companies have spent millions of
19 dollars to meet your standards. And to exclude them from
20 any area geographically or functionally would be highly
21 unfair.

22 Number four, we ask that you make it clear to the
23 school boards in your directives to them that they are not
24 being asked to sit as a board of toxicology. We've seen
25 in the transit hearings that they're very confused when

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264

1 they're being presented with conflicting information, CNG
2 and diesel. And they feel very uncomfortable being asked
3 to make the health decisions that they are presuming that
4 they need to make, so we're asking that you be more clear
5 that your staff has undertaken health and environmental
6 studies and determined that the two paths are equivalent
7 in reaching your standards.

8 Again, I don't think you are sell-outs for
9 considering both paths. And I think that you will get the
10 best bang for the buck and the most clean air for the buck

11 if you follow both of these paths as stated in the staff
12 recommendations.

13 Thank you.

14 CHAIRPERSON LLOYD: Thank you very much.

15 Questions or comments?

16 Mr. McKinnon.

17 BOARD MEMBER MCKINNON: The staff. Has CNG
18 emissions been studied the way diesel has? I'm not making
19 that a matter to be resolved today, but if it's the case
20 that it -- we really need to probably think about doing
21 some work.

22 EXECUTIVE DIRECTOR KENNY: We do need to do more
23 work in that area. We know much more about diesel.

24 CHAIRPERSON LLOYD: Thank you very much.

25 Scott MacDonald, V. John White, Bonnie

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265

1 Holmes-Gen, Sandra Spelliscy.

2 MR. MacDONALD: Hi, good afternoon, Good evening.
3 My name is Scott MacDonald. I'm with the South Coast
4 Clean Air Partnership. We are a coalition of school
5 districts, transit agencies, the petroleum industry and
6 other business in southern California largely within the
7 South Coast Air Quality Management District, promoting and
8 fighting for fuel neutrality in government regulations
9 concerning fuels of the future.

10 The kind of dual path strategy that we are

11 talking about today for school buses is consistent with
12 the established Air Resources Board policy and makes sense
13 as a way to allow all districts in the state a chance to
14 clean the environment for their students. With a clean
15 diesel option, you give school districts a chance to
16 protect the health of thousands of more kids. Your own
17 staff report on the issue shows that dollar for dollar
18 clean diesel buses will remove hundreds more tons of
19 pollutants from the air than CNG buses.

20 If clean air for kids is really the goal here,
21 then school districts should be given a clean diesel
22 option. A couple of more quick points on the handouts you
23 just received. There's a bar graph showing the results of
24 the real world San Diego City school test of clean diesel
25 school buses and the difference between those emissions

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266

1 and the emissions of the dirty diesel buses that we're
2 trying to get off the road.

3 As you can see there was serious reductions in
4 important pollutants and we're hoping that this kind of
5 real world test makes it clear that this is an option that
6 should be made available to all school districts.
7 Secondly, there's a question earlier in the presentation
8 today by your staff, that the South Coast Air Quality
9 Management District is requesting that the money only be
10 made available for CNG buses in that area, again.

11 I'd like to read you a list of our school
12 districts who are a part of our group. The California
13 Association of School Transportation Officials, Riverside
14 County Schools Advocacy Association, Orange County
15 Department of Education, Unified School Districts in
16 Beaumont, Irvine, Murieta Valley, Newhall, Ontario, Monte
17 Claire, Roland, Walnut Valley, William That Harte, and the
18 Transportation Supervisors in the Covina Valley and the
19 Santa Ana Unified School District. They are pleading for
20 fuel neutrality, so that they can give their students the
21 most clean air bang for the buck.

22 And we're asking you to support them in that
23 position.

24 Thank you very much.

25 CHAIRPERSON LLOYD: Thank you.

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267

1 Question, Mr. Calhoun.

2 BOARD MEMBER CALHOUN: I don't have a question
3 for him, but I want to go back to something the Matt
4 McKinnon was mentioning a few minutes ago, and that is
5 about the emissions from natural gas and the comparison
6 between those of diesel fuel. And I think we ought to
7 take a serious look at it. Now Stephanie Williams was up
8 here a few moments ago and she mentioned this also. And
9 that I notice in looking at the press release that they
10 issued saying that "Truckers Champion Green Diesel,"

11 "Challenge Environmental Lobby to 'come clean'" and talk
12 about the emissions from natural gas. I think we ought to
13 take a real good look at that and expose whatever results
14 we find.

15 DEPUTY EXECUTIVE OFFICER CACKETTE: I would just
16 comment, that we are testing right now natural gas and
17 diesel engines at our MTA facility and we're going to be
18 doing fairly detailed work on that. So there will be more
19 information available later.

20 CHAIRPERSON LLOYD: Thank you. Next is John
21 White. And I think we've got to thank John for all his
22 efforts to actually get the \$50 million that we're
23 squabbling over here in some ways.

24 MR. WHITE: Thank you, Mr. Chairman. John White
25 today representing the Sierra Club. I want to first of

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268

1 all thank the Board and the staff for all the time they've
2 spent on the issue. I'd actually prefer to spend more of
3 our time working on spending the money and getting money
4 than having quite the level of detail on allocation, so I
5 want to put this in a little bit of context.

6 On the other hand, I do think that I agree with
7 my friend Ed Manning that this is reminiscent of the
8 transit bus rule. But unfortunately this is not a rule,
9 this is a procurement. And that's where I'd part company
10 with Mr. Manning, although, I am fond of sharing much in

11 common with the views. I am particularly gratified to
12 hear of the evolution and the thinking of BP ARCO on this
13 subject.

14 But I think that the essential point that I am
15 troubled by is we have given undue deference to the market
16 share considerations of one company in this procurement.
17 And I have no desire to demean the accomplishments of
18 International. Quite the contrary, I only wish they would
19 offer that engine as a repower, so we could use it in
20 Sacramento and LA on the truck market, but instead they're
21 not offering it as a repower as I understand. I'm told
22 that they refuse to offer the same engine as a repower,
23 which is actually where it would be a terrific
24 achievement.

25 Instead, it's only offered as a school bus, which

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269

1 is a narrow niche market. And essentially what we're
2 doing is we're allowing a less clean engine to receive
3 advantages over a more clean engine. So that's my
4 concern.

5 So I think if there is a requirement to have to
6 have a certain allocation to the company because of how
7 hard they've worked, that allocation ought to be smaller
8 than 15 million, certainly, given the state of preparation
9 and certification and so forth. And I'd put the
10 difference into, agreeing with South Coast, I'd put it

11 into retrofits.

12 I think that the problem that's come here is that
13 we've sort of, because the public money is going to be
14 very helpful in the marketing of the vehicles and we've
15 sort of confused ourselves that we're defining who can
16 sell a particular product as opposed to who we're going to
17 help the most. And to me we should help the most that one
18 that's doing the most good.

19 And so that's my complaint with the regulation.
20 On the other hand, I want to see it put in context and
21 have us move forward overall, but I think it's troubling
22 when we seem to have felt the need to have a policy that
23 guarantees outcomes. And, in fact, to me the policy we
24 should be striving for is to move the alternative cleanest
25 fuels to everywhere we can and enthusiastically put the

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270

1 clean diesel and the less clean technologies everywhere
2 else, because we know that CNG isn't going to go
3 everywhere.

4 Propane. I was pleased to hear about it's
5 competitiveness and opportunity to apply. We know that
6 not every school district can handle the alt fuels
7 infrastructure. So to me the policy preference should be
8 clear for CNG, but it should be flexible. And I'm
9 disappointed that we weren't able to get to that outcome
10 here today and would urge the Board to give all of the

11 testimony and all of these discussions its full
12 consideration.

13 But I want to thank the staff for working hard.
14 I just think we ought to think of procurements
15 differently. To me the clean should go first, the less
16 clean should be participating, but not have the same
17 advantage or encouragement. And they should be, I think,
18 encouraged to go into other markets where we need them
19 more. We, frankly, don't need them in school buses quite
20 as much as we need them elsewhere.

21 So anyway, thank you for the time to listen and
22 I'd be happy to answer questions.

23 CHAIRPERSON LLOYD: Thank you very much, John. I
24 would like maybe to ask International, whether, in fact,
25 that's true, that they're not interested in the repower

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271

1 market.

2 MR. WHITE: I think it's a matter of where the
3 scarce number of engines can go. I called to get some
4 guidance on the discussion today, because as you know we
5 have a somewhat different emphasis in the north and south,
6 and repowers are very important.

7 And I just don't want to see the clean diesel
8 going where the CNG can go. I want it to go where the CNG
9 can't as easily. And that's where I think we should hit
10 for a policy as we go forward in the future.

11 Thank you.

12 CHAIRPERSON LLOYD: Mr. McKinnon.

13 BOARD MEMBER McKINNON: I don't have a problem
14 with what you're asking there. And he's coming now. Do
15 you happen to have any information about the alternative
16 fuel engine manufacturers and whether or not they have
17 engines available for repowers?

18 MR. WHITE: I wish the guy from Cummins had shown
19 up six months ago, frankly, because if we'd had his
20 testimony earlier, that, in fact, the 2.5 is not a CNG
21 only standard, which it was in the Carl Moyer and I didn't
22 think it was here, we might have not had the level of
23 confusion.

24 I think the work that the staff -- I'm serious,
25 staff -- I mean, because I understand the policy that the

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272

1 Administration wants to pursue does not exclude fuels that
2 have the same or better performance, I understand that.
3 What we don't want to do is raise fuels technologies up
4 that don't quite meet the same standards, and help them.
5 But I agree with the staff and I thought the guy from
6 Deere made some very good testimony about -- and, frankly,
7 you know, I spend most of my time these days working on
8 the energy problem that we have.

9 And I want to see a meeting on diesel backup
10 generator retrofit technology and funding, so that we can,

11 you know, these school buses are going to all be pretty
12 clean if we get going on it. We've got a lot of other
13 places to put these technologies where we're not doing as
14 well.

15 So I think the work, getting all the European
16 work, getting everybody to open their kimono and show what
17 they do and compare them to each other is the way to go
18 forward.

19 BOARD MEMBER McKINNON: That wasn't the question
20 I asked at all.

21 (Laughter.)

22 CHAIRPERSON LLOYD: He operates in the
23 Legislature there.

24 MR. WHITE: Excuse me, Matt.

25 BOARD MEMBER McKINNON: I guess I'll leave the

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273

1 question open for the CNG manufacturers, but as to whether
2 or not -- I mean, if we're going to deal with the fairness
3 issue that you raise, I mean, part of the fairness issue
4 is whether or not the CNG manufacturers, engine
5 manufacturers, can also do repowers and are selling their
6 engines for repowers.

7 MR. WHITE: My guess on repowers is that they're
8 case by case, that certain applications will work and
9 others will not.

10 BOARD MEMBER McKINNON: Right.

11 And some will work with natural gas and some will
12 work better with diesel depending on the fuel storage
13 capacity and things like that.

14 BOARD MEMBER MCKINNON: They, too, may make
15 allocation decisions in terms of their markets and where
16 they're moving engines and that's --

17 MR. WHITE: My sense is to the extent we want to
18 draw people in with public money, we want to draw them
19 where we need them the most, and where they're going to be
20 the cleanest. I don't disagree that we want to encourage
21 all the --

22 BOARD MEMBER MCKINNON: And I guess, finally,
23 while we probably have a very different view about how we
24 should do the year, I do appreciate you and your
25 organization's pressure to keep this thing moving and to

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274

1 make sure that we have the money. And I look forward to,
2 you know, clearly the school buses are going to take a few
3 years and a few more dollars.

4 MR. WHITE: I think we agree it's important to
5 get the money we have spent well and demonstrate the
6 viability of the program to everybody concerned, improve
7 and narrow our differences and go get more money for the
8 future.

9 BOARD MEMBER MCKINNON: You bet.

10 CHAIRPERSON LLOYD: Thank you, John And I guess

11 Warren is going to address the issue of repowering.

12 MR. SLIDOLSKY: Well, after what you were saying
13 about not quite being responsive to the question, maybe it
14 would be better if I heard exactly what the Board is
15 asking. And to show that I learned, Dr. Lloyd, I'm Warren
16 Slidolsky again from International Truck and Engine
17 Corporation. How can I help?

18 MOBILE SOURCE CONTROL DIVISION CHIEF CROSS: It's
19 my fault I had Warren out in the hall in an argument.

20 CHAIRPERSON LLOYD: I think the issue was Warren,
21 Mr. White mentioned that he was delighted to see the
22 progress made by International with the Green Diesel
23 engine, but he said the market obviously for school buses
24 is more limited. We really need your help particularly in
25 the north area to repower some of the engines stationary

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275

1 side so that we can bring the NOx down rapidly in the
2 region.

3 And it was trucks, sorry, trucks. But the point
4 is that he understood that, in fact, Navistar was not
5 interested in that particular market.

6 MR. SLIDOLSKY: Well, one thing, when you talk
7 about stationary sources --

8 CHAIRPERSON LLOYD: I misspoke, it was trucks.

9 MR. SLIDOLSKY: You know, it's something my
10 mother used to tell me is you can't really make a silk

11 purse out of a sow's ear. And when you look at these
12 old --

13 CHAIRPERSON LLOYD: You would never call one of
14 your engines a sow's ear, would you?

15 MR. SLIDOLSKY: Well, no, I would not to answer
16 the question, specifically. What I would say is not only
17 International but the industry has worked very hard at
18 improving engines. And the difference between these older
19 engines and the new engines is so dramatic that it is
20 extremely difficult, if not impossible, to bring that
21 technology backwards, to be a little more specific.

22 When you look at these old engines, they're
23 mechanical engines. The beauty of today's engines are the
24 electronic controls, and you just can't put those
25 electronic controls on old mechanical engines.

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276

1 The new fuel systems are so dramatically
2 different you just can't bolt on a new fuel system and
3 have it work so that the repowering thing in our mind is
4 something that was extremely difficult to do, and can you
5 really do it? It's almost like trying to design a new
6 engine. We have been focusing our resources to get the
7 clean engines of the future that you're demanding, the
8 public is demanding, and the environmentalists are
9 demanding. We want to do it.

10 I'll stop if there's some additional questions on

11 that?

12 CHAIRPERSON LLOYD: I understand. I think Mr.
13 Cackette.

14 DEPUTY EXECUTIVE OFFICER CACKETTE: It's my
15 understanding that some of the repowers are much newer
16 trucks than mechanical ones. They're not trucks of the
17 eighties, but trucks of the nineties. I think the
18 specific question is would International make the Green
19 Diesel engine available for repower into an
20 electronic-base chassis or something that's more modern?

21 MR. SLIDOLSKY: Well, one of the things that we
22 have said initially, and this really starts to get into
23 retrofit programs, the real key on a Green Diesel is the
24 particulate filter. Yes, we do some additional things
25 with a lot of electronics and calibrations to reduce the

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277

1 NOx. And we have been on record as saying that we at the
2 get-go would support retrofits to electronic control
3 engines, because the electronic control engine does play a
4 role in using a particulate filter.

5 You can get environmental benefits. And we
6 support what you're doing with the retrofit programs. But
7 to really maximize the use of a particulate filter, you
8 need those electronic controls to keep that continuous
9 regeneration going. You need a certain amount of heat.
10 If you're not getting the exhaust temperature required,

11 then with electronic controls you can get it.

12 DEPUTY EXECUTIVE OFFICER CACKETTE: I think we're
13 still missing. The question was, wouldn't you like to
14 sell a brand new engine with a particulate filter and put
15 it in an older truck in Sacramento, that's the question,
16 the whole shebang, not just a trap or not just a retrofit
17 of an engine, but the whole brand new thing is what we're
18 calling a repower.

19 MR. SLIDOLSKY: One of the things that has gotten
20 in the way, and we have looked at that also, Tom. And I'm
21 sorry I keep missing the point. Stick with me or I'll run
22 out of things to say and I'll just have to sit down.

23 One of the issues you have when you put a new
24 engine into a vehicle is you need to match it with the
25 existing transmission and the existing rear axle. And our

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278

1 engines have changed so much that there's also been
2 dramatic changes in what the rear axle looks like, what
3 the transmission looks like.

4 So if we were to take one of our new engines and
5 put it into an older vehicle, you may not get that match
6 up and it would lead to a lot of customer dissatisfaction
7 issues. And so that has been -- we've asked that over and
8 over. Also, the size of the engine has changed and there
9 are cases that that horsepower engine just wouldn't fit
10 anymore. So there are three things that get in the way.

11 Yes, Dr. Burke.

12 CHAIRPERSON LLOYD: Dr. Burke.

13 BOARD MEMBER BURKE: They have those same
14 problems when they repower old boats and they change the
15 transmissions and the drive shaft. And you put a longer
16 driveshaft on the prop and you change the universal joint
17 and bingo it works.

18 MR. SLIDOLSKY: I didn't say it was impossible.

19 BOARD MEMBER BURKE: I mean Detroit Diesel is
20 putting D decks in boats every day now.

21 MR. SLIDOLSKY: I didn't mean to imply that it
22 was impossible to do, but when you start talking rear
23 axles, transmissions trying to maybe reconfigure for it to
24 fit, it adds to the cost. It takes away the cost
25 effectiveness. And both in 2004 and what EPA is proposing

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279

1 in 2007, those are major challenges to our industry, and
2 we're accepting that challenge, and we're putting our
3 resources in to meeting those challenges. And that takes
4 away from the ability to do these things that, yes, would
5 give some modest gains. But in the long run, I think
6 we'll be best served with cleaner engines. And, yes, Tom,
7 I still have gotten there.

8 CHAIRPERSON LLOYD: I think we have two board
9 members that you have stimulated more questions.

10 Mr. McKinnon and Ms. D'Adamo.

11 BOARD MEMBER McKINNON: I wasn't aware that there
12 had been major changes in transmissions. So, now I'm a
13 little concerned here. You were out of the room and in
14 fairness I'll kind of wrap the whole thing up as I heard
15 it. What caused you to be asked to come back is there is
16 a great concern that we are budgeting \$15 million for what
17 would effectively be a monopoly for you for the next
18 couple of years.

19 And, you know, frankly, I don't believe that's
20 going to be true. I think there's other companies that
21 are coming along and I think at least one is going to come
22 to the market. But albeit, it is a fair question, if
23 that's what's happening and you're going to benefit from
24 15 million being invested and possibly you're the only
25 people to supply the engines. The question that was

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280

1 raised is, you know, if you're getting that benefit, is
2 there something you can do to help California?

3 And one of the suggestions that was laid out
4 there in the testimony was repowering of some trucks in
5 California. And I mean if you're allocating X number of
6 engines so you sell them with the whole bus or you
7 maximize your profit here or whatever, if that's the
8 answer, that's the answer.

9 But if you have the ability to produce more
10 engines and do repowers where it makes sense, you know, we

11 have probably several hours more of testimony, maybe the
12 thing to do is kind of talk about it and check back in and
13 come on back in a couple of hours after talking it over.
14 I don't know.

15 I think it's a fair question. And transmissions
16 not fitting up bothers me as an answer.

17 MR. SLIDOLSKY: Well, I listen -- many things
18 with the electronic control of the engine, the
19 transmission starts to begin to tune in to what those
20 electronic signals are, so there are some differences
21 there.

22 In fact, we're finding the choice of transmission
23 as we begin to certify engines in the light-duty
24 marketplace is very dependent on how the transmission is
25 configured. So that is becoming a critical parameter in

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281

1 reducing emissions as just emissions design.

2 I think the real critical issue that I was
3 hearing from you is that you don't want to give
4 International a monopoly. You know, we worked very hard
5 on this project, and the real motivation for this project
6 was just to show what diesel is capable of. And we have
7 jumped the gun.

8 A .01 particulate standard is something that
9 wasn't supposed to come into being until 2007. And we
10 will be offering that next year. Now, the kinds of things

11 that we have done, to do that is what you heard the
12 after-treatment folks giving testimony, and they have this
13 after-treatment device. Other engine manufacturers are
14 fully capable of going to these same suppliers, getting
15 these same particulate filters and putting them on and
16 achieving the same result.

17 I think the added thing that we have done in
18 recognition of your concerns, as was pointed out, a four
19 gram NOx engine, we have worked with what we could to take
20 it from four to three grams. So those are things that we
21 have done. We've heard Cummins say that they could even
22 do more with the NOx. So what is the issue with them
23 putting on a particulate filter and competing in that same
24 business?

25 So those opportunities have been there. We've

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282

1 shown the way for years now and other engine manufacturers
2 have had the opportunity to do exactly the same thing.
3 And it's my understanding that DDThat is coming out with
4 exactly something similar for transit buses. So I don't
5 think it is a monopoly that's been, I think, unfairly
6 characterized.

7 CHAIRPERSON LLOYD: Ms. D'Adamo.

8 BOARD MEMBER D'ADAMO: I view today's proposal as
9 just one in a series of many building blocks. This issue
10 first came before us when, I think it was in January of

11 this year, when we had the transit rule before us. And
12 we've felt that we needed to grapple with school buses,
13 but there was a problem with funding.

14 Now, we've come up with a way to resolve or at
15 least begin to resolve the funding issue. And in doing
16 so, we've got a whole other set of issues to deal with.
17 I'm totally comfortable with what we have, because I think
18 that it strikes a balance. But the reason I think that it
19 strikes a balance, even though there may be a monopoly for
20 one company, it doesn't really matter to me, because we
21 have the next building block.

22 And the next building block that's going to come
23 before us is going to be a retrofit program, a regulation
24 on diesel engines. So it's crucial in my mind that
25 whatever we do now supports the next stage. And if we are

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283

1 going to reward your company -- I think your company ought
2 to be rewarded. But if we are going to do that, then I
3 think that we also need to gain in the next step far
4 beyond school buses when we go to the regulations that are
5 going to appear before us within the next year or two.

6 And so I think you ought to consider what Mr.
7 McKinnon has raised, maybe take a little bit of time and
8 go outside, see what you can do to help us out in the
9 future on some of these other goals, so that you can
10 benefit now, kids can benefit and then the next building

11 block can also be achieved.

12 MR. SLIDOLSKY: Well, I certainly hear your
13 message loud and clear. Unfortunately, the folks that
14 have the ultimate decision-making in what you're
15 requesting have probably all gone home, because back in
16 Chicago it's 7:00 p.m. And so coming back in a couple of
17 hours, I'm just simply not going to be able to reach
18 someone. And I think it would want to be a studied
19 response.

20 CHAIRPERSON LLOYD: We'll be here tomorrow. I
21 think you will be, too.

22 MR. SLIDOLSKY: Yes, I am, Dr. Lloyd. I will be
23 here tomorrow. And I will make that commitment to try to
24 get ahold of somebody tomorrow morning on that particular
25 issue.

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284

1 But, you know, we have given something to build
2 with the particulate filters. The kind of work we've done
3 I think for EPA to propose in 2007 that all diesel engines
4 should meet a .01 standard. And because of what we're
5 doing and the pioneering work that we're doing, it's going
6 to allow everyone to have a great deal of confidence that
7 this is a viable way to reduce particulate matter.

8 So I think that is, I think, is positive that we
9 have done and a reason why we should be rewarded.

10 CHAIRPERSON LLOYD: Professor Friedman had a

11 question.

12 BOARD MEMBER HUGH FRIEDMAN: I share my
13 colleague's uneasiness, I guess, is the way to put it,
14 with the fact that in looking at what is available
15 presently now, you have now the best to offer. You've set
16 the standard at some expense and you're to be
17 congratulated for doing it. Its not as far as we want to
18 get, but it's the best that there is. It's very close to
19 the best there is in any technology.

20 I don't call that a monopoly. To me a monopoly
21 is granting an exclusive right legally without
22 competition. As you've made it clear and others have made
23 clear, competition is free to compete. I don't consider
24 that we are showing favoritism. Our goal is to get the
25 best we can for the public, get the biggest bang for the

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285

1 buck. You happen to have it available.

2 I don't know the reasons why others don't or
3 chose not to. But there are lots of companies out there
4 and if they see money in it, I'm sure that they'll be
5 throwing some money to get there. And there may be plenty
6 of time. And as others have pointed out, this is the
7 first round.

8 So while I wish there were more companies who --
9 there were, if you will, choices whether to deal with
10 Chicago or deal with Detroit, I don't see your company's

11 name here, other than that you've appeared. You've been
12 identified as the source available.

13 But I think that's the, I think, a de facto
14 product that you have developed, but you don't have the
15 only patent on it. Or at least whatever patent you have,
16 I assume others can replicate and are talking about even
17 beating you in a few years. And, hopefully, that
18 competition will continue. And I think it's not only
19 because of the efforts of this board and staff before I
20 joined it, but because of the efforts of the
21 environmentalists, those concerned about our environment
22 and others who have been putting the pressure.

23 And I understand why everybody is trying to get a
24 little bit of grasping about this money. It's a limited
25 pot. And I can sure understand why the Legislature passed

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286

1 the buck to us --

2 (Laughter.)

3 BOARD MEMBER HUGH FRIEDMAN: -- to allocate it.
4 But that said, I think we all I think at some level,
5 should be a little bit self congratulatory, and I think
6 particularly those of you who have been testifying here on
7 all sides of this, to feel that you've all played a real
8 role into bringing us to where we are now. And we
9 wouldn't be here if it weren't for everybody in this room
10 probably.

11 So that said, I share my colleague's uneasiness
12 that there's only International truck currently having a
13 monopoly, but I don't think that that should, in my view,
14 should stop us if we want to preserve a viable replacement
15 bus diesel alternative. And I'm hopeful that there will
16 be choices by the time this money actually has to be
17 contracted.

18 CHAIRPERSON LLOYD: Thank you. I would like to
19 now, if I could, now take a ten-minute break, and give the
20 reporter till 5:15.

21 MR. SLIDOLSKY: May I just respond a little
22 quickly on this. I promise, you can watch the clock.
23 I'll be less than a minute. You know, we are looking at
24 other applications for Green Diesel. And we're talking
25 about a difference between three grams and 2.5 grams.

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287

1 My company has signed on to the challenge to get
2 to .2 grams. And so there are better things coming and
3 we're working at that. It doesn't stop at Green Diesel.
4 And thank you for your indulgence.

5 CHAIRPERSON LLOYD: Thank you. It was our
6 questions. I do have a request here for one more witness,
7 Bonnie Homes-Gen. I know she's got a child to take care
8 of, so I'm going to take this one last witness, then we'll
9 take a ten-minute break.

10 MS. HOLMES-GEN: Thank you. I said good

11 afternoon here in my testimony. I guess it's good
12 evening. My name is Bonnie Holmes-Gen. I'm Assistant
13 Vice President for Government Relations with the American
14 Lung Association of California.

15 And I, first of all, want to join the chorus of
16 those who are very appreciative of the \$50 million for
17 this program and certainly want to work together with you
18 and the Governor to increase that amount in the future, so
19 that we can make a much bigger impact on children's
20 health. We absolutely have to get more money to buy more
21 buses and have more impact.

22 But today we're here to testify on the proposed
23 distribution of funding for school buses. And what we're
24 asking for you to do today is to increase the funding
25 available for the cleanest school bus technology,

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288

1 alternative fuel, compressed natural gas technology and to
2 dramatically reduce or eliminate the funding allocated to
3 low-emission diesel technology.

4 The American Lung Association of California is
5 involved in this issue, because we are concerned about air
6 pollution and children's health. Each diesel school bus
7 idling next to a school bus -- next to a bus stop or a
8 school yard is having a direct impact on the lungs and
9 breathing ability of children.

10 And we know from recent research that impacts to

11 the lung from air pollution, may not only cause acute
12 symptoms, but contribute to chronic diseases and reduction
13 of lung capacity over the lifetime of the individual. I'm
14 not going to read my entire text on health effects of
15 diesel. I understand that you know very much about the
16 health impacts and appreciate all the work that you have
17 done to list diesel as a toxic air contaminant.

18 But I do want to say that we have major concerns
19 about the health effects of diesel exhaust, that we're not
20 prepared to call any diesel technology, at this point,
21 clean or green. Although we acknowledge there certainly
22 have been improvements and progress in producing lower
23 emission diesel technology.

24 And we believe that using the terms clean or
25 green can be very misleading, because we do have so much

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289

1 information about the toxicity of diesel exhaust. And no
2 testing has yet shown that lower-emission diesel
3 adequately reduces the toxic risks. What I would like to
4 do is just set out a few principles for the Board to
5 consider while you are making your decision today, this
6 evening.

7 One, that your decision for new purchase of
8 school buses with public funds should be made according to
9 determining which buses are superior from a public health
10 perspective. And we view that as looking at a per bus

11 comparison of emissions and benefits that are available.

12 And I wanted to say briefly on the issue that we
13 have to consider in-use emissions, that we cannot put the
14 in-use emissions issue to rest until we have adequate
15 bus-to-bus testing between CNG and Thater diesel
16 technologies.

17 The limited testing that's been done in San Diego
18 on two buses is not sufficient. And I wanted to point out
19 that the staff report certainly does not put this issue to
20 rest. It acknowledges that there is an in-use discrepancy
21 and that that's a problem with transit buses, and that
22 it's unknown, the degree of the problem for school buses.

23 The staff report says on page 22, "At this time,
24 there is insufficient information to determine if there is
25 a significant in-use PM discrepancy with school buses, as

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290

1 there is with transit buses."

2 So, you know, we can't put it to rest as the
3 representative from International calmly suggested that we
4 could do. We definitely need to have more information.

5 So, first, look at a bus-per-bus comparison
6 getting the most emissions benefits on a bus-per-bus
7 comparison, especially because this decision does involve
8 the expenditure of limited public funds. Please consider
9 which buses will be the cleanest over the long-term.

10 These buses will be on the road for 15, 20 years

11 or longer, and we believe the alternative fuel
12 technologies do have the best long-term emissions benefits
13 because they do not have similar deterioration problems to
14 diesel buses. We don't believe the Board should establish
15 any special standards to allow the low-emission diesel
16 buses to receive funding in this program. You know,
17 you've heard a lot of testimony about the International
18 bus and how it cannot meet the 2.5 gram standard. And,
19 you know, we are very concerned about weakening that
20 standard to 3.0 grams for one company.

21 And finally, we believe the Board should follow
22 its adopted resolution and replace diesel fuel school
23 buses to the degree that you can with cleaner alternative
24 fuel buses. I did want to read two sentences from the
25 American Cancer Society, if I can change hats. I have

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291

1 submitted a letter from the American Cancer Society, and
2 they are saying, "We urge you to restrict the purchase of
3 new buses to those that utilize technologies that meet or
4 exceed natural gas school buses and establish a program
5 that assures buses remain clean over the lifetime of their
6 use. Looking to the future, we ask that you take action
7 that will result in fewer cancer cases in California."

8 Thank you for the indulgence of your time.

9 CHAIRPERSON LLOYD: Thank you. Any questions or
10 comments?

11 Thank you.

12 With that, we will take a ten-minute break till
13 5:20 to allow the court reporter here to take a rest.

14 (Thereupon a brief recess was taken.)

15 CHAIRPERSON LLOYD: Can we restart? We have
16 Sandra Spelliscy, Gail Ruderman Feuer, Julia Levin, Jesus
17 Santos-Guzman.

18 Just wait a minute. We're not timing yet.

19 Sandy, we have now moved the light now and it is
20 actually working.

21 MS. SPELLISCY: Okay, lucky me.

22 BOARD MEMBER HUGH FRIEDMAN: Your time is up.

23 CHAIRPERSON LLOYD: The other thing, remember, I
24 have this, you can't speak.

25 MS. SPELLISCY: Good evening, Mr. Chairman and

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292

1 Members. My name is Sandra Spelliscy, and I'm the General
2 Counsel with the Planning and Conservation League. And
3 thank you for the opportunity to address you on this.

4 And I want to make it very clear that our goal
5 today is to help craft a program that we can all support
6 and we can move toward to create it as a long-term program
7 and continue to seek additional funds, because we really
8 believe that this is a program that we need to maintain.
9 And we want to be able to support it over the long term.

10 I'm going to spend my time just commenting on

11 some of the remarks that have already been made today.
12 And I'd like to start recognizing that several Board
13 members have picked up on what we think is the anomaly of
14 the staff recommendation in terms of the money for new
15 diesel purchases. And that is that we could find ourself
16 in a situation where several months after the time that
17 the last Green Diesel bus, the 3.0 gram bus, is delivered
18 to a school district, that bus which will be on the road
19 for probably 15 or 20 years will actually be dirtier than
20 the new diesel engines that will be coming on the market
21 by five other major manufacturers in California.

22 So we think that that's one of the problems with
23 carving out this 3.0 exception. And we do have a problem
24 with backsliding on the low optional NOx standard. As you
25 know, that standard was devised in part in order to have a

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293

1 standard that we could use to spend air quality incentive
2 funding. And that's exactly the case that we're dealing
3 with here today. We have incentive funding. We've never
4 spent it on a situation where we go above that low
5 optional NOx, and we don't think that should be happening
6 today.

7 On the other hand, we, too, want to get buses on
8 the road as soon as possible. So we don't think that we
9 should be delaying purchase of buses, but we think that we
10 should use the money now to purchase the cleanest buses on

11 the market now, and then, you know, go forward, and if
12 other technologies come forward that can meet tough
13 standards, then hopefully we will have money, at that
14 point, to, you know, spread around.

15 We don't want to strand school districts that may
16 not be able, for whatever reason, to use alt fuels,
17 although we believe alt fuels are the superior technology
18 here. But we are willing to see some money spent as an
19 exception to, you know, a general push for alt fuels in
20 terms of new purchases, but we would like to keep that
21 very small. And we've mentioned the number of \$5 million.
22 And that money could be coupled with the money in the
23 small district program that the Department of Education
24 has already. And so that would give a fair amount of
25 money to smaller districts that, for whatever reason,

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294

1 can't use CNG.

2 I want to get back to the issue of in-use
3 emissions, because I think that issue got muddied a little
4 bit here this morning. And I also want to go back and hit
5 on what we know that's in the staff report, and what
6 they've said is that there's insufficient information at
7 this time to determine if there's a significant in-use PM
8 discrepancy with school buses as we know there is with
9 transit buses and other heavy-duty diesel engines.

10 And I would just submit to you that insufficient

11 information is not an adequate basis for making a \$15
12 million policy decision. We're just not there in terms of
13 the information. We're projecting in the staff report
14 long-term PM reductions based on certification numbers.
15 And I just don't believe that that's the correct approach,
16 because we know that certification numbers don't reflect
17 reality.

18 So we take exception with what the staff report
19 says in terms of what the overall PM reduction would be if
20 you allocate \$15 million for diesel.

21 I also want to just briefly say that there's a
22 few. And I know I'm getting close to the end, there's a
23 few things that haven't been discussed here today that I
24 just want to highlight, because I think this Board should
25 be considering these issues in every policy decision that

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295

1 it makes. And those are the issues of fuel diversity,
2 energy security and basically continuing to move our fleet
3 towards zero and near zero emissions. And we know that
4 promoting alternative fuels gives us a leg up on all three
5 of those issues. And that's another important reason why
6 we're promoting that the majority of the money should go
7 to alternative fuel buses for new purchases.

8 CHAIRPERSON LLOYD: Thank you, Sandy.

9 Gail Ruderman Feuer, Julia Levin, and Jesus
10 Santos-Guzman, Marta Arguello.

11 MS. FEUER: Good evening, Dr. Lloyd, members of
12 the Board. I am Gail Ruderman Feuer. I'm a senior
13 attorney for the Natural Resources Defense Council. I'm
14 here on behalf of NRDC and our 80,000 That members. We
15 appreciate all the work your staff and this board has
16 done, all the time they have spent developing the
17 proposal. Unfortunately, as you know, we and many in the
18 environmental and public health communities disagree with
19 the proposal to allocate money to new diesel buses as
20 opposed to spending money, both on alternative fuel buses
21 and on retrofitting of existing diesel buses.

22 We don't question that the International bus is
23 much cleaner than the smoking diesel buses on the road
24 today. And we commend them for that. That's a good
25 thing. But it's not certified. And when it will be, it

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296

1 will not be as clean as alternative fuel buses. And we
2 think we should not be spending taxpayer money to
3 subsidize a bus which is not as clean, particularly when
4 it comes to our kids.

5 This Board in 1998 adopted a resolution to set a
6 goal to quote "replace diesel fueled school and public
7 transit buses with cleaner alternative fuel buses," close
8 quote.

9 We urge you not to change course with that
10 resolution. This year your Board adopted its transit bus

11 rule. And earlier Board Member D'Adamo said that this
12 should be a building block as part of that transit bus
13 rule. And we absolutely agree. And we've heard the
14 diesel industry come up and say well, the proposal by
15 staff is consistent with the transit bus rule.

16 I'd like to focus on that issue, because we think
17 the transit bus rule is precisely you should not go with
18 the staff proposal, because they are inconsistent for four
19 very serious reasons.

20 The first, the transit bus rule does create two
21 paths. We, in the environmental community, accepted that.
22 And as you may know, we originally were alt fuels only and
23 we changed our position and said no, if diesel cleans up
24 its act, we can support it. The two-path concept was okay
25 with us.

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297

1 But that rule, in its staff report this Board
2 said, was designed to create incentives for transit
3 agencies to use the alternative fuel path. And in
4 particular, from 2004 to 2007 if you look at the standards
5 for diesel and for alternative fuel, they are not the
6 same.

7 Diesel has to meet a .5 gram NOx standard.
8 Alternative fuels only have to meet 1.8 grams on NOx. On
9 particulates, diesel has to meet .01, natural gas has to
10 meet .03. That's because this Board decided it was very

11 important to incentivize alternative fuels. That's not
12 what you're doing here. You're putting them on an even
13 playing field.

14 Second, if transit agencies choose the diesel
15 path, there's a built-in environmental benefit that was
16 sold to us. And that is zero emission buses. In 2003,
17 larger transit agencies have to buy 3.0 emission buses.
18 In 2008, they have to buy 15 percent of their fleet with
19 zero emission buses.

20 If you choose alternative fuels, you have no
21 obligations to buy zero emission buses until 2010. Again,
22 there was a built-in environmental benefit, again, to
23 encourage transit agencies to go the alternative fuel
24 path.

25 Third, the transit bus rule was just that, a

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298

1 rule, a regulation designed to set standards. What you're
2 doing today is deciding how to spend taxpayer money. And
3 I submit a more stringent standard should apply where
4 you're spending taxpayer money which should be used to
5 incentivize the cleanest technology.

6 And fourth is this is about kids. And, again, we
7 believe the most stringent standard should apply when
8 you're dealing with children's health.

9 Our concern is --

10 CHAIRPERSON LLOYD: It's been red for awhile.

11 MS. FEUER: It's been red. I'm sorry. Let me
12 just wrap up. Our concern is if you adopt the staff's
13 proposal you will create an incentive for school districts
14 to buy more diesel buses instead of alt fuels for two
15 reasons. I'll be very quick.

16 One is they have to spend \$25,000 of their money
17 either way. They can spend \$25,000 for diesels, \$25,000
18 for alternative fuels. If they go the alternative fuel
19 route, they have to deal with the infrastructure of a new
20 fuel. Why would they pick alt fuels? You're almost
21 encouraging them to go the diesel path.

22 Second, let's say they choose the clean path. If
23 school districts start choosing the clean alternative
24 path, they're going to use up the money and the next ones
25 in line are going to have to go diesel. Again, you're

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299

1 going to push them to the diesel path.

2 We urge you either to go back to the staff
3 proposal in September which was a 2.5 gram low NOx
4 optional standard. We think that's fuel neutral. In
5 fact, we believe if you set that standard, they will come.
6 The diesel manufacturers will find a way to get their
7 engines to meet the 2.5 standard, or we support keeping a
8 50/50 split, alternative fuels, diesel, but put the diesel
9 money into retrofits. You're going to get more PM
10 reductions. It's a better deal and you won't be favoring

11 one manufacturing with a weaker standard.

12 CHAIRPERSON LLOYD: Thank you, Gail. I think the
13 issue that certainly I grappled with is the way in which
14 people flip-flop back from NOx to particulates and
15 confusing those. And the critical area here for children
16 is for toxic air contaminants, the particulates there.
17 And you can't just flip the NOx switch on and off. It's a
18 definite issue. And so I think that's what you see when
19 the staff talked about it. What you get was basically
20 bang for your buck on some of those. So that's what I
21 struggled with personally, because we can't just do that.

22 MS. FEUER: And we agree. We basically want
23 both. We want to see each bus to be cleaner. We think
24 in-use natural gas is cleaner on both.

25 CHAIRPERSON LLOYD: But, again, I hear these

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300

1 things, but I'd like to see some data which proves that.
2 We don't have the data for either of those and we have to
3 make some policy decisions here.

4 Any questions from the Board?

5 Supervisor Roberts.

6 BOARD MEMBER ROBERTS: This idea of the two
7 categories, 25 million in each, and I think what you're
8 suggesting is that you'd have alternative fuels for half,
9 the other would be diesel. But within that diesel you'd
10 have the option of retrofitting or buying.

11 MS. FEUER: Well, our proposal is that the \$25
12 million pot would be specifically for retrofits. One
13 thing we have proposed in thinking about that is we
14 recognize there's a concern about rural school districts
15 who may not be able to build the infrastructure. Our
16 proposal would be to set \$25 million for retrofits, but to
17 direct your staff to develop an exemption, if there are
18 rural school districts, school districts which cannot --
19 did I mean CNG.

20 Okay, \$25 That for CNG, 25 That for retrofits in
21 the diesel pot, so you're splitting 25 in each. And our
22 point was in the diesel retrofit kitty that perhaps a
23 small portion of this money could be available for new
24 diesel buses, but only if it were a rural school district,
25 a school district which met a specific guideline for why

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301

1 it could not buy new alternative fuel school buses. And
2 you'd have a cap on how much would be spent on that.

3 But we oppose the use of any of that 25 for a
4 school district which can meet the 2.5 standard and buy a
5 cleaner bus.

6 BOARD MEMBER ROBERTS: I'm wondering if it would
7 work significantly different if you just left it up to the
8 school district? Are you afraid they would end up
9 buying -- using a majority of that money for the diesel
10 buses rather than doing retrofit?

11 MS. FEUER: Our concern is that school districts
12 not be allowed to choose a dirtier technology because it's
13 cheaper for them, because you're not creating the
14 incentive. We think that this board should push them to
15 the cleaner technology, unless there's a reason they can't
16 go there.

17 BOARD MEMBER ROBERTS: Some overriding
18 circumstance that they couldn't?

19 MS. FEUER: That's right. And the same way with
20 a lot of transit agencies. And supervisor, you're on a
21 transit agency that has chosen a clean fuel path. We have
22 been incentivizing transit agencies to go the alternative
23 fuel path. We want you to incentivize school districts
24 the same way to go the clean fuel path.

25 BOARD MEMBER ROBERTS: I just happen to be on one

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302

1 that did choose the CNG, but That seems to me here --
2 what's bothering me here is the sort of limitation on the
3 retrofit part of this, where we have a smaller part for
4 retrofit and we've got an even larger amount set aside for
5 basically a technology and a company here. And I was
6 trying to think if there might be a way to do your 50/50
7 split, but we'll get to that. I'm not going to let go of
8 this.

9 MS. FEUER: We'd urge you to pursue that, because
10 we really think we should not be giving away \$15 million

11 to one company.

12 BOARD MEMBER ROBERTS: Well, what is so clear, if
13 we're talking about immediate environmental benefits, the
14 retrofit, which is the smallest part of this whole amount,
15 is the thing that would benefit us the most.

16 MS. FEUER: And we agree.

17 BOARD MEMBER ROBERTS: We've got this upside down
18 right now, but that's okay.

19 CHAIRPERSON LLOYD: One thing I must say, I'm
20 very impressed that after one meeting of the International
21 Retrofit Committee that Mike is chairing, that now we have
22 you endorsing diesel retrofits. We've come a long way, so
23 I appreciate that.

24 MS. FEUER: Yes. We actually have. You know, in
25 all fairness, your staff has spent a lot of time with us.

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303

1 We have listened and we are more supportive --

2 CHAIRPERSON LLOYD: I was sincere.

3 MS. FEUER: -- of retrofits. We still would like
4 to see more testing.

5 (Laughter.)

6 BOARD MEMBER DeSAULNIER: It's hard to tell.

7 (Laughter.)

8 CHAIRPERSON LLOYD: The facts are there.

9 BOARD MEMBER McKINNON: They endorsed our transit
10 rule, too.

11 CHAIRPERSON LLOYD: Yes, Supervisor DeSaulnier.

12 BOARD MEMBER DeSAULNIER: I'd just be anxious to
13 hear Mr. Kenny respond to this, because it doesn't seem
14 like a bad idea and I'm sure you thought about it, didn't
15 you?

16 EXECUTIVE DIRECTOR KENNY: Actually, yes, we
17 have. We've thought about probably every permutation you
18 can think about, and probably every permutation is being
19 presented to you today.

20 CHAIRPERSON LLOYD: Could I exercise the
21 Chairman's prerogative here? I think it would only be
22 fair to -- we have not heard from the school districts at
23 this stage, and we've got a bunch of those to testify.

24 What I would like to do then is ask Mr. Kenny to
25 come back after they've testified, Supervisor, if that's

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304

1 okay with you.

2 BOARD MEMBER DeSAULNIER: Certainly, Mr.
3 Chairman.

4 (Laughter.)

5 BOARD MEMBER DeSAULNIER: When you put it that
6 way.

7 (Laughter.)

8 CHAIRPERSON LLOYD: Thank you very much.

9 Julia Levin.

10 MS. LEVIN: Good evening. My name is Julia

11 Levin. I'm the California Policy Coordinator for the
12 Union of Concerned Scientists. We're a national nonprofit
13 organization with nearly 15,000 members in California.

14 On behalf of those members, I would urge you to
15 use the clean school bus money for the cleanest possible
16 school buses, which we firmly believe are natural gas
17 buses. And if you must use a small part of the money for
18 diesel in rural school districts, that it be truly an
19 exception to the rule and not merely a third of public
20 money which is supposed to incentivize cleaner alternative
21 fuel buses.

22 There are a whole host of reasons why we think
23 this is so critical in the decision that you make tonight,
24 but I'm going to focus on two right now.

25 Now, despite the testimony of diesel engine

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305

1 manufacturers, and International in particular, real
2 world, in-use emissions from diesel buses are
3 significantly higher and more dangerous for our children
4 than real world, in-use emissions for natural gas buses.
5 And I'll be going into that in just a moment.

6 But the second reason, which is also equally
7 important, is that natural gas will lead the way to fuel
8 cells, which this board has recognized is the end goal for
9 both transit and school buses. Those will be the cleanest
10 buses on the road and we hope to see them soon.

11 On the first point, although we do applaud the
12 diesel makers for building much clean engines and they
13 have come a long way, they've got a long way yet to go to
14 catch up to natural gas. There was testimony earlier
15 about an ARCO/BP test conducted in San Diego. That test
16 used exactly two buses. No statistician would find that
17 test definitive on the topic of emissions from Green
18 Diesel, so-called, Green Diesel buses.

19 The test in San Diego did not use the most
20 demanding urban drive cycle. It did not include cold
21 starts. It used two very new buses with very new traps.
22 It is not a safe assumption to make that emissions would
23 be the same in the real world in urban and much more
24 difficult driving conditions.

25 We strongly urge the Board to commission or to

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306

1 conduct a side-by-side comparison of CNG with That cleaner
2 diesel. But we do not feel that based on the current
3 evidence that this Board can reach the conclusion that
4 diesel emissions would be the same or lower.

5 And, in fact, I would like to read to you from
6 the staff report on page 22, that the staff recognizes
7 that data indicate that real life PM emissions from diesel
8 transit buses are greater than expected by the
9 certification values, while CNG engines produce
10 significantly in-use PM emissions.

11 The staff goes on to say that in the transit bus
12 field, they would not be surprised if diesel transit buses
13 have ten times greater PM emissions than in certification,
14 ten times. This is very significant. You heard testimony
15 earlier today, I think it was from International, but I'm
16 not positive that the emissions in-use in real world
17 emissions would be substantially similar or the same as
18 certification.

19 Your own staff has said that they could be as
20 much as ten times higher for diesel transit buses. We're
21 talking about the same engines.

22 There has been a side-by-side comparison done of
23 trucks, and using the emissions data from trucks, if we
24 reduce the particulate matter by 85 percent, which is what
25 the new traps will have to do, the particulate matter

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307

1 emissions from diesel school buses would still be double
2 the particulate matter emissions from CNG buses. That is
3 based on the cleanest newest engines going into trucks in
4 a side-by-side comparison. You're talking about double
5 the emissions and affecting our children.

6 In the area of smog-forming pollutants, which are
7 NOx and hydrocarbons, the difference is a little smaller,
8 but it's still significant. There are -- using the EPA
9 calculation method for NOx, the difference would be 25
10 percent. Green Diesel, so-called Green Diesel, would

11 still emit 25 percent more NOx and hydrocarbons than CNG
12 buses. This is significant both because it leads to smog,
13 but also because NOx itself directly impacts children's
14 lungs, according to a recent study by the University of
15 Southern California School of Medicine.

16 CHAIRPERSON LLOYD: Again, I don't think you have
17 to tell this Board what we know. We funded that study and
18 we've had reports on that.

19 MS. LEVIN: I'd like to leave you with one final
20 point. And that is natural gas leads to fuel cell buses,
21 which you all know is where we want to end up, at least in
22 the foreseeable future. Not only does it use a similar
23 fuel, but it uses much of the same infrastructure,
24 particularly the maintenance facilities, which are the
25 most expensive part of a CNG infrastructure. Those costs

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308

1 would be directly offset as we move towards fuel cells.

2 In addition, the pipeline, the compressor, the
3 pumps are all very similar or the same. So I'd like to
4 close by urging you to choose the cleanest possible school
5 buses. There is no question right now that those are
6 natural gas.

7 Thank you very much.

8 CHAIRPERSON LLOYD: Thank you.

9 Any questions?

10 Thank you.

11 I presume staff would like to respond to this
12 continued mention of in-use, and I presume we've got some
13 of the finest staff in the world that can answer these
14 questions.

15 DEPUTY EXECUTIVE OFFICER CACKETTE: Yes, we do.
16 The quote came out of the Transit Bus Regulation that the
17 Board considered early last spring, or the winter time, I
18 guess it was. And with a nontrap equipped bus, there was
19 comparisons that showed that when the diesel bus went on a
20 very aggressive cycle, like you'd have with a transit bus
21 where it's going start, stop, start, stop, that it did
22 produce a lot more particulate compared to its emission
23 standard, which is done on a much more easy test, and that
24 the natural gas bus did not exhibit that characteristic.
25 And that's where this idea, that in-use emissions could be

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309

1 much higher in real use in a transit bus, came from.

2 First of all, these school buses don't operate
3 like a transit bus. The school bus cycle is much more
4 like the normal driving cycle we put heavy-duty trucks
5 through. And second of all, we've gone and tested one of
6 the trap-equipped Green Diesel buses on the various types
7 of cycles. And we've tested on the transit bus cycle.
8 And we've tested on what they call the school bus cycle,
9 which is more equivalent to the certification type cycle
10 we use.

11 And, basically, its emissions are essentially the
12 same at around .02, .03 grams per mile, which is the kind
13 of level we measured on a CNG transit bus, for example.
14 So I think what happens, the technical reason for it, is
15 that the trap is to capture the extra particulate that
16 comes out and then eventually regenerate it. So it acts
17 as somewhat of an absolute filter, not completely, but
18 it's able to pick up the extra emissions that come from
19 the more aggressive driving, but maybe from a more
20 fundamental standpoint the transit buses don't tend to
21 have as -- or I should say the school buses don't have
22 these aggressive driving cycles as the transit buses do.

23 CHAIRPERSON LLOYD: Thank you.

24 MS. LEVIN: Can I make two quick responses on
25 that?

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310

1 CHAIRPERSON LLOYD: One. I think, again, in this
2 particular case, we've got experts here and I understand
3 what you're saying, but I think we have to move ahead.

4 MS. LEVIN: Okay. I would just say that your
5 point is well taken, but even with the 85 percent
6 reduction for traps.

7 CHAIRPERSON LLOYD: I thought -- thank you.

8 Jesus Santos-Guzman, Marta Arguello, Tiffany
9 Schauer.

10 MS. ARGUELLO: He agreed to switch with me,

11 because I have to catch a flight.

12 CHAIRPERSON LLOYD: You are?

13 MS. ARGUELLO: Marta Arguello.

14 CHAIRPERSON LLOYD: Oh, okay.

15 MS. ARGUELLO: I am Marta Arguello. I'm the
16 Environmental Health Coordinator for Physicians for Social
17 Responsibility. I am a health educator by training. Our
18 organization represents over 2,000 physicians in the State
19 of California who, much like yourselves, are charged
20 beyond their clinical practices with foreseeing and
21 forestalling damage to the environment and to human
22 health.

23 And as such, we're here to encourage you to go
24 with the cleanest burning fuel alternatives, which is
25 compressed natural gas.

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311

1 And I want to put, sort of, that hat aside for
2 awhile. And this is my first experience here. Like I
3 said, I'm a health educator by training, and I spent many
4 years working for the National Cancer Institute, a
5 volunteer for the American Cancer Society. I've worked
6 many years with asthmatics and their families. I've
7 worked with the American Lung Association.

8 So I'm a little bit troubled after sitting for
9 four hours, this is my first hearing of this type, of sort
10 of the costs, discussion of costs and benefits of diesel

11 and back and forth, and nowhere have we really talked
12 about the health impacts.

13 And I know that you're well aware of them, but I
14 think it's important for us to take a moment and remember
15 that we're really talking about the most vulnerable
16 populations, and that's children, the elderly. And more
17 importantly some of the trends that we're seeing with
18 asthma are truly alarming when you think of inter-city
19 communities.

20 Black and Latino Communities are severely
21 affected. If you're an African-American child between the
22 ages of 15 to 24, you're five times more likely to die of
23 asthma. These are the decisions that are important than
24 whether International has \$15 million to spend on diesel.
25 That is your charge, as physicians are charged to provide

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312

1 the best medicine possible. The best medicine possible
2 for California's air is compressed natural gas.

3 Thank you.

4 CHAIRPERSON LLOYD: Thank you.

5 MR. SANTOS-GUZMAN: My name is Jesus
6 Santos-Guzman, pediatrician from the Coalition for Clean
7 Air. And I thank the chairman and Board members and other
8 representatives for the opportunity to talk in this
9 meeting.

10 I came here to ask this Board and the appropriate

11 agency to support the cleaner alternative technologies and
12 retrofits from the harmful effects of the diesel
13 emissions. Diesel emissions have been shown to contribute
14 importantly to several health effects, like
15 cardio-respiratory, morbidity and mortality. It also has
16 shown to reduce the function and ability of the lungs to
17 respond on a daily basis. And also a higher prevalence of
18 several symptoms like bronchitis, coughing and several
19 others.

20 It also affects the development of kids. That
21 not only affects the lungs but may also affect the entire
22 economy, the entire kid and arrest possibilities for
23 future development, academic development. The air
24 pollution that received air particles and other emissions
25 from diesel may contribute to more asthma in our kids and

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313

1 asthma may make also our kids live to have more
2 absenteeism, also to require more special programs and to
3 require more medical assistance, so in some ways increase
4 other costs as well.

5 This also has been proved to increase the risk of
6 cancer and some of the things that we can do to reduce all
7 these morbidity and cancer risks is to choose for kids the
8 best available technology, the most available one, the one
9 that has proved to reduce morbidity and cancer risks. And
10 so the point to be underlined is to use whatever is

11 available and is proven to reduce all these risks.

12 So that's my statement.

13 CHAIRPERSON LLOYD: Thank you very much indeed.

14 Next, we have Tiffany Schauer, Stephen Rhoads,
15 Sal Villasenor.

16 MS. SCHAUER: Okay, my speech is now
17 substantially reduced.

18 CHAIRPERSON LLOYD: Thank you.

19 MS. SCHAUER: I just wanted to say a quick word
20 to you. My name is Tiffany Schauer and you may or may not
21 be aware. I recently stepped down from being vice chair
22 of the Air Quality Management District Hearing Board. And
23 at that time, I would attend the National Judicial College
24 where they'd train judges to adjudicate cases.

25 And judges from all over the country come there

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314

1 to be trained. And one night I was out with a judge from
2 Alabama, and she looked at me, and I was saying how hard
3 it was and I wanted to be fair and wise. And she said,
4 "Judge Schauer, there's one thing you ought to know. Any
5 Judge ain't got no friends." And you must feel like that
6 today.

7 (Laughter.)

8 MS. SCHAUER: But you do.

9 CHAIRPERSON LLOYD: Could you say that again,
10 that was good.

11 (Laughter.)

12 MS. SCHAUER: I don't think I can, but it stayed
13 with me, and I think it should stay with you, that you do
14 have friends here and we're here to help you, and that's
15 our job. And I know that your job is very difficult too.
16 And I have been in those chairs, and it's tough. And I
17 appreciate that you're willing to take and make the
18 sacrifice to do it.

19 Okay. With that said, my new hat I wear is
20 Executive Director of Our Children's Earth Foundation.
21 Now that organization is new. I'm not new. I worked at
22 EPA as an Air Enforcement attorney for five years. After
23 that, I represented industry at Brobeck, Phleger and
24 Harrison on air issues. Then I sat on the Air District
25 Hearing Board for three years.

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315

1 So I would like to think I'm relatively
2 experienced. Although no one in air ever is. As the
3 staff I'm sure well knows, that this is complex, it's
4 tedious, it's probably more boring than election law. And
5 I want to thank you for doing your work too. And I know
6 how difficult it is to understand air and make good
7 choices and good policy.

8 I have a simple message and I think the power of
9 my message is, the mission of my group is to create a
10 cohesive voice among environmental organizations that

11 right now are disenfranchised and don't have a voice. I'm
12 here today to say I represent that voice. The voice and
13 the sentiment of the environmental community is enormous
14 and it's strong and it's heartfelt about this issue.

15 I have a sign-on letter that we put together in
16 less than three weeks when we were made aware of the
17 decision that was going to be made. It's representative
18 of over 40 organizations. It compiles about -- we have
19 very conservative estimates, it compiles about 400,000 to
20 500,000 individuals. You have the support to make a
21 decision based on our discussions with the environmental
22 community. The simple message is you are fully supported
23 to make a decision to protect our kids' health by
24 allocating the money for the purpose of clean school buses
25 that can certify today to the 2.5 NOx standard and the

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316

1 lowest certified and in-use PM emissions. Case closed.

2 If it can be certified, and side-by-side
3 certified and in-use is lowest, we win. Right now you
4 don't have all the information you need to make that
5 decision, but you have to make a decision today. There's
6 a decision you can make next year. There's a decision you
7 can make after that. You've got time to help other fuel
8 producers and other manufacturers, but today you need to
9 make a decision with what you have in your hand and you
10 have that information.

11 We know that CNG can That those standards. We
12 have today that propane can also meet it. There may be
13 other alternatives after additional research is made. It
14 looks like, in my estimation, that the evidence is
15 inconclusive today for the advanced Green Diesel, clean
16 diesel, interim diesel. That's fair enough to be said,
17 and it is fair enough to recognize their efforts and it's
18 fair enough to reward them in other ways and other
19 programs, but just not today in this decision.

20 Thank you.

21 CHAIRPERSON LLOYD: Thank you very much.

22 MS. SCHAUER: Any questions?

23 CHAIRPERSON LLOYD: Stephen Rhoads, Sal
24 Villasenor and Dave Randall.

25 MS. SCHAUER: I'm sorry. Can I just make one

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317

1 five-second statement. In addition to the sign-on letter,
2 we also have included in the packets over 500 E-mails of
3 individuals in support of our statement.

4 Thanks.

5 CHAIRPERSON LLOYD: Thank you.

6 Now, we hear from the school districts to see
7 what you really want.

8 MR. RHOADS: I'm the first one of the schools,
9 and I'm Stephen Rhoads. And first of all, I want to say
10 also that we are your friends, and we appreciate the

11 efforts that you are going through today in the
12 deliberations.

13 I am here representing the School Transportation
14 Coalition. This Coalition was founded by a John Mather,
15 Secretary of Education for the Governor. And when he put
16 it together, he wisely, as he usually does, put it
17 together to represent a broad spectrum of education people
18 from employee organizations, like CTA and the CSEA,
19 administrators, transportation officials and 50 school
20 districts. We represent over one-quarter of the school
21 enrollments in California and 28 counties.

22 We are troubled a little bit today by all this
23 controversy, because this really should be a day of
24 celebration. You are going to be cleaning up the air
25 today and we are very, very thankful for that. You're

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318

1 going to be putting school buses on the road that are
2 cleaner, some of your staff say ten times cleaner, than
3 the buses they're going to be replacing. They're safer,
4 much more safer, and they are also fuel efficient. And it
5 is something that all of you are going to be able and all
6 of us are going to be able to take great pride in.

7 The Governor proposed this 50 million in last
8 January's budget. That was the bare-bones budget. And it
9 was the single largest appropriation that was ever made
10 for school buses in California's history. And he did it

11 for the health of the children and the concern of the
12 children.

13 We are not proud of the fact that we have so many
14 old school buses, and we are not proud of the fact that we
15 are ranked dead last in this country for the number of
16 kids that we bus. It's only 16 percent of our children.
17 The average for the rest of the nation is 54 percent.

18 Our major concern has to do with the school
19 match. As some of you probably know, I used to be the
20 Executive Director of the California Energy Commission.
21 But in my older days when my hair was very, very black and
22 brown, I was actually a school finance expert. I was
23 hired by A. Alan Post for that purpose in the Legislative
24 Analyst's Office, and I was the chief witness for the
25 Western Center of Law and Poverty on the Serrano issue.

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319

1 I might add I did that all pro bono. I was young
2 in those days and kind of idealistic.

3 But one thing, I know a tad about school finance,
4 and I do not know of a single school district that has
5 allocated, set aside, any money for this match. And one
6 of the reasons is because when the Governor proposed this
7 program, he did not propose a match. He not only did not
8 propose a match, but the language that accompanied the
9 budget BCP was very, That clear. There will not be a
10 school match.

11 And he gave a series of reasons for that. And
12 the reasons were because the school districts, unlike
13 other organizations, like transit districts, just have a
14 very, very difficult time coming up with the money.

15 CHAIRPERSON LLOYD: Steve.

16 MR. RHOADS: The Legislature did not propose --
17 did not even discuss a match in the legislation
18 deliberations. And as the Legislative Analyst's office
19 was quoted earlier today, Chris Brown said that there
20 would be no school match.

21 CHAIRPERSON LLOYD: Steve, three minutes has
22 gone.

23 MR. RHOADS: I'm going to make this quick. I'll
24 skip a couple of issues. There's even some that say you
25 probably have the -- you need regulations to do this.

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320

1 Today we'd get 3.17 percent for an increase in
2 transportation funding. And it's hardly enough to cover
3 just what the bare bones of the gasoline increase is going
4 to be.

5 We have three proposals related to the match.
6 One is we'd liked to see it eliminated. If you can't
7 eliminate it, we'd like to see you maybe have it reduced
8 to \$5,000 or \$10,000 per bus.

9 Third, this is my Serrano hat that I'll put on,
10 because people ask me well, can we think about the ability

11 to pay? Because we certainly don't want to come up with a
12 proposal where only the wealthy districts are able to take
13 advantage of this program.

14 And so I have a proposal for you to consider and
15 that is we have a form in school transportation called the
16 J141 form. And in that form we put in what the State
17 approved transportation calls for and we put in what the
18 State approved reimbursements are. And my proposal is
19 this, that maybe you say hey, if a school district only
20 has State reimbursements of 75 percent or less, then you
21 exempt them from the match. That will be a lot of
22 districts, but that's because the encroachment is so bad
23 among school districts.

24 I had an issue on the traps. And my issue was --
25 and I just want to take one minute on it because of

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321

1 Professor Friedman's question that he asked earlier.
2 Originally, the staff's report said that the school
3 districts would not be awarded these traps until the year
4 2002 and 2003. The new version says December 15th, 2001.
5 We are very supportive of traps and we want to do
6 everything to help the ARB with traps. It's just that you
7 don't need the money right now and we'd rather see that
8 money spent on school buses, and then we will work hard
9 with you during the school year. In fact, we can almost
10 guarantee you get 10 or 20 million during this next budget

11 cycle and it won't delay your trap program at all.

12 Thank you very much.

13 CHAIRPERSON LLOYD: Thank you very much.

14 MR. RHOADS: I'm going to take one more thing,
15 just if I can. We want to thank the staff, if I can, just
16 for one second. School district people and transportation
17 have a tendency to be a little skeptical of coming to
18 Sacramento. And I have been told this many, many times by
19 many of the members. They are really appreciative of the
20 staff. You listened. You made lots of changes and they
21 want to thank you for that.

22 Thank you.

23 CHAIRPERSON LLOYD: Thank you, Steve.

24 We've got Sal Villasenor, Dave Randall, Doug
25 Snyder.

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322

1 MR. McFADDEN: Mr. Chairman, thank you. I am not
2 Sal Villsenor.

3 CHAIRPERSON LLOYD: I didn't think you were.

4 MR. McFADDEN: He has had to leave. However, Sal
5 has asked that I could testify on his behalf. I am Brett
6 McFadden on behalf of the Association of California School
7 Administrators. Sal Villasenor who's, I believe, speaker
8 number 35, I'm speaker 39, also represents the School
9 Board Association, so the two of us represent pretty much
10 the lion's share, the bulk of the school management

11 officials in the school setting.

12 And I basically want to do four things very
13 briefly tonight. One I, too, want to thank all of you.
14 We are in agreement with Mr. Roads that this is very much,
15 you know, a celebration for us. These are funds that we
16 did not have last year.

17 And, in fact, the allocation of these funds is a
18 problem we didn't have last year. So this is something
19 that we're willing to deal with.

20 A second, I would like to sort of bring the
21 Board's perspective on a larger picture. The bulk of the
22 testimony that you've heard this afternoon and this
23 evening has been centered around CNG versus diesel, sort
24 of the environmental aspects of it. But what I'd also
25 like to bring to your attention is sort of the education

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323

1 side of this and what's occurring in that realm.

2 In the last five years, we have seen one of -- I
3 think, one of the largest school reforms or policy reform
4 efforts in any single area or political issue that we have
5 faced in the State. Nevertheless, most of the dollars
6 that have been dedicated to that have been
7 nondiscretionary dollars. They have gone to programs
8 specific. As a result, our school budgets, the
9 discretionary share of those -- now, while we saw an
10 increase last year, overall the discretionary share of our

11 dollars has shrunk, so that the money that we get out for
12 transportation has to come out of somewhere. And in this
13 case, it comes out of our classroom dollars.

14 So in the last five years, we've had to deal with
15 class size reduction, new teacher standards, new
16 accountability standards for students. Now, today, for
17 instance, I was at a hearing this morning talking about
18 that one in seven of our teachers does not have the
19 sufficient credential or sufficient training. Later on, I
20 was at a low performing schools seminar. And now this
21 afternoon we're talking about school buses.

22 So we are -- the pressures that we are facing are
23 rather drastic, and I would ask that the Board keep that
24 in mind. What the staff has put together for you is a
25 good start. It represents sort of a multi-faceted

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324

1 approach to this issue.

2 CHAIRPERSON LLOYD: How will you change it?

3 MR. MCFADDEN: The only change -- I would concur
4 with Mr. Rhoads, and we are in support of an amendment.
5 The match is a problem for us. And that is very
6 prohibitive for many of our districts to participate in
7 that, primarily because of the factor that our
8 discretionary dollars are limited, and that's basically
9 the bulk of my testimony.

10 Thank you.

11 CHAIRPERSON LLOYD: Thank you very much.

12 Professor Friedman.

13 BOARD MEMBER HUGH FRIEDMAN: Before you leave,
14 since you're apparently representing the administrators
15 and the school boards --

16 MR. McFADDEN: Yeah, the management group is what
17 it's called.

18 BOARD MEMBER HUGH FRIEDMAN: -- at least speaking
19 for them, do you have any interest or concern as to
20 whether school districts have any choice in the new bus
21 replacements, that is any choice, any alternative to
22 natural gas?

23 MR. McFADDEN: Well, I think our position would
24 be that it would be flexible for each district.

25 BOARD MEMBER HUGH FRIEDMAN: If you could buy

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325

1 three buses, new buses, or your districts could buy three
2 new buses that were diesel and that reduced the
3 particulates to .01 or something close to that, but still
4 kicked out a little more NOx, versus two buses that are
5 natural gas, would you like that choice?

6 MR. McFADDEN: Yes, I think overall --

7 BOARD MEMBER HUGH FRIEDMAN: You mean districts
8 want to spend within the allocations. It wouldn't be us
9 making the expenditures, but would you want that choice?

10 MR. McFADDEN: To the extent that we could

11 maximize the number of buses at a lower cost, yes, we
12 would like that choice. And that's --

13 BOARD MEMBER HUGH FRIEDMAN: With that margin of
14 potential difference.

15 MR. McFADDEN: I think that would overall be
16 good. Now, I can't speak for every Board or every
17 administrator, but to the extent that the program is
18 flexible enough to fit with the needs of an individual
19 district, what's good for an urban district is not
20 necessarily sufficient for a rural district.

21 And you'll hear from a colleague of mine later
22 on, Mr. Walrath, that will be representing rural districts
23 and some of their concerns.

24 BOARD MEMBER HUGH FRIEDMAN: Thank you. I just
25 wanted to know if you had any position.

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326

1 MR. McFADDEN: We are favorable of that, yes.
2 Thank you.

3 CHAIRPERSON LLOYD: Thank you very much.
4 Sorry, Supervisor Roberts.

5 BOARD MEMBER ROBERTS: Professor Friedman, you
6 have to help me since they would have to pay \$25,000 no
7 matter what kind of bus they buy, why do they get three
8 versus two?

9 BOARD MEMBER HUGH FRIEDMAN: My understanding is
10 the staff was indicating that a replacement bus, if it's

11 CNG, including infrastructure would be in the
12 neighborhood, I'm using rough numbers, of 130,000.

13 BOARD MEMBER ROBERTS: No, I understand that.
14 But the question is the school districts themselves are
15 going to have to pay \$25,000 per bus no matter what kind
16 of bus they buy, so for them that's not a question. In
17 other words they're going to pay \$25,000, there's not a
18 difference in the cost to the school districts.

19 BOARD MEMBER HUGH FRIEDMAN: Well, but the cost
20 out of this fund, it will go further and it will provide
21 more buses.

22 BOARD MEMBER ROBERTS: You're saying there's
23 potentially more buses, but for the school districts,
24 they're still going to have to spend \$25,000 per bus.

25 BOARD MEMBER HUGH FRIEDMAN: Yeah, but they'll

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327

1 get more buses. I mean, it's between 300 buses and 400
2 buses.

3 BOARD MEMBER ROBERTS: They're going to get more
4 buses if they got more money.

5 MR. McFADDEN: The match is still prohibitive,
6 that's the bottom line.

7 BOARD MEMBER HUGH FRIEDMAN: Well, I'm ignoring
8 the match even. I'm asking if assuming you could get more
9 buses. Is there any doubt in your mind, Ron, that there's
10 a difference in cost and that you would get more buses,

11 setting aside --

12 BOARD MEMBER ROBERTS: No, because I mean that's
13 been my experience with the transit district, the
14 differential that you're quoting seems to be significantly
15 different from what our experience is, but I'm not
16 debating that.

17 BOARD MEMBER HUGH FRIEDMAN: I don't have
18 experience. I'm going on what the staff told me.

19 BOARD MEMBER ROBERTS: That's not what we've
20 experienced with transit buses.

21 CHAIRPERSON LLOYD: Mr. McKinnon.

22 BOARD MEMBER McKINNON: I have a question of this
23 speaker and probably --

24 CHAIRPERSON LLOYD: Mr. McFadden.

25 BOARD MEMBER McKINNON: If we tried to

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328

1 incentivize getting rid of the oldest buses by lowering
2 the match on the oldest buses for the purchase of new
3 buses, not retrofitting, for the purchase of new buses, is
4 that something that would be helpful to let's say the
5 school districts that are having the hardest time?

6 MR. McFADDEN: I think the considering -- I think
7 it's a step in the right direction, I mean, I think.

8 BOARD MEMBER RIORDAN: Heads are nodding.

9 MR. McFADDEN: No, I think yeah, we would be very
10 supportive of something like that.

11 CHAIRPERSON LLOYD: Thank you.

12 We have Dave Randall, Doug Snyder.

13 MR. RANDALL: Good evening Dr. Lloyd and members
14 of the Air Resources Board. You have a letter from -- I'm
15 Dave Randall from the California Association of School
16 Business Officials. I'm also the Director of
17 Transportation for the Vista Unified School District.

18 You have a letter that came in and it will give
19 you a lot of the detail. That's not what I want to talk
20 about tonight. I want to hit some of the points that are
21 in there, though, and maybe I can answer some of the
22 questions that have been raised here today.

23 First, I need to tell you that, with your staff
24 present, they really listened to us in October and we had
25 a great meeting in October after the other two meetings.

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329

1 And the things that we see in the staff report, we are
2 very much appreciative of. And we see this as a win-win
3 for everyone here.

4 We have \$50 million that does not come out of
5 school district money that is specifically designated for
6 school buses. That's great in the state of California,
7 because we want to boost the number of children who are on
8 yellow school buses. We also want to make them as clean
9 and as safe as we possibly can.

10 CASBO takes the position that we're into fuel

11 neutral. Now, I'm not a technician so I'm not going to
12 get into the other piece. But what I need to say to you
13 is that whoever can meet the standard, and maybe we will
14 have a floating standard, and maybe we'll have the
15 building blocks that we talked about here, but we want to
16 get buses out there that do the job for everyone. Now,
17 the problem in school districts is that when you look at a
18 school board and you say I want to buy a school bus, they
19 look and see which checkbook does it come out of and how
20 can we pay for this.

21 And everything is down to the dollar. And so
22 what I'm going to say is that with the scarce dollars that
23 are out there, and the fact that school funding is really
24 a complicated issue, we're saying that we would like to
25 see the match set aside. Now, there are issues that can

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330

1 go with that.

2 When a school district looks to buy a bus, they
3 also look to see whether they're going to be putting money
4 in the classroom and is that money going to come out of
5 there. It would be nice if every school district in the
6 State of California had a bus replacement program.
7 Usually, what happens is when it's time to retire a bus,
8 they look and see if they can pay for it.

9 With the programs that have come on, and they are
10 great in the state for the education of our students, but

11 those programs that are class-size reduction and the other
12 ones have put a greater demand on the support services
13 including transportation. So we're doing more with the
14 same thing. And in a lot of cases, we're being asked to
15 run the bus just one more year and then we'll see if we
16 can fund it.

17 And I realize at your level 25,000 looks like you
18 could get another bus out there, but on some of the
19 smaller districts, it will mean that they will not replace
20 that bus. They won't do it. They'll wait for something
21 else to come along that would allow us to do that. So if
22 there's a way to look at the match, we would greatly
23 appreciate that.

24 In my letter you'll see, and I don't mean to go
25 after your trap program, but I have an issue with it, only

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331

1 in the fact that if the traps cost \$7,000 and we're going
2 to use low sulfur on only those buses, but we're going to
3 require the rest of the fleet to also operate under low
4 sulfur, then the cost increase for that transportation
5 director is going to add that five cents a mile to all
6 those other buses that operate.

7 If we're going to do a retrofit program, great,
8 can we do the whole fleet, and now we're back down to
9 allocations of dollars. So if we have a program, maybe
10 the issue is we need to look at the whole fleet in that

11 area. And I'm not advocating putting it all in one pot,
12 but you're asking to spend other dollars as you do that.

13 So if there's a reallocation of any of these, you
14 know, I'd like to see a 50/50 split, maybe this year in
15 that. And if we can get a retrofit program, where the
16 traps are a little bit more available and a little bit
17 less expensive where the fleet could go in and go do the
18 whole thing at once, it would really be great for us.

19 CHAIRPERSON LLOYD: Three minutes. If you could
20 wrap up.

21 MR. RANDALL: I've got one more statement, and
22 this is the last one and I thank you very much for this.
23 This is a great step in the right direction. I applaud
24 all the actions that have been taken by this Board. We
25 need not lose the momentum that we have right now. We

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332

1 would like to see and we've talked 50. We'd like to see a
2 hundred million out there for school buses. We could do a
3 lot with the retrofit program. We could also do the other
4 things to get some buses out to the school district.

5 And I, you know, would -- we here in CASBO are
6 ready to work with you for next year's funding.

7 Thank you.

8 CHAIRPERSON LLOYD: Yes, Ms. D'Adamo.

9 BOARD MEMBER D'ADAMO: Would you say that there
10 are any trends out there in terms of the school districts

11 that have a greater problem with the ability to meet the
12 match in terms of where they fit in with the pre-77 buses
13 and air quality status of nonattainment?

14 MR. RANDALL: Actually in my experience, what's
15 happened is the larger districts have had an opportunity
16 to play in the CATS program and most of their pre-77 buses
17 have gone. You'll find a lot of the other pre-77s in your
18 smaller districts, which, in a roundabout answer to your
19 question, is, yes, they would have a harder time coming up
20 with the match because their fleets are probably smaller.

21 BOARD MEMBER D'ADAMO: Could staff respond to the
22 issue of nonattainment status and whether or not there
23 seem to be any trends with regard to the smaller rural
24 districts and where they are, central valley, north coast,
25 where do they fit in in terms of the attainment status?

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333

1 MOBILE SOURCE CONTROL DIVISION CHIEF CROSS: Many
2 of them are attainment because of their rural nature, but
3 I think that we should refocus back on the issue of PM.
4 In other words, the issue here is not the ozone attainment
5 as much as it is the localized exposure of kids to PM.
6 And I don't think that's a rural urban issue.

7 EXECUTIVE OFFICER KENNY: Actually, if I might
8 try to add a little bit of assistance, the staff has put
9 together essentially a table of all the different school
10 districts throughout the state and when you look at those

11 tables of the different school districts, what we find is
12 essentially the smaller districts are essentially pretty
13 well distributed all over the place. We can find small
14 school districts in Los Angeles as well as finding small
15 school districts in places like Trinity County.

16 And so it's a little bit difficult, I guess, to
17 generalize it and say we're finding them in one particular
18 part of the state. They really do seem to be fairly
19 distributed.

20 BOARD MEMBER D'ADAMO: Okay. Now, maybe if we
21 could go back to, and I don't know if you'd be able to
22 speak to this or staff would, but the previous witness
23 raised the issue of a formula in transportation funding, a
24 J141 form. First of all, were you aware of this formula
25 and did staff consider, perhaps, consideration of that,

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334

1 and if utilization of that approach would help to target
2 both the problem of need and also the pre-77 issue?

3 PLANNING AND REGULATORY DEVELOPMENT MANAGER

4 KEMENA: No. We weren't aware of that formula. My
5 understanding from the testimony, though, was that formula
6 related to the percent of funding that the school district
7 got from the State. And I was not clear how that is a
8 reflection on ability to pay.

9 MR. RANDALL: Let me help you a little bit and a
10 couple of my colleagues following me will be able to give

11 you a little more detail on it. J141 is a reporting form
12 that's used for all school districts to report their
13 transportation costs to the State. From that form, we get
14 a certain apportionment back to cover a very small portion
15 of our transportation costs.

16 It's based on the amount of monies we need to
17 spend for it, and the monies we get back from the State.
18 There are certain things that we cannot claim on there and
19 purchasing of new school buses is one of them.

20 But it's really a formula that's used throughout
21 the State to allocate the pot of monies for home to school
22 transportation. And I'll let one of my other colleagues
23 who's coming up behind me give you the mechanics of that
24 form.

25 CHAIRPERSON LLOYD: Mr. McKinnon.

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335

1 BOARD MEMBER MCKINNON: I heard something you
2 said and I think we have someone that can kind of, with
3 practical experience, walk us through this. You were
4 mentioning some concern about retrofitting some of the
5 buses and not retrofitting others and fuel, and I guess
6 what I'm interested in is kind of your impressions on the
7 manageability of having two fuels and that kind of thing,
8 what you're going to do about that?

9 MR. RANDALL: It presents some significant
10 problems. In some areas you share fueling facilities with

11 other cities or municipal agencies, so you'd have to have
12 Green Diesel or clean diesel, low sulfur fuel in there for
13 all the vehicles. And I guess my concern was if I only
14 have seven buses that qualify under the replacement
15 program for the retrofit and then I've got to run low
16 sulfur in my other 70 buses that I'm running, I'm paying
17 an extra five cents a gallon for that, and I recognize
18 down the line we're going to go to low sulfur, and that's
19 great, and I think we need to get there.

20 If at the same time the technology could help us
21 bring the cost down on the traps, so that they would be
22 more affordable to go in, then it would -- then you could
23 go in and do a fleet in a fell swoop and get it all done
24 as opposed to only having a limited amount of monies to go
25 in and retrofit the buses.

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336

1 BOARD MEMBER McKINNON: Thanks.

2 CHAIRPERSON LLOYD: Yes, Mrs. Riordan.

3 BOARD MEMBER RIORDAN: Just to follow along on
4 the idea of the pre-1997 buses and how they are
5 distributed. In looking at this table, and I'm asking the
6 staff, in looking at this table, it appears to me that
7 it's pretty well distributed throughout the State, kind of
8 proportionate. For instance, some of the smaller
9 districts, maybe the proportion is a little bit higher,
10 but they do have some pre-1997 buses, but they also have a

11 smaller pot of money to utilize if it's distributed, you
12 know, sort of through the process, where the larger
13 districts, again, have a lot of pre-1977 buses.

14 So that it looks to me like if you were to
15 eliminate the match on the pre -- or reduce it, either
16 eliminate it or -- pre-1977, excuse me -- eliminate it or
17 reduce it, that would basically flow to most every air
18 pollution control district throughout the State of
19 California. It doesn't look like anybody's any better
20 off, am I right in looking at that, that it's pretty wide
21 distribution?

22 EXECUTIVE DIRECTOR KENNY: No, I think, actually,
23 you're probably fairly accurate in terms of what is
24 happening in terms of pre-77 buses and the distribution of
25 money. The consequence is that we then have a smaller

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337

1 pool of overall dollars, which will result in fewer buses
2 statewide.

3 BOARD MEMBER RIORDAN: That's true. But it's
4 hard to figure out a way to help the truly poorer school
5 districts and then allow for some other distribution
6 formula for those districts who can probably truly think
7 that to pay \$25,000 for a new school bus is a real
8 bargain, I mean, a true bargain. So I don't know how to
9 distribute that. But at least everybody seems to have at
10 least those pre-1977 buses.

11 MR. RANDALL: We appreciate your dilemma and we
12 appreciate the fact that there's some money for school
13 buses.

14 Thank you very much.

15 CHAIRPERSON LLOYD: Thank you. Doug Snyder, Kirk
16 Hunter.

17 MR. SNYDER: Thank you, Dr. Lloyd and members of
18 the Board. My name is Doug Snyder and I'm here this
19 evening representing the California Association of School
20 Transportation Officials, CASTO. CASTO is a school
21 transportation industry organization representing over
22 2,500 members and representing over 80 school districts in
23 the State of California.

24 We'd like to take this opportunity to thank
25 Governor Davis for his allocation of 50 million for a much

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338

1 needed school bus replacement program in the State. And
2 we'd also like to take this opportunity to thank the Air
3 Resources Board and their very competent staff for being
4 very receptive and considering all concerns and
5 recommendations from the school transportation industry.

6 We have a couple areas of concern that we'd like
7 to address today. First of all, let me just offer our
8 support for the fuel neutrality portion of the staff's
9 recommendations and the proposal before you tonight and
10 that is because it meets the needs of a greater number of

11 school districts in the State. Not everybody has the
12 ability to develop the infrastructure for CNG. So the
13 alternative does meet more school district's needs and
14 does reduce pollution.

15 I'd like to follow-up a little bit on the school
16 district match portion. I've enclosed in my handouts to
17 you tonight a graph, it's actually the second graph, and
18 it's entitled 1998/99 Transportation Statistics For
19 California School Districts. If you look at the right
20 side of the graph, there is expenses and apportionment for
21 school districts listed by counties. And as you can see
22 that all counties are underfunded for their school
23 transportation program, all school districts underfunded
24 for their school transportation program.

25 And, in fact, the statewide average of

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339

1 encroachment into the General Fund, monies and programs
2 that are competing for classroom dollars is about 55
3 percent on a statewide average. And, in fact, that
4 encroachment is disproportionate for rural districts as
5 compared to urban districts. So I'd just like to bring
6 that to your attention. And it is hard for school
7 districts to get that match because they are in direct
8 competition for the programs that the gentlemen from the
9 school administrators talked about, all the important
10 things that we're doing for our children in the classroom.

11 So that is a problem for some school districts.

12 The other thing that I would like to address
13 tonight is the population based allocation of the school
14 buses. We believe that the oldest bus should be replaced
15 first. We need to get the oldest pre-77 buses off the
16 road first. They do not meet today's safety standards for
17 compartmentalization, rollover protection, all those
18 important things that we trust our school buses to have.

19 The oldest buses need to get replaced first.
20 And, generally, in rural districts, those children ride
21 further and are on the bus longer than in urban districts.
22 And they're affected more. So we would like to see --
23 that's the only fair way we see to allocate the money,
24 oldest bus first.

25 CHAIRPERSON LLOYD: Three minutes.

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340

1 MR. SNYDER: Lastly, I would like to encourage
2 the Board to make a recommendation to the Governor through
3 a budget change proposal for \$100 million to continue this
4 program, because as you can see in the other graph that
5 I've supplied to you, there are approximately 30 children
6 killed every year during school transportation hours in
7 passenger vehicles on their way to and from school, and
8 about 20 children killed every year as pedestrians on
9 their way to and from school.

10 And as one gentleman mentioned, only 16 percent

11 of children utilize school buses. Buy increasing that
12 percentage, we will protect more childrens' lives than we
13 do now.

14 Thank you.

15 CHAIRPERSON LLOYD: Thank you.

16 Ms. D'Adamo.

17 BOARD MEMBER D'ADAMO: Yes. I'll ask you, and if
18 the other witnesses that are coming up could be mindful of
19 this as well, I'm interested in learning more about the
20 J141 formula and how that would fit in, say, on a sliding
21 scale. Is it geared, is the whole purpose to determine --

22 MR. SNYDER: The J141 is not necessarily a
23 formula. The J141 is a reporting mechanism for school
24 districts to report, like the last gentlemen said, their
25 expenses and miles and those kind of things to the

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341

1 Department of Education, School Finance Division. Then
2 because of a formula that was established in 1983, I
3 believe, that allocation for their transportation expenses
4 is based on that base year, which is 17 years old, and
5 that's why school districts are so underfunded.

6 It is somewhat equitable across the board in the
7 way it's disbursed, but you could come up with a logical
8 way to buy down the match if that's what you're looking
9 for, from that process, by taking miles and costs or
10 amount of students in working with staff to come up with

11 some formula that would work and be equitable to all in
12 that regard.

13 BOARD MEMBER D'ADAMO: But it's based upon need
14 and not ability to pay.

15 MR. SNYDER: It's based upon miles and students
16 only, not anything else.

17 CHAIRPERSON LLOYD: Supervisor.

18 Thank you.

19 Kirk Hunter, Steven Stetson, Ranson Roser, Victor
20 Ogrey.

21 MR. HUNTER: Good evening, Dr. Lloyd and members
22 of the Board. Thank you very much. My name is Kirk
23 Hunter. I am the Director of the Southwest Transportation
24 Agency and I handle ten school districts in rural Fresno
25 county, busing about 6,000 students a day. I have two

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342

1 issues to address. But before I go there, I just wanted
2 to let this Board know and Dr. Lloyd that the staff has
3 been wonderful, they're a class act. I've had a chance to
4 work with them with this program for a couple of months
5 and they're a bunch of great folks. And I just want to
6 tell them thanks.

7 The match, to give you a practical example of how
8 the match works for me at Southwest Transportation. My
9 budget this year is a million seven, my reimbursement from
10 the State is one million dollars. I take \$700,000 out of

11 the general fund of ten school districts this year for
12 transportation services, add another 25,000 or however
13 many buses that we would get, that's just directly out of
14 the classroom.

15 We have no pre-77 buses at this time, but do have
16 a couple of pre-86's, so it's just direct money out of the
17 classroom. And that's the reason you're going to hear "we
18 want it to go away," because it's just not there.

19 The other area I'd like to address is the
20 allocation. I, too, am a very large advocate of pre-77
21 buses first and only, and do not go past pre-77 until such
22 time as the money or the buses run out and we need to move
23 on forward. Staff did an excellent job trying to reach
24 that goal of pre-77, but stopped just short by still
25 allowing pre-87.

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343

1 If we're going to really be concerned with the
2 health and safety of the children of this State, we have
3 to go all the way and not just halfway. We can't just
4 concern ourselves with air quality, we also have to
5 concern ourselves with the environment inside the bus.
6 And by replacing pre-77 buses, it's a complete safety
7 picture. They get the inside of the bus as well as the
8 outside of the bus.

9 And I would also like to see the Board cap the
10 number of buses that somebody could get in this program to

11 ten. That way it would be fair and it would be spread a
12 lot wider. Just as a hypothetical situation, let's assume
13 that a school district would ask for 100 buses. Absent a
14 cap, if their name comes up, they could get 100 buses.
15 And that's just not appropriate nor fair when you're
16 trying to reach 24,000 buses or 979 school districts in
17 the State of California.

18 Thanks.

19 CHAIRPERSON LLOYD: Thank you very much.

20 Questions or comments?

21 Thank you.

22 Steven Stetson.

23 MR. STETSON: I'm Steven Stetson. I'm here to
24 comment on the proceedings today in three different areas.
25 First, in a legal sense, secondly in a structural form and

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344

1 then just kind of some of the priorities that have come
2 up.

3 There's been a lot of talk of specifics, but it
4 seems that California being in violation of federal clean
5 air standards is held to use best available current
6 technology in upgrading transportation systems to reach
7 standards set by the federal Clean Air Act.

8 If you do that, then you probably won't go to
9 Green Diesel. We're currently in violation of those
10 standards. So if you just look at it in that sense,

11 there's really no choice, you have to go with --

12 CHAIRPERSON LLOYD: I can recognize the priority
13 here was for toxic air contaminant, diesel particulate.

14 MR. STETSON: Well, NOx is too, though, I think.
15 I could be wrong.

16 CHAIRPERSON LLOYD: You could be wrong. You
17 definitely are wrong.

18 MR. STETSON: Okay. Well, let's go over to
19 structural items. I noticed that \$15 million will
20 purchase roughly 150 buses with Green Diesel. The other
21 technology, compressed gas, would purchase roughly 115.
22 That's a difference of about 30 buses statewide out of
23 16,000 That's a very small difference, a very small
24 difference. So I think a lot was made of that. And in
25 lieu of the 16,000 bus need, it's just not that important.

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345

1 Also, the priorities, matching funds, that's
2 going to be impossible for a lot of districts. That's
3 already been talked about. One thing about the NOx
4 standards, you will be protecting the majority of the
5 population of children, but when it comes to the elderly
6 and asthmatics, you cite a level of .25 parts per million
7 damaging asthmatics and susceptible individuals in the
8 population. So I think that should be considered also
9 think you should use the best available current technology
10 that is out there whether the specifics are argued ad

11 infinitum or not, is one thing, but if you just go
12 straight with that, the choice is already made.

13 CHAIRPERSON LLOYD: I think, as we've heard today
14 there's a difference of opinion there. The best available
15 lowest numbers may be on natural gas or diesel is one, but
16 for NOx or particulates, you can see one is better or
17 equivalent to the other, so it's not a straight forward
18 choice.

19 MR. STETSON: The figures are in dispute, so if
20 you go with what you do have --

21 CHAIRPERSON LLOYD: Thank you. I would like --
22 by the way, I really do take exception to this handout
23 here and the direct comment here about Air Board
24 executives talking about special deals cut and
25 commissions. I think this is completely unworthy of even

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346

1 putting in writing, so --

2 MR. STETSON: I should retract that. I wrote
3 this last night kind of late and --

4 CHAIRPERSON LLOYD: You shouldn't have handed it
5 out. Don't retract it.

6 MR. STETSON: May I apologize?

7 CHAIRPERSON LLOYD: You can see how hard staff
8 has worked on this issue. We're all committed to this.
9 We're here to get the facts. We're here also to
10 distribute the \$50 million that the Governor devoted to

11 the school districts. You hear how grateful they are to
12 this. We take our responsibility very very seriously.
13 We're here to protect public health. We are trying to
14 weigh all the evidence.

15 And for you to cavalierly write one page here of
16 ill-informed and inflammatory stuff is not acceptable.

17 Thank you.

18 Next, Ranson Roser, Victory Ogrey and Michael
19 Hulsizer.

20 MR. ROSER: You'll have to excuse me at this
21 point, I know myself only as number 41.

22 (Laughter.)

23 BOARD MEMBER DeSAULNIER: Welcome to Area 51.

24 (Laughter.)

25 CHAIRPERSON LLOYD: Do you realize he's actually

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347

1 from Reno?

2 BOARD MEMBER DeSAULNIER: How appropriate.

3 (Laughter.)

4 MR. ROSER: I thank the Board for its time. And
5 my name is Ranson Roser, number 41, from NRG Technologies.
6 I'm an engineer with a small research and development
7 company. My history has been with air quality districts
8 and in low-emission vehicle technologies.

9 And my comments, that will be very brief, are in
10 line with the previous comments that have talked about a

11 favorable position towards natural gas in the Board
12 proposal in order to not only use the extremely low
13 emissions that have been achieved by natural gas in the
14 forms of the standards, but also natural gas in terms of
15 enabling technology for other technologies which are
16 coming up on the horizon.

17 And so with that, my company is actively dealing
18 with the development of hydrogen enriched natural gas,
19 which is basically hydrogen as a supplementation to
20 natural gas. Some might consider it as an additive. And
21 I'll refer to that as HCNG rather than just CNG. And That
22 achieve ultra efficient, clean combustion with that type
23 of fuel mixture and spark ignition engines. The
24 development and commercialization of this technology has
25 been funded by the Department of Energy for the past three

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348

1 years. And in addition to our work at our offices, our
2 data has been substantiated by work at another laboratory.

3 We currently are working on vehicle
4 demonstrations with Pinnacle West, British Columbia
5 Hydroelectric, Bechtel Nevada and the US Department of
6 Transportation.

7 The vehicle platforms that we're working on in
8 these development projects include light-duty vehicles,
9 medium-duty and transit bus applications with the first
10 applications in 30 to 40 foot transit buses.

11 We have recently demonstrated in our
12 laboratories, the attainment of less than .2 grams per
13 horse power hour NOx in a compression ignition engine with
14 these fuel mixtures, simulating conditions to match the
15 torque requirements of the diesel or natural gas base
16 engine that it will replace in the heavy-duty transit bus
17 application.

18 We expect similar results to be obtained for a
19 project that we will be initiating in Davis, California.
20 Currently, the hydrogen required for the engine fuel is
21 supplied in addition to CNG. Air products and chemicals
22 are supplying this hydrogen for both our Las Vegas and
23 Davis, California projects.

24 NRG is currently in the development phase of a
25 concept that's patent pending that will create the

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349

1 required hydrogen from the on-board, natural gas in the
2 vehicles. These reformer concepts are brought up with, of
3 course, in the context of fuel cells. It turns out that
4 when you're dealing with internal combustion engines they
5 can run on a wide variety of fuels, these reformer
6 concepts are not so far-fetched, they are much more
7 tangible.

8 And so in that sense with that technology, of
9 course, we would then be talking about using just the
10 natural gas infrastructure to achieve these low-NOx

11 emissions, and not specifically talking about a hydrogen
12 infrastructure.

13 I urge the Committee to support a stronger slide
14 towards the CNG based portion of the proposal. And we
15 hope to, of course, show maybe in the next Board meeting
16 the achievement of maybe less than .1 grams per horse
17 power hour NOx emissions of an internal combustion in a
18 heavy-duty transit bus application.

19 Thank you very much for your time.

20 CHAIRPERSON LLOYD: Thank you very much. I would
21 ask the staff, obviously, this round our technology is not
22 quite there, but I think to be able to reduce NOx here by
23 a factor of ten, we'll just ask staff to monitor and work
24 with you on that to see the development and get that bus
25 working in Las Vegas and that would be good.

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350

1 MR. ROSER: Thank you. Clearly for this context,
2 it's merely to support the CNG based portion of this
3 proposal and I look forward to speaking with the staff.

4 CHAIRPERSON LLOYD: Thank you.

5 Victor Ogrey, Michael Hulsizer, and Veronica Dale
6 Muchmore.

7 MR. OGREY: Mr. Chairman, I'm Victor Ogrey. I
8 live in Redding, California, which is in Shasta County.
9 In keeping with your previous admonition earlier this
10 afternoon, I think just about everything I was going to

11 say has already been said, so I'm sure you'll be pleased
12 to hear that. I would just like to make two points.

13 One I have personally observed in our small
14 transit district in Redding, which has about 13 routes,
15 that at least three of the drivers each day lose their
16 voices about mid-day. And since the transit terminal is
17 enclosed pretty much by a couple of buildings, it seems to
18 me that most of the cause of their losing the voices, is
19 the five to 12 minutes they spend each hour in the
20 terminal breathing the exhaust fumes, because the transit
21 district won't shut their engines off.

22 In addition to which, I happen to live in a
23 community where they're now proposing to put a second
24 major truck stop across the street from the one existing
25 truck stop we have in Shasta county, which is right next

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351

1 to the I-5 freeway, which has 8,750 trucks passing daily.
2 And this creates a lot of exhaust fumes, especially since
3 it's -- both of these truck stops will be 260 feet from
4 our 500 student elementary school, believe it or not.

5 So I'm very concerned about diesel emissions.
6 And I would hope that -- I'm very pleased to see what is
7 happening here, that you have the \$50 million and it will
8 be spent. I'm hopeful that this money will be spent so
9 that we can prove in the period of a year or a recently
10 short period of time that the studies of the alternative

11 fuels are possible and get some hard statistics which will
12 prove which one is best, but moreover it will show this
13 whole series of hearings here have shown how important it
14 is that we do update our school bus fleet in the State of
15 California. And I applaud you for your efforts.

16 Thank you.

17 CHAIRPERSON LLOYD: Thank you very much.

18 Michael Hulsizer.

19 MR. HULSIZER: Thank you, Mr. Chairman. Michael
20 Hulsizer with Kern County Schools. I want to begin, as
21 some other speakers have, by thanking you all. First of
22 all, we want to thank the Governor and staff and the Board
23 for supporting this program.

24 Very early tonight you heard a speaker from
25 Riverside say that schools are in a crisis, and we are.

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352

1 And it's going to get worse, because as another speaker
2 pointed out, the need for transportation for schools in
3 the State is going to grow. As we provide after-school
4 programs, enrichment programs for students, we provide --
5 we extend the school day for students, bus transportation
6 is going to be increasingly important. And so we need
7 this program.

8 And the concerns that I'm about to express
9 shouldn't upstage the fact that we generally appreciate
10 and support this program. I'm going to try to stick to

11 two points and provide you with some analysis that I don't
12 think you've quite heard. We are concerned about the
13 proposal of staff because we believe that it
14 disproportionately and unfairly will impact rural and
15 small school districts. And we'd ask you to take a look
16 at two of the proposal provisions from that perspective.

17 The first is the match. We agree with all the
18 school people who've spoken that are telling you to
19 eliminate the match. But I want to argue with you just
20 for a second or argue to you that the match
21 disproportionately hurts rural and valley schools. And
22 the reason for that is that in rural small school
23 districts we have greater encroachment. And the reason
24 for that is that we bus a much higher percentage of our
25 students.

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353

1 In the valley, we bus roughly twice the number of
2 the state average. The state average is about 16 percent.
3 In Kern county we bus 32 percent of the students. If you
4 go up into the northern part of the State, the most rural
5 isolated counties, you're looking at 50 and 60 percent of
6 the students being bused. What that translates to is on a
7 per student basis for the school district, encroachment in
8 the urban school districts of this State is about \$100 a
9 student districtwide, because they bus only some of them
10 less than ten percent of their students, most of them less

11 than 15.

12 In our county, our encroachment costs are \$130
13 per student countywide, that's multiplied by 143,000
14 students. In the most rural parts of the state, it's up
15 to about \$200 a student is the encroachment. Now, because
16 of that disproportionate or inequitable encroachment, to
17 have a flat \$25,000 per bus match unfairly discriminates
18 against the smallest most rural districts.

19 We'd ask you to eliminate the match. If you
20 can't do that, at least have the match be on a per student
21 basis so that the smallest most rural districts are at
22 least equitably treated.

23 The second point that we'd make is that on the
24 distribution formula, you also, I think, unfairly hurt
25 rural parts of the state, small districts, first of all,

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354

1 because you bus a higher percentage -- first of all, we
2 have a higher percentage of pre-1977 buses in the most
3 rural isolated parts of the state.

4 In the San Joaquin Valley, where I'm at, 25
5 percent of the pre-1977 buses in the state are in the
6 valley. We only have about eight percent of the
7 population. That same ratio is about the same in the
8 northern part of the State. If you distribute the money
9 on the basis of population, the San Joaquin valley will
10 get about \$3.7 million. If you distribute it and targeted

11 it pre-1977 buses, you'd provide about \$10 million to that
12 area.

13 The point is, is that if you really mean what
14 you're saying and that you want to equitably reduce the
15 amount of pre-77, the most polluting buses in this state,
16 you will equitably prioritize pre-1977 buses and send the
17 money out equally around the state where those buses most
18 exist.

19 Mr. Walrath and the small school districts, I
20 think, will expand on this, but we just, from the sense of
21 fairness ask you to look at this rural issue.

22 Thank you.

23 CHAIRPERSON LLOYD: Thank you.

24 Ms. D'Adamo.

25 BOARD MEMBER D'ADAMO: I'm really troubled by

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355

1 this. At first when I looked at this, population did seem
2 to be the appropriate way to go, but has the staff
3 considered a number of factors that could be accounted
4 for, pre-77 buses, the encroachment issue, the point I was
5 trying to raise earlier, need, is there a way that -- and
6 population, obviously, maybe even population weighted more
7 heavily than some of the other factors.

8 Could staff speak to that.

9 EXECUTIVE DIRECTOR KENNY: Well, we actually -- I
10 don't think we looked at the encroachment issue. We did

11 look at essentially at a pre-77 issue. And what we ended
12 up determining there was that it actually seemed to be a
13 reward to those who had not replaced their buses earlier.
14 And it seemed to be a penalty to those who actually had
15 actually, you know, taken money out of their budgets and
16 replaced the pre-77 buses.

17 And so one of the concerns we had there, from a
18 population basis or a population pre-77 basis, was that if
19 we went with the latter, it did seem to essentially not
20 take into account that simple fact, that some school
21 districts had recognized that there was a pre-77 bus in
22 their fleet, or several pre-77 buses and that they had
23 made budgetary augmentations in order to try to move those
24 buses out.

25 And the worry we had was we did not want to

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356

1 disincentive school districts from moving those buses out
2 with their own funds, and so that was why we went with a
3 straight population approach.

4 BOARD MEMBER D'ADAMO: What about some of the
5 other factors, though and also, if you could, speak to
6 that very well may be the case, but then the testimony by
7 the gentlemen from Mendocino led me to the conclusion that
8 they're just not going to be able to -- that match,
9 they're not going to be able to participate in the program
10 at all.

11 So in that situation -- there may be a varying
12 degree of pre-77s. There may be certain districts that
13 could afford it and then others that it's not due to any
14 bad faith on their part, they just don't have the dollars.

15 EXECUTIVE DIRECTOR KENNY: You're absolutely
16 correct. The difficulty we ran into there was that we
17 were looking at essentially how much money we had and how
18 far we could go in terms of that money. And with the
19 available money that we had and using a \$25,000 match, we
20 could essentially purchase roughly 400 school buses with
21 the \$40 million.

22 And that really broke down essentially to a
23 little bit more than 200 as CNG and a little less than 200
24 as diesel. And if we basically eliminate the match, then
25 what we do is we take that 400 number and we basically cut

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357

1 that number by roughly 25 percent, and so suddenly we're
2 down to 300 school buses. And we saw essentially fewer
3 buses being able to be distributed around the state.

4 And with the large population of school buses in
5 the state, we were trying to at least get the biggest bang
6 for the buck that we could. And I mean it is, obviously,
7 a difficult issue.

8 The one thing that we were actually playing with
9 a few moments ago was a suggestion by Mr. McKinnon that we
10 look at maybe a different kind of a match associated with

11 pre-77 buses as a way of trying to equalize this in some
12 fashion, with the idea also being that the pre-77 buses
13 seem to be located in some of the poorer districts, or at
14 least that was the assumption, and so maybe we change the
15 match there a little bit.

16 Now, we don't know what the exact consequence of
17 that would be, but it will mean that we will have fewer
18 buses. It doesn't mean that we would lose, you know, the
19 same number of buses as if we eliminated the match
20 completely.

21 BOARD MEMBER D'ADAMO: Yeah. I think we should
22 discuss it further. And maybe in future years, if we
23 could -- because I don't think this would be appropriate
24 at this point, but maybe to have a sliding scale, maybe
25 there are some school districts that could afford more

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358

1 than the 25,000 and so a sliding scale based upon ability
2 to pay. Perhaps some school districts could afford 20, 15
3 all the way up to, you know, 30 to 40.

4 EXECUTIVE DIRECTOR KENNY: The difficulty we had
5 with that is that we were, I guess, very uncomfortable
6 trying to figure out what the ability to pay is in
7 essentially, 1,100 school districts throughout the state.
8 We thought that would be almost an impossible task. And
9 especially not knowing, you know, the entire school
10 district system and how the money is basically funded and

11 what the augmentations are like.

12 The other thing we did also consider is that
13 there are a number of air districts around the state,
14 which we do anticipate probably providing at least some
15 level of match funding themselves and maybe covering the
16 match fund obligation so that, again, we could extend the
17 money as far as possible and get as many buses as
18 possible.

19 CHAIRPERSON LLOYD: Did you want to respond?

20 MR. HULSIZER: Well, I just needed to respond to
21 this argument that you didn't want to reward areas of the
22 state that hadn't replaced their buses. I could accept
23 that argument if the burden, if you will, were equally
24 distributed. But the fact is, it's not so much ability to
25 pay as it is the fact that in the ruralmost -- the small

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359

1 parts of the state, we are busing exponentially more
2 students and that is the reason we haven't -- if there's
3 one reason why we haven't been able to replace buses at
4 the rate of the more urban concentrated parts of the
5 State, they're just not busing as many students, and so
6 it's not as big a burden on their budget.

7 The encroachment issue, the per student cost of
8 this program is what we're asking you to look at. I'm
9 not -- I think that there's a point to make about
10 low-wealth versus high-wealth districts. But the real

11 issue is the encroachment, the hit on the district's
12 general fund budget. And if it's \$200 or \$130 per student
13 in the district, that's got to be recognized versus \$97 or
14 \$100 per student in the district, the ability to pay is
15 impacted for small rural.

16 CHAIRPERSON LLOYD: Ms. D'Adamo, then Mr.
17 McKinnon.

18 BOARD MEMBER D'ADAMO: The encroachment issue, is
19 that a term of art, is that information that all school
20 districts have to have.

21 MR. HULSIZER: Absolutely, and it goes back to
22 the J141 but it's not as simple as just looking at the
23 percentage of revenue versus expenditure. It's taking a
24 look at the difference between the revenue and the
25 expenditure and then multiplying that by the total number

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360

1 of students in the district, that's the real issue.

2 There are many counties where the encroachment
3 percentage is right around 50 percent. But if it's 50
4 percent and you've got a third of the students of the
5 other area, your encroachment per student is going to be
6 much greater and that's the number that you need to look
7 at.

8 BOARD MEMBER D'ADAMO: And you don't just have
9 that information per county, it is broken down by school
10 district?

11 MR. HULSIZER: It is per county. The data is
12 there. It's just a matter of doing the calculation. It
13 would not be difficult to do.

14 BOARD MEMBER RIORDAN: It's by county or by
15 school district?

16 MR. HULSIZER: Both. You could do it by local
17 education agency. You could do it by county. There's
18 ways of configuring it, but what it really comes down to
19 is by school district, and you can do that. It's not
20 difficult.

21 CHAIRPERSON LLOYD: Mr. McKinnon.

22 BOARD MEMBER McKINNON: The reporting, what is it
23 the J141, is there data collected that would tell us
24 something like the number of student miles traveled per
25 day or something? Is there data collected that could give

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361

1 us that.

2 MR. HULSIZER: Yeah, I'd refer you to our
3 transportation officials on that. There is and that's
4 another issue as well.

5 BOARD MEMBER McKINNON: Well, one of my concerns
6 is that I think there's really something we need to do
7 here. And I guess what I would float is dropping it to
8 like ten percent and 10,000 for pre-77 buses, but I have a
9 sense we need another condition. I mean, I'm not really
10 interested in replacing the school buses that move the

11 football team, occasionally, at an urban high school,
12 right.

13 But if you're talking about the buses that run
14 around Trinity county or even in the Los Angeles area,
15 there's some very poor school districts here that are a
16 hundred percent pre-77. And I think that's who we ought
17 to be helping. But I'm not sure how we distinguish school
18 districts that easily can make not buying buses okay.

19 I mean, for instance, if you're an urban
20 district, you have two buses at the high school you move
21 the football team with every Friday afternoon. It's easy
22 not to place a priority of buying more buses or new buses.
23 And I'm not sure how we sort that out. And that may be
24 the insurmountable problem for us here.

25 If you've got -- do you have any ideas?

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362

1 MR. HULSIZER: I think we would suggest that you
2 start with pre-1997 and equitably distribute the money
3 there. If you really want to impact the issue of the most
4 polluting buses in the state that's where you go. Don't
5 look at student population, because you're going to
6 unfairly and inequitably disproportionately send money to
7 parts of the state that have the lowest per capita usage
8 of buses, of school buses.

9 BOARD MEMBER McKINNON: What if we looked at
10 student miles traveled divided by buses, right?

11 MR. HULSIZER: I think the number of miles is an
12 issue. I think that's complicating it, but I certainly
13 cannot deny that's not an issue, because it's a huge
14 issue. In a county with 8,000 square miles, we travel per
15 student a heck of a lot more miles with each student than
16 you're going to find in an urban county, so we would
17 welcome that.

18 CHAIRPERSON LLOYD: Supervisor DeSaulnier.

19 BOARD MEMBER DeSAULNIER: Not knowing, but I'm
20 just looking at this list that the California Association
21 of School Transportation Officials gave us, which breaks
22 down the percentage of riders by enrollment. And all of
23 the ten largest urban counties have very small
24 percentages, which answers your question. But on the
25 other hand, my involvement with some of those districts is

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363

1 it's because they have other priorities. They demand from
2 their constituents -- let me just finish my thought --
3 whereas we still -- it's not that we don't want to get
4 those ridership numbers up, we've got safer routes to
5 school programs, I know, in the Bay Area and I think other
6 urbanized areas, because you're worried about the security
7 of kids and congestion.

8 So I think, at least for now not understanding
9 that, I'm more comfortable at least with beginning with
10 Matt's suggestion, because -- and maybe you can answer

11 this, I don't -- is it largely demand, that a rural
12 county's parents need those school buses?

13 MR. HULSIZER: You're talking about school
14 districts that serve exponentially larger numbers of
15 square miles. And so, you know, in my county, I've got
16 school districts that have got to bus 50 percent of their
17 population. They just have to, because 50 percent their
18 kids live more than five miles away from the school.

19 In an urban county that's just not the case. I
20 don't think we should criticize urban school districts for
21 not busing more kids. The reality is they're busing the
22 kids they have to bus. And they have a lower percentage
23 than we do in rural counties.

24 BOARD MEMBER DeSAULNIER: I'm worried about
25 getting on this comparison, not knowing what school

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364

1 districts base that on and what criteria, knowing that
2 especially poorer school districts all have funding
3 problems, in Los Angeles, San Diego, the Bay Area.

4 And not knowing that, I'm anxious about getting
5 into this whole debate rather than just dealing with the
6 pre-77, as Ms. Riordan said, which seems to spread across
7 the State more evenly.

8 CHAIRPERSON LLOYD: Dr. Burke and then Supervisor
9 Roberts.

10 BOARD MEMBER BURKE: I'll pass.

11 CHAIRPERSON LLOYD: Supervisor Roberts.

12 BOARD MEMBER ROBERTS: You know, something is
13 bothering me here. And it's we're getting away from what
14 it is that I thought was the principal focus and that's
15 cleaning the air. And it seems like anybody that
16 represents a school district just wants buses period. And
17 I've got a feeling it doesn't make any difference what
18 kind of buses we sold them or helped them to buy or what
19 the standards are, they just want buses.

20 And you know what, every one of the school
21 districts wants that. I'm kind of uncomfortable with the
22 direction this is going, because I think in a superficial
23 way there may be some legitimacy to it, but I'm looking at
24 school districts in urban areas that have very much the
25 same problems.

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365

1 I think Matt's suggestion to be thinking of maybe
2 a different line, I think there should be some match. But
3 I would feel very supportive of maybe reducing that
4 number. But to all of a sudden say, hey, we're going to
5 shift this whole program and heavily weight it in favor of
6 rural areas, I think is -- I would just -- I think maybe
7 what we ought to be doing is looking at the impacts, the
8 air quality impacts, and how are we going to clean up the
9 air and how are we going to make for a healthy environment
10 for more kids.

11 And I think we're, you know, without exception
12 everybody that's come up here representing a school
13 district has almost completely focused on we've just got
14 to get more buses.

15 I do have a question for our staff, in all due
16 respect, is it a requirement that if we help buy a bus,
17 they take a bus off the road?

18 EXECUTIVE DIRECTOR KENNY: Yes, it is.

19 BOARD MEMBER ROBERTS: That's set. So we know
20 you're going to demo a bus for everyone that --

21 EXECUTIVE DIRECTOR KENNY: What we had said is
22 basically, if they buy a bus, they have to essentially
23 demo the bus or they have to replace an older dirtier bus,
24 so that in fact, if they -- and what I mean is essentially
25 since we have a limited pool of buses here and we have a

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366

1 lot of dirty buses throughout the state, if, in fact, we
2 replace a dirty bus, there may be a dirtier bus somewhere
3 in the State, we would rather essentially get rid of that
4 dirtier bus by moving the dirty bus.

5 BOARD MEMBER ROBERTS: So there could be a couple
6 of basically trade downs?

7 EXECUTIVE DIRECTOR KENNY: Yes, but in the end it
8 disappears.

9 BOARD MEMBER ROBERTS: But somewhere at the end
10 of that, there is going to be a bus that we're going to

11 drive into a crushing machine somewhere?

12 EXECUTIVE DIRECTOR KENNY: Correct. There's a
13 crushing machine somewhere.

14 BOARD MEMBER HUGH FRIEDMAN: So we have dirt,
15 dirty and dirtier.

16 BOARD MEMBER ROBERTS: Well, that's what -- I
17 mean if you get the dirtiest -- ultimately if you -- I
18 just want to make sure there is a bus coming off the road
19 for every one that we end up helping to buy.

20 BOARD MEMBER BURKE: But isn't it the policy of
21 some school districts to sell the buses that they're going
22 to get rid of to Third World Countries.

23 EXECUTIVE DIRECTOR KENNY: It may be.

24 BOARD MEMBER BURKE: Isn't it an income stream
25 for them?

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367

1 EXECUTIVE DIRECTOR KENNY: It may be, but in this
2 particular situation there will be plenty of
3 opportunities, I think, in the State of California where
4 the dirtier buses exist and they can then move a dirty
5 bus, because they now have a newer clean bus.

6 BOARD MEMBER RIORDAN: But I don't think we want
7 to send some of these buses off to some other area.

8 BOARD MEMBER BURKE: We're just moving the
9 problem. But what I'm saying is that some school
10 districts use that as an income stream.

11 BOARD MEMBER RIORDAN: Well, that isn't a good
12 practice.

13 BOARD MEMBER BURKE: So you know then that's a
14 consideration also. I passed to speak before because, you
15 know, this is a highly emotional issue for me. I was born
16 on a farm, so nobody needs to tell me how far you've got
17 to go to ride a school bus.

18 But I also drive through the city of Los Angeles,
19 every district, every place, all the time, more than my
20 wife wants me to, but I go anyway. And there are
21 different -- it's like comparing apples and oranges. And
22 the reason you transport kids in an urban environment is a
23 totally different reason than you transfer them in a rural
24 environment.

25 And quite frankly, I'm glad I was born when I was

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368

1 because I wouldn't want to travel on a school bus in any
2 environment today. But I think our charge here is about
3 the air. And if you look at it like that, I think the
4 staff's recommendation, the population distribution of
5 this money -- now, I have no problem with the 1977
6 lowering of the match, even though, you know, it goes
7 against the staff's theory of, you know, having those
8 school districts step up to the plate initially.

9 And, you know, Matt, I knew that you were an
10 athlete, but the days of having a bus sit around and

11 taking the team on Fridays doesn't exist anymore. Well,
12 maybe where you're at, but let me --

13 BOARD MEMBER McKINNON: Sacramento schools,
14 you've got be kidding, but --

15 BOARD MEMBER BURKE: Okay, but I guarantee you if
16 you go down to the Los Angeles school district, it's just
17 crazy down there.

18 MR. HULSIZER: I'm sorry, I just need to say one
19 thing. The organization I work for has no pre-1977 buses.
20 If you distribute the money on the basis of 1977 buses
21 equitably, my organization will get not a dime.

22 If you want to clean the air, you'll distribute
23 the money on the basis of 1977 buses pre-77 equitably
24 around the State.

25 CHAIRPERSON LLOYD: Ms. D'Adamo.

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369

1 BOARD MEMBER D'ADAMO: Well, I think that there
2 are just so many different ways of doing this, and we just
3 don't have all the information before us right now. Maybe
4 if there's a way to do what Mr. McKinnon suggested on the
5 match issue.

6 But I would propose that for next year we look at
7 this formula closely, because even though the encroachment
8 issue may weigh it more heavily than what it should be for
9 rural districts, I think the population factoring solely
10 weighs it disproportionately in favor of urban areas,

11 particularly if there are all these great distances to be
12 traveled. And it's not just about air quality, it's about
13 proximity to the buses, PM and exposure standing outside
14 the bus and riding the bus.

15 CHAIRPERSON LLOYD: I think I agree, it is a very
16 complicated issue. I think what's suggested in the
17 interest of time here, we've got -- it's now 7:10 and
18 we've still got another eight witnesses, maybe what we
19 should do is get the witnesses to focus on some of the
20 issues which maybe have not been addressed so then we can
21 have this discussion, maybe take a break -- but we now
22 have Veronica Dale Muchmore and I guess you're going to
23 speak for two people.

24 MS. MUCHMORE: Yes, I am. I'm going to speak for
25 Charlie Ott first. He's director of transportation for

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370

1 Yuba City Unified School District, which is one of your
2 more rural districts. And I represent East Side Union
3 High School District in the City of San Jose, and we have
4 over 25,000 ADA in our school district. So we're one of
5 your bigger city ones.

6 Let me read Charlie's letter first because I
7 think he will put some of my own thoughts in here.

8 It says, " Dear Air Resources Board
9 Members. I'd like to apologize for not
10 being able to speak in front of you

11 today. I intended to do so, but due to
12 the agenda, I had other obligations this
13 afternoon.

14 "I am writing this letter to ask you to
15 please consider remaining neutral on the
16 types of fuel allowed in the lower
17 emission school bus program. Many small
18 to medium school districts within the
19 State of California do not have the
20 option of natural gas. If we do, the
21 infrastructure is so extensive that we
22 could not even consider it."

23 And a good point is you need to understand how
24 much infrastructure really does cost to support CNG if you
25 do not have it in your area or if you are not already

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371

1 equipped at your site to handle CNG. I have a background
2 in setting up infrastructure here locally.

3 "By you remaining neutral, we have a
4 choice in how we can do our part in
5 lowering emissions. Our jobs as school
6 district transportation directors is
7 education. Sometimes we get caught up
8 in the politics, but that is not what we
9 are here for. We ask students to keep
10 an open mind so that their learning

11 ability can increase. We expect them to
12 see things clearly and make objective
13 decisions.

14 "For the sake of all children in the
15 public school system, as well as the
16 small school districts that service
17 them, please keep an open mind and be
18 objective. Allow us, the people whom
19 you have entrusted to run your school
20 transportation units, to have a choice
21 when it comes to alternative fuels.

22 "Thank you, Charles Ott."

23 CHAIRPERSON LLOYD: Thank you.

24 MS. MUCHMORE: He put that very well. There were
25 some other issues that I noticed that have come up. A

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372

1 little background, I've been driving school buses since I
2 was 18. I have over 25 years in this industry from the
3 ground up. I didn't start out in college to be a school
4 bus driver, but somehow I ended up doing it.

5 I've worked with CNG. I've helped at a previous
6 facility I worked at, we worked on different agencies to
7 test alternative types of fuels including pure NOx, which
8 is a water emulsion fuel based with diesel. The test
9 results were quite interesting. We ran methanol.

10 Fortunately, we were not part of the test program

11 for electric school buses. I would never recommend anyone
12 go that way again. But the differences between where I
13 was from and where I'm at now, even though they're both
14 city school districts, are that previously someone else
15 started the CNG program, and I expanded on it. And we had
16 the support mechanism from both the local air district and
17 from the school board to do that.

18 Where I'm at now, I don't have that support. I
19 don't have the ability to replace my pre-77s and I have
20 quite a few of them. If you're talking about what happens
21 and why school districts are worried about replacing
22 pre-77's -- and quite a few of us in the audience took
23 offense to Supervisor Roberts' comments about why we're
24 here.

25 We're here and we're in this industry because

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373

1 this is where we want to be. We chose to be here and this
2 is our passion. This is our lives. These people in this
3 industry don't make big bucks, and it's a struggle for us
4 as directors everyday to keep these people happy and to
5 keep the equipment running and to keep our shops updated.
6 It's not easy. So, of course, we want more, you know,
7 bang for the buck as you have put it.

8 CHAIRPERSON LLOYD: You used pretty well all of
9 your time, unless you've got some salient points here.

10 MS. MUCHMORE: There were several things that

11 were made. Just to make a statement, I am a taxpayer. I
12 heard people make remarks about taxpayers. I'm a
13 taxpayer. I heard other remarks about cancer. I'm a
14 cancer survivor. So, you know what, please keep fuel
15 neutral. Allow us, the people that we've entrusted, to do
16 our jobs and to do them right.

17 Thank you.

18 CHAIRPERSON LLOYD: Thank you very much.

19 Dr. Burke.

20 BOARD MEMBER BURKE: Two things. One, did staff
21 consider just taking this money that they've divided up
22 and giving it to local air districts and letting them take
23 all this testimony? Did they ever think about that?

24 (Laughter.)

25 BOARD MEMBER BURKE: You know, and let the school

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374

1 districts then make their own decision on whether they
2 want, you know, CNG or diesel or retrofit?

3 EXECUTIVE DIRECTOR KENNY: We are now, right?

4 Actually, we did not.

5 (Laughter.)

6 BOARD MEMBER McKINNON: So moved.

7 (Laughter.)

8 BOARD MEMBER BURKE: Second point, that you know
9 some people should not -- I assume everybody knows that
10 T-bone Pickens has formed a company which will provide

11 four school districts and other institutional groups CNG
12 refueling facilities at no cost based on the entrance into
13 a supply contract. So when you talk about the support of
14 refueling --

15 CHAIRPERSON LLOYD: Not quite at no cost. He
16 gets it back in the end.

17 BOARD MEMBER BURKE: Well, he's not a
18 philanthropist.

19 (Laughter.)

20 CHAIRPERSON LLOYD: Anyway, we need to move on.
21 Mark Fairbanks, David Walrath and Ralph Knight.

22 MR. FAIRBANKS: Good evening, Chairman Lloyd, and
23 Board Members. My name is Mark Fairbanks. I'm the
24 Director of Transportation up at Calaveras Unified School
25 District.

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375

1 I am one of those rural communities that
2 transport approximately 55 percent of our student
3 population. And we do this over a 600-square mile area.
4 We're basically two-thirds of the county as one district.
5 We're actually one district that would be hurt by the
6 thought of population based funding because we don't have
7 the population in the area. In fact, our school district
8 has 4,000 students. And, like I said, we transport well
9 over half and we cover approximately 800,000 miles based
10 on what we did last year, based on trips and other things

11 that we do throughout the year.

12 Now, by not replacing any buses or getting any
13 funding for that, of course, you know, we are traveling
14 more miles than you would see some buses in an urban area.
15 So, in a sense, we are polluting the atmosphere more,
16 running the older buses that we are running. So we would
17 definitely want you to consider the stance of being
18 population based as far as basing the funding.

19 As far as waiting, you know, the funds need to be
20 allocated now, and I understand that. And I heard that we
21 need to focus on clean air, which is why we're here. But
22 as was already mentioned, the 77 and pre-77 buses are the
23 most polluting buses that are out on the road.

24 So, you know, of course, being transportation, we
25 look at the safety first, because that's most important to

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376

1 us. But if you can get the safest vehicle and the
2 cleanest vehicle to replace those that are polluting the
3 most, of course, that would be the more appropriate to do
4 so. We would encourage you to look at replacing all the
5 pre-77 buses and going through that.

6 By the way, I appreciate what your staff has done
7 and all the hard work they've put in. Going into the
8 thought of being fuel neutral, I appreciate the different
9 things that have been brought up as far as natural gas,
10 the Green Diesel and propane. Now, I note you were

11 talking a little bit about propane. My background in this
12 industry, of course, started as a mechanic. Using propane
13 powered buses in our area wouldn't work because of the
14 great ability or the power issues that we have to deal
15 with in the mountains.

16 Fueling becomes the issue when it talks about
17 natural gas, so really only the viable solution for us is
18 a Green Diesel. So, anyhow, we would ask that the Board
19 here consider the population-based area and also that they
20 look to replace all the pre-77 buses.

21 CHAIRPERSON LLOYD: Thank you.

22 David Walrath, Ralph Knight, Claudia Sherrill.

23 MR. WALRATH: Good evening. My name is Dave
24 Walrath. I'm the Executive Director of the Small School
25 Districts Association. It is a pleasure to be here. It's

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377

1 a pleasure to be talking about \$40 million.

2 You have multiple goals. I'm not sure if anybody
3 could have kept track of the number of agendas that have
4 been presented before you today. I'm presenting one more.

5 I want to cover two points of comment on the
6 staff recommendations. But before hitting those, I want
7 to compliment staff. I think you've done an excellent job
8 like many other people, \$40 million for cleaner air, for
9 safer buses, better programs for students, how could
10 anybody complain.

11 So my comments are not in the form of complaint,
12 they're in the form of hopeful comments and considerations
13 in the allocation mechanism. There have been comments on
14 the ability of small school districts to make a match.

15 In my written testimony, I suggest you do a per
16 ADA match requirement. A district of 500 students paying
17 potentially \$10 per student, which would be \$5,000. In a
18 district of a thousand students, \$10 would be 10,000, but
19 no more than 50 percent of the replacement cost of the
20 school bus is to be replaced.

21 The 50 percent figure comes from the last time we
22 did school bus replacement, \$35 million appropriation
23 trailer bill to the budget had a 50/50 match requirement.
24 Most small districts were unable to participate in that
25 program. However, the 50 percent maximum amount is a

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378

1 precedent you may want to consider.

2 Ten dollars per ADA. How do I come to this
3 figure? Approximately 400 school buses to be replaced, a
4 \$25,000 match per bus, approximately \$10 million. Ten
5 dollars per ADA, if you have a million ADA in the state
6 and school districts participating in this program,
7 approximately a sixth of this ADA of the state, then
8 that's approximately \$10 million again.

9 Instead of having a disproportionately high cost
10 to a small district replacing one bus, be it a 1977 or a

11 1986, instead it would be proportionable to the ability to
12 pay. And the ability to pay depends upon your revenue.
13 And our revenue comes as a per ADA revenue source in the
14 revenue line. Fewer kids, the less money you get. More
15 kids, more money you get. Per ADA is what we'd recommend
16 you take a look at as far as a match mechanism.

17 On the distribution on the allocation,
18 representing school districts, yes we'd very much like to
19 have solely pre-1977, but that's just one of the agendas.
20 You have multiple. And one is clean air, the purpose of
21 why the money was given to you. It would have been given
22 to the Department of Education if it was just going to be
23 going to -- for the purpose of replacing school buses.

24 Multiple agendas. Population covers part of the
25 issue on clean air. Pre-77 covers part. We request you

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379

1 look at instead of using simply pre-77 or simply
2 population, some sort of a blend of the two. We would
3 suggest using proportion pre-1987, looking at the fact
4 that pre-87 buses, 1984 buses as polluting as -- are
5 generally as polluting as a 1997 bus, will better
6 represent the needs of the San Joaquin Valley in their
7 number of buses that are pre-77 or pre-87.

8 That brings them closer to the pre-77 amount they
9 would have, more than they would have under population.
10 Other areas would have a little bit less than they would

11 have under population, but more than what we would have
12 received under the pre-77.

13 We think in 1987, you will give balance as you
14 try to look at how to deal with these issues. With that,
15 thank you, and I'll be pleased to answer any questions you
16 might have.

17 CHAIRPERSON LLOYD: Thank you very much.

18 Questions or comments?

19 Thank you very much.

20 MR. WALRATH: Thank you.

21 CHAIRPERSON LLOYD: Ralph Knight, Claudia
22 Sherrill and lastly Phil Hendrix.

23 MS. Sherrill: Good evening, I'm Ralph Knight.

24 (Laughter.)

25 CHAIRPERSON LLOYD: Yes. Did we lose Ralph?

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380

1 MS. Sherrill: We lost Ralph. He waited all day
2 and had to leave. My name is Claudia Sherrill, Director
3 of Transportation for the Elk Grove School District right
4 here in the Sacramento area.

5 I think you've probably left the best for last,
6 meaning school districts to respond to you last. I want
7 to thank you for this opportunity. School dollars are
8 hard to come by in any fashion. When they're dedicated
9 for the yellow school bus, we take part.

10 I would ask that you give me the respect of being

11 able to address you and give you the information that I
12 had planned on earlier in the day. It does repeat much of
13 what you've heard, but it may have just a little different
14 twist.

15 As a school district representative, I want to
16 thank and show our gratitude for the \$50 million Governor
17 Davis has made available to improve the safety and health
18 of the school students utilizing school buses in the State
19 of California, their health, by means of improving the
20 fuel source and their safety by originally attaching this
21 money to the replacement and demise of the pre-77 buses.

22 I emphasize original, because with the expansion
23 of the 87 buses, 1987 buses, we are missing a critical
24 opportunity. We in the school bus industry preach safety,
25 we teach safety and then when we fail to recognize the

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381

1 priority and the impact that this money could do by
2 replacing first the 1977 buses not by population but by
3 all 1977 buses.

4 Throughout the State you've heard a lot of
5 dialogue here. I'm not going to repeat it. I'm not here
6 as a school district that will receive any of those. We
7 have none. I believe in my industry we need to replace
8 the pre-77 buses throughout this State, that's critical.

9 Secondly, if compressed natural gas is an
10 available source, that should be the fuel of priority. If

11 it is not available, then the smaller school districts
12 should not be held hostage, if you will, and not be able
13 to participate. If the cleaner fuel is available for them
14 through diesel, then that should be what they are allowed
15 to replace.

16 The proposed \$10 million for diesel traps, I
17 would propose that we only postpone that. The school
18 districts and the school industry has been a target of
19 demonstration programs, much of which has been successful.
20 But as a manager of a large school district, when I don't
21 put a bus on the road to transport kids every day,
22 someone, beginning with the Superintendent of my school
23 board, wants to know why.

24 And it's very difficult to say, you know what, we
25 stepped up to bat and we're participating in a clean air

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382

1 program. But the tests weren't complete and we're
2 suffering, our equipment isn't running day-to-day. So I
3 would simply ask that the traps be postponed until we have
4 all the information needed.

5 Lastly, continued funding of this allocation of
6 dollars not only in next year's budget but for in budgeted
7 years in the future, school district transportation needs
8 your help. We need to be partners with you. I hope that
9 nothing you've heard here today is a negative from the
10 school districts in particular. We appreciate what you're

11 doing. We appreciate the very difficult decision that you
12 have.

13 We are interested not just in getting a bus in
14 our fleet, but we're interested in safe transportation of
15 all children. I applaud you. I applaud the staff. Thank
16 you. I feel like we've come to know each other and you
17 have a very tough decision to make.

18 CHAIRPERSON LLOYD: Thank you and thank you for
19 bringing the bus outside there as well.

20 MS. Sherrill: You're welcome. Isn't it pretty?

21 CHAIRPERSON LLOYD: It sure is, yes.

22 The last name is Phil Hendrix.

23 Not here.

24 No one else.

25 Okay. Now, I guess we can open it up for

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383

1 discussion.

2 We now -- I guess the one thing I would like to
3 ask here is, Mr. Kenny, having heard all this, if you'd
4 like to make any summary comments here before the Board
5 discusses the item.

6 EXECUTIVE DIRECTOR KENNY: I think I would like
7 to make a few comments. I think, basically, probably the
8 comment that's most appropriate is you've now had a chance
9 to share the staff's pain.

10 (Laughter.)

11 EXECUTIVE DIRECTOR KENNY: As you can see, there
12 are a multitude of issues that we have been trying to
13 wrestle with in terms of the proposal that we brought to
14 you. And quite fundamentally and quite simply the biggest
15 difficulty that we have had has been that there are
16 roughly 1,100 school districts in this State.

17 And what we are proposing is something that can
18 only provide 400 new school buses. And so we cannot even
19 provide a single new school bus for every school district
20 in the State.

21 In addition to that, what we have been trying to
22 do is wrestle or compare or balance that with the air
23 quality issues that are associated with this particular
24 proposal. From a purely staff perspective, given our
25 druthers, given our purely air quality desires, we would

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384

1 have proposed to you \$50 million for traps and no school
2 buses because we thought that was the best air quality
3 thing to do.

4 At the same time, we recognize that this was a
5 bigger issue than simply going in that direction. And
6 what we tried to do is recognize that there was an issue
7 here of providing new school buses to the school districts
8 around the State. We tried to recognize that what the
9 Governor was looking at was essentially replacing older
10 school buses throughout the state, even on a more limited

11 basis because of the money we had available.

12 We took that into account when we looked at
13 essentially the different types Of technologies. And what
14 we were doing there is looking at whether or not any
15 particular technology should be advantaged solely over all
16 the rest. And our conclusion was that it should not,
17 because what would happen is that if we did that, we would
18 lose air quality benefits, we would reduce the number of
19 buses, and we would not be able to provide the greatest
20 benefit to the greatest number of people.

21 So what we did in the end is take essentially all
22 the issues that you've heard today and we reached a
23 conclusion that we thought balanced all those issues in a
24 way that was most appropriate. We provided CNG buses in a
25 substantial volume, so that, in fact, they would be

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385

1 available in big portions of the State. We provided
2 diesel buses because we do think it was important to have
3 them available in the State and we also recognized that
4 what International did was bring a bus in that is cleaner
5 than the four gram standards to which they are currently
6 obligated to produce buses.

7 And then lastly what we did is we made sure that,
8 in fact, we continued to have the traps out there,
9 because, in fact, what was most important about all of
10 this is the PM. NOx is very important, but in line with

11 what the Board basically directed us to do, just in
12 September, we are looking at trying to figure out
13 strategies to reduce PM, because in the bottom line
14 assessment what we have to do is figure out how to reduce
15 the PM, because that gives us the biggest benefit in terms
16 of cancer reduction.

17 And so in the end, the proposal we brought to you
18 was one that was as balanced as we could kind of make it,
19 and at the same time try to address as many of the
20 constituent issues as could be addressed.

21 CHAIRPERSON LLOYD: Thank you very much. The
22 suggestion I'd have for the Board is that we look at the
23 areas here, for example the fuel splits, how do we fit
24 propane into this also with all the traps and the
25 proportion right there. And then the issue we heard from

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386

1 the school districts, the match and then the allocation of
2 buses.

3 So maybe first what we'll address is are we
4 comfortable with where we are in terms of the splits
5 between the diesel and the alt fuels, which is
6 predominantly natural gas?

7 Supervisor Roberts.

8 BOARD MEMBER ROBERTS: Okay. I'll start it. And
9 let's go back to the comments that I made earlier where it
10 seemed to me that from an air quality standpoint, that to

11 have the very smallest amount that's going to the
12 retrofit, the larger amount that's going to the Green
13 Diesel and then those two adding up to half of the pot,
14 the other half of the pot going to the CNG, That like the
15 split 50/50, but I would --

16 CHAIRPERSON LLOYD: That's fine. That was my
17 first issue there. So you like that part of it?

18 BOARD MEMBER ROBERTS: Yeah, but I don't like
19 the --

20 CHAIRPERSON LLOYD: Yeah, I understand.

21 BOARD MEMBER ROBERTS: Okay. I thought you were
22 taking it a step further.

23 CHAIRPERSON LLOYD: Well, I can, but I'd like to
24 settle that issue first.

25 BOARD MEMBER ROBERTS: I like the 50/50, for no

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387

1 other reason than it's simple and clean.

2 CHAIRPERSON LLOYD: After today, I understand.

3 So do we have anybody who might change that?

4 That's good. Now we get into the diesel part
5 then, the trap issue vis-a-vis the new Green Diesel.

6 BOARD MEMBER ROBERTS: For me, the retrofit part
7 of this, I think, ought to be larger than the clean
8 diesel. I think there's a number of issues that have been
9 raised, not the least of which, I mean, we are talking
10 about something that there is no track record in terms of

11 the clean diesel, where at least with the retrofit there
12 is some evidence in terms of the workability over time.

13 I mean if I had my way, I'd say 20 million on the
14 retrofit and five million on the clean diesel, which --
15 and maybe prioritize the clean diesel for those more rural
16 areas with pre-1977 buses, so you'd in a sense, create a
17 smaller pot, but focus it on what the most need is for
18 that particular technology. And maybe that would balance
19 out some of the concerns of the population base, leave the
20 population base on the other side, but maybe priorities.

21 But I would make it a much smaller pot than the
22 \$15 million, which ought to be significant for the fact
23 that there may only be one company producing these things.

24 CHAIRPERSON LLOYD: Discussion.

25 BOARD MEMBER ROBERTS: So for whatever it's

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388

1 worth, that would be my recommendation.

2 CHAIRPERSON LLOYD: Yes, Professor Friedman.

3 BOARD MEMBER HUGH FRIEDMAN: I respect that view,
4 Ron. I wrestled with this too. But at the end of the
5 day, and it is now at the end of a very long day for all
6 of us, I personally have concluded that the staff wrestled
7 with this for a lot longer than we have. They've heard
8 all of the views and probably maybe others and many more
9 of it, much more accumulation of it than we heard today,
10 and I've gained great respect and more respect and

11 appreciation for the staff and the job they did in
12 cobbling this compromise together from the varying agendas
13 and points of view, all of which deserve careful
14 consideration.

15 And it's a delicate balancing act. And we're on
16 a high wire. And my concern is if we begin to try and
17 fine tune it collectively and negotiate here in this forum
18 at this time and in this place and begin to tinker to the
19 smallest, other considerations will begin to kick in and
20 I'm not sure we'll end up with any better product.

21 And so reluctantly I, for one, think that though
22 there's some arguments that could be made, certainly, good
23 arguments for changing the allocation within the diesel
24 path, there's also the issue of retrofits. Are they
25 available, are they not, I mean how fast, when? I mean

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389

1 people and districts are saying it takes awhile, and
2 things are out -- you know, there are other
3 considerations.

4 And then we get into all that sort of thing in
5 terms of timing. So I guess what I'm doing is saying I'd
6 just as soon not go there where you feel we ought to go.

7 BOARD MEMBER RIORDAN: Mr. Chairman, I'd like to
8 agree with Professor Friedman. I also want to provide the
9 flexibility to the school districts to choose what is
10 smartest for them. And it seems to me that what the staff

11 has proposed in the split is indeed that flexibility. It
12 may be, if we're fortunate enough, to have another
13 opportunity we may want to adjust this split. But for
14 this year, I'd really like to see as much flexibility
15 given to our school districts as possible and I believe
16 that is within the split.

17 CHAIRPERSON LLOYD: Supervisor DeSaulnier.

18 BOARD MEMBER DeSAULNIER: Maybe in the idea of
19 particular tinkering -- although I can't believe I've been
20 for almost -- we've been talking about this all afternoon
21 and evening and I haven't heard -- I thought Dr. Burke was
22 going to start talking about how I walked to school every
23 day through the snow ten miles.

24 (Laughter.)

25 BOARD MEMBER DeSAULNIER: And as Bill Cosby said,

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390

1 uphill both ways.

2 (Laughter.)

3 BOARD MEMBER DeSAULNIER: You're almost there.

4 BOARD MEMBER HUGH FRIEDMAN: We haven't heard
5 about the 10 cent allowance.

6 BOARD MEMBER DeSAULNIER: He's changed that over
7 the course of his lifetime.

8 When I started out, you know, a little anxious
9 over not emphasizing enough on the alt fuels route, but
10 I'm okay with the split. I think maybe a variation in

11 still keeping with flexibility that Ron is suggesting
12 maybe we could do, in the idea of tinkering, but I just
13 throw this out for conversation, if we did the 10 million
14 for retrofit but the other 15 we gave them the option,
15 they can either do the green buses or they can do any
16 proportion of that as retrofit?

17 It's just a suggestion, so you're not mandating
18 they have to do 20, but you give them the flexibility. It
19 sounds like they're going to go for the buses anyway, but,
20 Ron, if you're right, which I'm inclined to think you are,
21 when they start looking at it, they'll probably see some
22 value in doing the retrofit as opposed to the buses.

23 Just a suggestion. You have that look on your
24 face, Mr. Chairman, that you wished you hadn't called on
25 me.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

391

1 (Laughter.)

2 BOARD MEMBER DeSAULNIER: You told me I had
3 something coming from the previous --

4 CHAIRPERSON LLOYD: You have many more coming.
5 Maybe what would the staff -- what would that do? What
6 are the implications of basically Supervisor DeSaulnier's
7 suggestion?

8 EXECUTIVE DIRECTOR KENNY: I think it's a timing
9 issue. I mean, I think what we'd have to do is
10 essentially if there was an option there on the \$15

11 million, the question would be at what point would you,
12 sort of, pull the option, because the difficulty is going
13 to be is that, again, we only have roughly 190 buses in
14 that particular category. And, again, we're looking at
15 over 20,000 school buses in the state.

16 So I think the likely outcome is that all 190
17 buses are going to be claimed, and so I don't think
18 there's going to be any money left for retrofits.

19 So the question becomes one really of timing. If
20 you say that they can basically jump into the retrofit pot
21 immediately, then someone may, in which case you reduce
22 the number of buses. But if you say they have to wait X
23 number of weeks or months, I think there won't be any
24 money for retrofits. I think the money will all go to
25 school buses.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

392

1 BOARD MEMBER DeSAULNIER: Then if you give it --

2 BOARD MEMBER BURKE: But that's an assumption not
3 necessarily based on fact, but in theory. So, if, in
4 fact, you did that and your theory was right, there
5 wouldn't be any change in what you did at all, but at
6 least he got the option to give flexibility. She got her
7 school board flexibility and those people who are looking
8 for more retrofit thought at least they had a shot even
9 though they didn't get it.

10 EXECUTIVE DIRECTOR KENNY: Yeah, I'm not

11 disagreeing. I'm just saying that I think it would be
12 important to identify the timing, essentially, either it's
13 like on day one or basically it's on day 30, at which
14 point, you know, the people have the option to go into the
15 retrofits.

16 BOARD MEMBER DeSAULNIER: In the keeping of the
17 spirit how about day 15? I don't know what the right time
18 is but the idea of giving some motivation for people to
19 look at retrofit but a very limited period of time, I'd
20 leave that up to staff.

21 CHAIRPERSON LLOYD: All right. Mr. McKinnon.

22 BOARD MEMBER McKINNON: Yeah. I guess I started
23 out at use all 50 million for retrofit and fix 24,000
24 buses, I mean --

25 BOARD MEMBER DeSAULNIER: That's more than

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393

1 tinkering.

2 (Laughter.)

3 BOARD MEMBER McKINNON: I mean, that's where I
4 started. And actually what I've arrived at is kind of
5 living with the proposal as it is. It has merits in all
6 the directions. While I listened to people feeling that
7 we weren't doing enough for natural gas, half the money
8 goes to natural gas, 25 million. We were offending this
9 industry by giving them \$25 million. Hello.

10 (Laughter.)

11 BOARD MEMBER McKINNON: And I think moving
12 forward with new diesel buses that are cleaner is a good
13 thing to do and making sure that there's money there to do
14 that.

15 And yeah, there's a debate over 3.0 and 2.5. I
16 think we're going to end up with competition for
17 International. I mean, who is going to avoid the
18 opportunity to sell buses and engines? I mean, it's going
19 to happen. And I think it helps with cleaning up diesel.

20 So that's a very long winded way to say I have no
21 objection to the mix. Probably the only place I would
22 tinker has to do with the school match stuff.

23 CHAIRPERSON LLOYD: Are there any other issues on
24 the trap before we go on to the match.

25 BOARD MEMBER CALHOUN: Try to get some traps

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394

1 included in this whole package. I hate to see all of this
2 completely for new buses.

3 BOARD MEMBER BURKE: It's at 10 million so far.

4 CHAIRPERSON LLOYD: Dr. Burke.

5 BOARD MEMBER BURKE: I'm not going to tell about
6 my walk to school in the snow. And let me tell when it
7 was really cold and it was over my head.

8 BOARD MEMBER DeSAULNIER: Please, because I used
9 up my hankey about two hours ago.

10 (Laughter.)

11 BOARD MEMBER BURKE: And it was uphill both ways.

12 I agree. The three of you, and Matt started me
13 out going that way when he said hey man, I'm not into any
14 of this stuff, let's retrofit all these buses and get it
15 all done now. So he started me out going that way. Now,
16 he's turned out and he's behind me now.

17 So thanks.

18 (Laughter.)

19 BOARD MEMBER DeSAULNIER: Where do you prefer
20 him?

21 (Laughter.)

22 BOARD MEMBER BURKE: I want him in front of me,
23 thank you very much.

24 (Laughter.)

25 BOARD MEMBER BURKE: But I don't see anything

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395

1 wrong with your proposal, because it's basically the staff
2 proposal. And if what Mike says is true, which I
3 absolutely think it probably is unequivocally true, by
4 tomorrow afternoon 12:00 o'clock, but at least we've given
5 the opportunity to have retrofit sneak in a few extra
6 dollars.

7 Now, I don't in my heart of hearts, I don't
8 believe it's going to happen. But it also gives her her
9 flexibility for the school districts to make the decision
10 whether they want new buses or retrofitted buses. It

11 gives retrofit a shot at more money. And I want to thank
12 Mike very much and the rest of the staff from keeping this
13 from the air quality districts, because we don't stay this
14 late at work.

15 CHAIRPERSON LLOYD: I think staff obviously have
16 some consultation about that.

17 Professor Friedman.

18 BOARD MEMBER HUGH FRIEDMAN: I'm not sure of the
19 implications. I don't know if staff is still considering
20 them, but I'm all for flexibility, although I thought I
21 heard the Supervisor say that she liked the proposal
22 because it was flexible.

23 BOARD MEMBER RIORDAN: I do.

24 BOARD MEMBER HUGH FRIEDMAN: And she wasn't
25 seeking more flexibility.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

396

1 BOARD MEMBER RIORDAN: Right, I do. If I
2 miscommunicated that --

3 BOARD MEMBER HUGH FRIEDMAN: I would like to know
4 more about how that works? I mean, at what point do
5 school districts have to, with their boards and their
6 consultants and their transportation committees make this
7 election, and how do they do that meaningfully, and does
8 that mean that pre-77 buses can -- can they all be
9 retrofitted efficiently. I'm not clear that that's the
10 case.

11 And so is that a viable option? And how long do
12 we give for that? You know, we can chew this thing to
13 death. And if it's going to make a marked improvement,
14 I'm all for it, but I would hope to get a little more
15 guidance for how that works.

16 CHAIRPERSON LLOYD: It seems to me that it's so
17 complicated that we should refer it to the local boards of
18 supervisors to sort it out.

19 (Laughter.)

20 BOARD MEMBER HUGH FRIEDMAN: Actually, I wish we
21 had done what Mr. Burke mentioned --

22 BOARD MEMBER DeSAULNIER: Thank you. You've just
23 made four good friends.

24 BOARD MEMBER HUGH FRIEDMAN: -- and just sent it
25 all to the regional boards.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

397

1 BOARD MEMBER BURKE: Made all the sense in the
2 world.

3 CHAIRPERSON LLOYD: Seriously, I think Professor
4 Friedman, maybe staff has a comment, reflecting on the
5 suggestion.

6 EXECUTIVE DIRECTOR KENNY: Actually, we have been
7 trying to figure out how to do it. The difficulty we have
8 is that we have different administering sources for the
9 different funds. And essentially what is happening is the
10 new bus funds are being fundamentally administered by the

11 CEC. That retrofit funds are being administered by us,
12 and so we have to figure out a mechanism by which once the
13 new bus funds are out there, within some specified period
14 of time, the school districts make their determination and
15 either go a new bus route or they go a retrofit route.

16 If they then go a retrofit route, then there
17 would be some kind of a transfer of the money out of the
18 new bus funds into the retrofit fund. And I mean that's
19 where we are having our difficulties.

20 BOARD MEMBER DeSAULNIER: Mr. Chairman, I didn't
21 mean to make things more complicated. And, Ron, if you
22 want to start. My suggestion would be if there's a way
23 to do it cleanly, I'd leave that up to the Executive
24 Director, how's's that?

25 EXECUTIVE DIRECTOR KENNY: No thanks.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

398

1 BOARD MEMBER RIORDAN: I want to make it very
2 clear for the record, I am supporting what the staff has
3 proposed, because I think there is built into that
4 flexibility, and yet you keep sort of the pot sort of
5 separate and then adjust hopefully with another round of
6 funding next year, that is my position.

7 CHAIRPERSON LLOYD: Supervisor Roberts.

8 BOARD MEMBER ROBERTS: Yeah, let me try one last
9 effort here. And I'm going to take you back to air
10 quality. You know, while I certainly didn't mean to -- in

11 my observation of the school districts' motivations to
12 want to have more buses, I understand that. You know,
13 there's nothing wrong with that. But I thought that our
14 charge here was maybe from a little different perspective.

15 If I understand this right, a retrofit is
16 somewhere between \$4,000 to \$6,000. Let me for the moment
17 assume it's \$6,000. Assume it's \$4,000 roughly, or
18 \$5,000. We'll take the midpoint.

19 If you took \$15 million, it comes down to buying
20 150 buses or retrofitting 3,000 buses, and if you're
21 looking at it from an air quality standpoint, I've got to
22 tell you, we've got this upside down. Now, you may feel
23 comfortable with that, but buying 150 buses from an air
24 quality standpoint is not going to be measurable in the
25 State, okay.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

399

1 So I'm just telling you what's making me very
2 uncomfortable, and whether you want to tinker or don't
3 tinker, I think you're off the beaten path and I think
4 you're having only a marginal impact on air quality issues
5 that you could greatly impact by looking at this somewhat
6 differently.

7 And I will not say a thing and I'll be prepared
8 to vote on whatever you want to put forward.

9 CHAIRPERSON LLOYD: Professor Friedman.

10 BOARD MEMBER HUGH FRIEDMAN: I'd like to talk

11 about one other issue, before I get too tired to talk
12 about anything, and that is the issue of the match and the
13 funding. I mean if there's any more conversation on the
14 allocation, I didn't want to preclude it, but I don't want
15 people to feel that they have to keep doing it if they
16 don't want to chew it. Is there any more conversation?

17 CHAIRPERSON LLOYD: I think there is, obviously.

18 BOARD MEMBER HUGH FRIEDMAN: I mean, are we
19 trying to develop some kind of consensus or are we going
20 to have motions to amend or approve or accept.

21 CHAIRPERSON LLOYD: I just want to respond to
22 Supervisor Roberts. I certainly wouldn't advocate going
23 all retrofits. I think the balance we have is important.

24 BOARD MEMBER BURKE: Instead of taking 10 million
25 he said 15 million for retrofit, and then leave 10 million

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

400

1 for new --

2 BOARD MEMBER ROBERTS: Mr. Chairman, I was told
3 that I wasn't close enough to my mike and there were
4 people that couldn't hear. Could I repeat what I said.

5 CHAIRPERSON LLOYD: I think I understand.

6 BOARD MEMBER ROBERTS: What I said is if you -- I
7 wanted to change the balance. But I'm looking at 15
8 million, you can take whatever part of the 25 million you
9 want, but I'm looking at simply the impacts from an air
10 quality standpoint. And I said if you took 15 million and

11 to simplify this you say you were buying buses at a
12 100,000 apiece, you're going to buy 150 buses.

13 If you did retrofits at 5,000 apiece, you're
14 going to retrofit 3,000 buses, okay. The difference
15 between buying 150 buses and retrofitting 3,000 buses from
16 an air quality standpoint leads me to believe that we,
17 because of all of the testimony that we've gone through
18 and the tiredness that we're all feeling, that we're
19 losing the reason why I think we are here.

20 It isn't to help school districts supplement
21 their fleets. And as you can see, we're not -- we're
22 going to help very few school districts. You'd be lucky,
23 this is like a lottery, if you get a bus, you're going to
24 be very -- everybody is imagining they are going to get
25 some bus or buses, these rural districts, they're going to

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

401

1 be lucky if they get a half a bus at the rate at which
2 you're spending the money.

3 And the impact on the air quality in California
4 is going to be immeasurable, you are not going to measure
5 it, forget it. So I'm saying why don't we do it in a
6 different split. And not that we ignore -- we'll have
7 some money for those new buses, but I think that on the
8 diesel side, we should weigh in heavily on the retrofits.

9 BOARD MEMBER HUGH FRIEDMAN: And what about, I
10 know it's not air pollution, but what about safety? By

11 doing that and urging retrofits, we may be improving the
12 air but we're locking in the buses that are noncompliant
13 with federal safety standards since 1977 or before.

14 And, as I said earlier, I wish there were a
15 perfect solution. And maybe there's a better balance, but
16 I don't feel that I've got the -- I really don't feel I've
17 got the wisdom to pluck it out of the air at 8:00 o'clock
18 after a long day.

19 CHAIRPERSON LLOYD: Why don't we take the simple
20 approach of taking that, splitting that 25 million into 12
21 and a half apiece. It doesn't get to where you're going,
22 it's a step in that direction, what does staff think are
23 the implications of that?

24 EXECUTIVE DIRECTOR KENNY: We would actually have
25 more money then for the retrofits and roughly we were

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402

1 looking at \$10 million as being sufficient to provide for
2 roughly 1,500 retrofits. And so the additional two and a
3 half million dollars, we would increase that by
4 essentially about 375 retrofits. The number of school
5 buses would be decreased on the diesel side by essentially
6 25.

7 CHAIRPERSON LLOYD: Supervisor DeSaulnier.

8 BOARD MEMBER DeSAULNIER: I understand where
9 Ron's going and I appreciate his passion and the
10 investment. So if 1250 is agreeable to everybody, I'd be

11 supportive of that.

12 CHAIRPERSON LLOYD: That said, this time of
13 night, that seems a good number.

14 Now, then I think the question came up on the
15 match. We need to talk about that and the allocation of
16 buses.

17 BOARD MEMBER HUGH FRIEDMAN: What would be the
18 implications of changing from 25 percent to something
19 less, 20 percent, you know, we always buy things at 10
20 percent down and 20 percent down.

21 EXECUTIVE DIRECTOR KENNY: We were looking at
22 essentially roughly every five percent would make a
23 difference of 20 buses. And so right now we're at a 25
24 percent match which totals 100 buses. If it drops to a 20
25 percent match, we would be down to -- essentially we would

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

403

1 lose 20 buses, so we'd have only an additional 80 buses in
2 terms of the match procurement.

3 If we dropped to 15 percent, then what we'd do is
4 we'd lose 40 buses and down the line. If we dropped to 10
5 percent, we'd lose 60 buses.

6 BOARD MEMBER HUGH FRIEDMAN: And About every ten
7 percent is about -- or every five percent is about \$5,000
8 to \$7,000?

9 EXECUTIVE DIRECTOR KENNY: No, I was looking at
10 basically essentially from a more aggregate standpoint,

11 which was that the 25 percent gave us roughly an
12 additional 100 buses where we are right now.

13 BOARD MEMBER HUGH FRIEDMAN: Well, but if an
14 average bus is \$100,000 to \$130,000 and we're asking them
15 to come up -- am I wrong?

16 EXECUTIVE DIRECTOR KENNY: No, you're correct.

17 BOARD MEMBER HUGH FRIEDMAN: They come up with
18 five percent of that, then that's 5,000 to 7,000.

19 EXECUTIVE DIRECTOR KENNY: That's correct.

20 BOARD MEMBER HUGH FRIEDMAN: And so ten percent
21 would be 10,000 to 13,000.

22 EXECUTIVE DIRECTOR KENNY: That's correct with
23 the cap being at 25.

24 BOARD MEMBER HUGH FRIEDMAN: And to the extent
25 that they're going to -- they have the opportunity to sell

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

404

1 those buses or trade them for something, if there's
2 somewhere in this State a more polluting bus, is that a
3 way to raise some funds toward the match for the better
4 bus?

5 EXECUTIVE DIRECTOR KENNY: Well, the difficulty
6 there would be if they sold the bus and we were going to
7 use it toward the match, we'd have to figure out some way
8 of tracking that in terms of actually counting and I think
9 that would be very difficult to figure out, especially as
10 we're talking about rolling buses down before we

11 ultimately get to one that's crushed.

12 BOARD MEMBER HUGH FRIEDMAN: We do make sure that
13 we trace it, so that for every bus that is purchased under
14 this program, there is a colder more-emitting bus that is
15 out of action permanently?

16 EXECUTIVE DIRECTOR KENNY: Yeah, we do want to
17 see that.

18 BOARD MEMBER HUGH FRIEDMAN: I'm just wondering
19 how we might accommodate the concern, especially in some
20 of the poorer districts.

21 CHAIRPERSON LLOYD: I think I would echo that.
22 And clearly from what we heard earlier, I think it's the
23 Governor's concern about providing those buses, and, at
24 least, giving those districts the opportunity to
25 participate in the program and they shouldn't be doing it

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

405

1 for lack of funds. Can we have a hardship provision or
2 something in there?

3 EXECUTIVE DIRECTOR KENNY: We can. In terms of
4 determining what a hardship would be.

5 BOARD MEMBER BURKE: Mr. Chairman, I'm confused.
6 Now if we go with \$12,500,000 for new bus purchase.

7 BOARD MEMBER HUGH FRIEDMAN: Plus 25 for the CNG.

8 BOARD MEMBER BURKE: Well, no, but if we go for
9 12,500 for the new Green Diesel buses and we move the
10 co-pay, for lack of a better term, to 10,000, how many

11 buses are we talking about now?

12 EXECUTIVE DIRECTOR KENNY: That translated
13 roughly to 60 buses.

14 BOARD MEMBER BURKE: I mean, we're not doing
15 anything here. I mean, you know, I've stayed all day. I
16 could have stayed at work and maybe bought 60 buses.

17 (Laughter.)

18 EXECUTIVE DIRECTOR KENNY: Dr. Burke, just to
19 make sure I was clear --

20 BOARD MEMBER BURKE: I'm talking about this 12
21 and a half million dollars that's been --

22 BOARD MEMBER RIORDAN: You have to add it to the
23 other part of the equation.

24 BOARD MEMBER BURKE: Okay. So let me add it to
25 the other part of the equation.

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406

1 BOARD MEMBER HUGH FRIEDMAN: I'm not suggesting
2 that we across the Board cut the match. The match, I
3 think, is a good idea to leverage and expand the program.
4 But there are districts that may have hardship. I don't
5 know how to define that. We've been struggling a little
6 bit with that. I heard several of our colleagues. And
7 I'm just wondering before we -- if there is some way we
8 can accommodate need.

9 EXECUTIVE DIRECTOR KENNY: I think what we were
10 looking at, though, is if you look at the CNG That The CNG

11 That roughly 208 buses, is what we thought the \$25 million
12 would buy us. If you're looking at 12 and a half million
13 dollars on the diesel side for the new buses, that's going
14 to buy us roughly 167 buses, approximately.

15 And so what we're talking about is a total there,
16 and this is assuming a 25 percent match, is roughly 375
17 buses. And so as you reduce the match for hardship
18 purposes, for example, on the pre-77s as Mr. McKinnon
19 suggested, if you drop it down to say a 20 percent
20 requirement, that 20 percent reduction would cost 20
21 buses. Excuse me that five percent reduction would cost
22 20 buses. So we would drop from 375 down to roughly 355.
23 And each time --

24 BOARD MEMBER HUGH FRIEDMAN: That's assuming you
25 did that across the Board?

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407

1 EXECUTIVE DIRECTOR KENNY: Assuming maximum --
2 and that's assuming a maximum use of that money for those
3 buses.

4 CHAIRPERSON LLOYD: But that also assumes that
5 supposing Dr. Burke decides that he's got money there and
6 he can support buses in his district to make up that five,
7 so the numbers may not change.

8 EXECUTIVE DIRECTOR KENNY: You're absolutely
9 correct. I'm giving the most conservative possible
10 outcome here.

11 BOARD MEMBER RIORDAN: But those who are in, say,
12 the larger air pollution control districts have more money
13 flowing to them with other, you know, means by which they
14 can fund this. Little, you know, air pollution control
15 districts have zero, almost zero, of those discretionary
16 monies, because they don't have the, you know, the
17 population to support it.

18 Do you have to come up with the formula today,
19 but maybe we've come to the point where we've divided the
20 pot, it seems as though there's a consensus. Maybe what
21 we would ask the staff is to think about it. I think it's
22 a very hard difficult decision to come to quickly, but
23 maybe there is a hardship category that we could carve
24 out.

25 If you really think about it, if you take the --

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

408

1 I'll play the devil's advocate for a moment. For \$25,000
2 for some school district to get a wonderful new bus,
3 that's peanuts, it's just peanuts. I mean it's a
4 mid-sized car. So that is a real -- I hate to disturb --
5 I hate to disturb that balance. It's our hardship cases
6 that we want to accommodate and maybe there's a way to do
7 that.

8 EXECUTIVE DIRECTOR KENNY: The one way we were
9 actually thinking about was Mr. McKinnon's a suggestion
10 which is that it's a pre-77 bus, then the match is a lower

11 match. And what that does is does really two things. It
12 incentivizes getting rid of the pre-77s to a certain
13 degree. And then what it also does is that there's an
14 assumption that a poorer school district would have more
15 pre-77s and so we would be helping the poorer districts by
16 reducing the match associated with them.

17 My question would be, you know, how much of a
18 reduction in the match should there be if you accept both
19 those assumptions.

20 BOARD MEMBER RIORDAN: I think those pre-77s are
21 all going to come out.

22 BOARD MEMBER McKINNON: I floated ten percent
23 earlier and maybe that was a little extreme. So why don't
24 I float 15. I think I can't think of a simple way to
25 formulate this. I mean we're going to hand the Energy

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

409

1 Commission this money, lucky them.

2 (Laughter.)

3 BOARD MEMBER McKINNON: So I guess what I would
4 propose is 15 percent instead of 25 percent, if it's a
5 pre-77 bus.

6 BOARD MEMBER BURKE: What about this, Mr.
7 McKinnon. Say we put 20 million in retrofit and put five
8 million and give buses away to hardship districts?

9 CHAIRPERSON LLOYD: That would come back to the
10 same question, how do you define hardship?

11 BOARD MEMBER BURKE: How are you going to on
12 pre-1977?

13 BOARD MEMBER McKINNON: Yeah, I'll tell you the
14 mix between new diesel and CNG That significantly with
15 what I thought we did come to consensus at. If we're
16 going to fiddle with that some more, then I don't think we
17 want to do that.

18 BOARD MEMBER BURKE: How did it change, I missed
19 that?

20 BOARD MEMBER McKINNON: We did the 12,5, 12,5
21 right?

22 BOARD MEMBER BURKE: But that's for diesel
23 retrofit?

24 BOARD MEMBER McKINNON: It's diesel retrofit and
25 new diesel, the mix. So if we increase retrofit to 20,

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

410

1 it's got to come from somewhere.

2 BOARD MEMBER BURKE: Well, it was coming from
3 that other 12,5.

4 (Laughter.)

5 BOARD MEMBER McKINNON: You don't want to replace
6 pre-1977 buses with retrofit. We want to replace the
7 buses.

8 BOARD MEMBER BURKE: That's what I said. Take a
9 pool of money, whatever the number, and wherever we take
10 it, and I was just kidding when I said take it -- I wasn't

11 kidding.

12 (Laughter.)

13 BOARD MEMBER BURKE: But, you know, if you took a
14 pool of money and said, hey, you know, we got a lot of
15 agricultural, rural areas which are in desperate need,
16 have small populations, it's just like Ms. Riordan said,
17 they have a small population-base. The large districts
18 have more access to money, no question about that. But we
19 have larger problems most of the time and that's why we
20 have it.

21 But say you took a pot of money, say \$5 million,
22 and you said okay, in those rural areas the max is going
23 to be a thousand dollars or ten thousand or five thousand
24 or whatever, whatever number you pick. Then you're really
25 making a significant difference to a rural school

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

411

1 district, because they can really afford that.

2 And in the areas where they have the worst air
3 conditions, then a retrofit and you get a maximum bus
4 impact in those areas. And I'm willing to reopen the CNG
5 That

6 BOARD MEMBER DeSAULNIER: Please, God, no.

7 (Laughter.)

8 BOARD MEMBER McKINNON: Here we go. I'm looking
9 at some of the school districts that are a hundred percent
10 pre-77, and the Grossmont School District that's fairly

11 urban anymore.

12 BOARD MEMBER BURKE: We've got some right in the
13 South Coast.

14 BOARD MEMBER McKINNON: Del Mar.
15 Anyway.

16 BOARD MEMBER BURKE: That's not poor now. We're
17 talking about poor.

18 BOARD MEMBER McKINNON: I would argue that we
19 reached a consensus on the mix and, you know, I don't know
20 if I want to reopen that.

21 CHAIRPERSON LLOYD: I like the idea that maybe
22 someone mentioned earlier that is it possible that as I
23 say we quit when the going is good here and ask staff
24 maybe to take a month there to look at this whole issue of
25 match and how we address the hardship cases? Would that

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

412

1 make any sense?

2 EXECUTIVE DIRECTOR KENNY: We can do that or we
3 could essentially take the other suggestion that was put
4 forward of reducing the match on the pre-77s with the
5 assumption being that we'd probably end up addressing the
6 hardship cases by implication.

7 CHAIRPERSON LLOYD: But that's reducing, not
8 eliminating.

9 EXECUTIVE DIRECTOR KENNY: Exactly. Right now,
10 we're at a 25 percent match. What I was hearing was

11 essentially a reduction in that match down to 15 percent
12 and it's a pre-77 bus. Then what ends up happening
13 essentially, is that a rural district that's replacing
14 that bus is essentially going to buy a new bus for roughly
15 \$15,000.

16 BOARD MEMBER HUGH FRIEDMAN: The only problem
17 I've got with that, Mr. Kenny, is according to this, the
18 Grossmont Union High School District, I assume that's down
19 in Mount Helix, Grossmont, that's a fairly affluent area,
20 it's somewhat mixed, in southern California, near San
21 Diego, if that's the one that I'm familiar with, it's got
22 82.61 percent pre-77 in that school district. Out of 23
23 school buses, 82.61 percent are pre-77.

24 And I would like to think that through a few bake
25 sales and so forth, they could raise enough money to make

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413

1 some matches. I know a lot of people that live in that
2 district.

3 EXECUTIVE DIRECTOR KENNY: One other suggestion
4 that the Board could consider is essentially a reduction
5 in the match to 15 percent in a situation where it's a
6 pre-77 bus and the CEC who is administering the
7 distribution of the new bus money makes the determination
8 that, in fact, the school district does have a hardship of
9 some type and we identify that as essentially --

10 BOARD MEMBER RIORDAN: That's a great idea, Mr.

11 Kenny.

12 (Laughter.)

13 EXECUTIVE DIRECTOR KENNY: I'm just trying to
14 move us along. And we could provide that direction from
15 the Board to the CEC.

16 CHAIRPERSON LLOYD: Can you use those words
17 again?

18 EXECUTIVE DIRECTOR KENNY: Well, what I would
19 suggest is that we go with the pre-77 reduction in the
20 match down to 15 percent and the additional requirement
21 that the school district, for example, be below the 50
22 percentile line in determining of maybe the dollars
23 available per capita or something like that.

24 I don't know the exact language, but the key
25 direction by the Board, which I'm suggesting, would be

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414

1 that we are looking at the poorer school districts and we
2 could identify that in some dollar fashion.

3 CHAIRPERSON LLOYD: Yes. And that we would work
4 with the CEC That that?

5 EXECUTIVE DIRECTOR KENNY: We would just simply
6 give CEV that direction that that's the way that this
7 Board has asked them to distribute the money for the new
8 buses.

9 CHAIRPERSON LLOYD: And then would we -- let them
10 do it, but it would be nice also to have ARB staff also

11 agree to that.

12 EXECUTIVE DIRECTOR KENNY: That would be fine.

13 CHAIRPERSON LLOYD: Say when CEC That up That
14 that, ARB is involved -- staff is involved with that
15 decision as well.

16 EXECUTIVE DIRECTOR KENNY: What we could do, if
17 the Board wishes, is that we could essentially sit down
18 with the CEC That That out some kind of a calculation
19 methodology which does reflect what the poor 50 percent of
20 the school districts in the state are so that we have
21 identified them and those are the ones that get the
22 reduction in the match.

23 BOARD MEMBER RIORDAN: And I think your school
24 people that have been here today can give you it, because
25 I did hear a couple of suggestions that I thought would

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415

1 work, but because of the constraints of time, you can't
2 really explore them. But I'll bet there's a little bit of
3 a system that gives you some guidelines for determining
4 which district might have a quote "hardship" case.

5 EXECUTIVE DIRECTOR KENNY: I think you're correct
6 and I don't think this would be very hard to identify.

7 CHAIRPERSON LLOYD: And I think many of the
8 school districts are back there, and I see Steve still
9 there. So I think they can hear that, so good suggestion.
10 So I think is that -- so the form, as you know, we have a

11 resolution before us.

12 BOARD MEMBER D'ADAMO: Another issue.

13 I thought you were just on the match issues.

14 That should be easy to dispose of. I think that we ought

15 to include in the resolution some statement of need for

16 the future, and I don't know how we assess that. There's

17 been a lot of testimony, a hundred million next year.

18 Maybe it should go five years. I think we need to go

19 beyond just conjecture and have something based upon any

20 data that's been collected, so that it can be utilized by

21 whoever in the coming months.

22 BOARD MEMBER DeSAULNIER: Maybe the Legislation

23 can be written to give this Board less discretion.

24 (Laughter.)

25 BOARD MEMBER RIORDAN: You may regret that.

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416

1 BOARD MEMBER HUGH FRIEDMAN: Well, as we all

2 know, the Administration is in the process of not only

3 dealing with energy issues statewide, but with beginning

4 to develop a budget. And I think the sooner we could

5 begin whatever process we want to initiate or get our

6 licks in, in terms of a follow-on appropriation for and

7 ensuring next year's purchases and retrofits and the like.

8 And yeah we ought to urge the Legislature to see if they

9 can do it this time.

10 CHAIRPERSON LLOYD: Well, maybe a hundred million

11 is a good round number.

12 BOARD MEMBER McKINNON: For next year.

13 BOARD MEMBER D'ADAMO: But I was really hoping
14 that it would be based upon some information, and
15 hopefully the staff knows what the need would be, how much
16 would it cost, how long would it take?

17 BOARD MEMBER HUGH FRIEDMAN: You've got to have a
18 rationale. For example, what would it take to get rid of
19 all pre-77 buses that don't meet safety standards, that
20 are the most polluting, and giving effect to what
21 hopefully will occur under this existing appropriation?
22 That might be one way to quantify it.

23 EXECUTIVE DIRECTOR KENNY: We can put that
24 together.

25 CHAIRPERSON LLOYD: So we would include that in

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417

1 the resolution, yes. And I guess the number to come up
2 with later.

3 Yes.

4 BOARD MEMBER McKINNON: I want to say the
5 obvious. I thank God I didn't have to work on this for
6 the last year. And I want to say thank you to the staff
7 that had to do this balancing act. And I'm sure everybody
8 feels this way, but thanks.

9 CHAIRPERSON LLOYD: I certainly would echo that.
10 I know many of the staff have been working on other issues

11 here and I think it's tremendous when we hear people
12 coming up today to congratulate the staff for all the hard
13 work you've put in.

14 And we understand also very well what you put
15 together here.

16 So I think we have a resolution. I think we've
17 got the ingredients and hopefully you've got the
18 ingredients there of the fuel split. Then we've got on
19 the diesel side, we've got 12 and a half million for
20 traps, 12 and a half million for new green diesel. And
21 then we're talking about the match is going to come back
22 to CEC That then the resolution including the
23 recommendation for continued funding.

24 BOARD MEMBER BURKE: So moved.

25 BOARD MEMBER RIORDAN: Second.

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418

1 CHAIRPERSON LLOYD: All in favor say aye?

2 (Ayes.)

3 CHAIRPERSON LLOYD: Nay?

4 (Nayes.)

5 CHAIRPERSON LLOYD: Well, thank you very much
6 indeed. It's been a very long day. I appreciate staff
7 all you've done and stayed together.

8 Just a reminder before we adjourn this meeting.

9 BOARD MEMBER RIORDAN: We start at 8:30, Mr.
10 Chairman.

11 attorney for any of the parties to said meeting nor in any
12 way interested in the outcome of said meeting.

13 IN WITNESS WHEREOF, I have hereunto set my hand
14 this 29th day of December, 2000.

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JAMES F. PETERS, CSR, RPR

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