

MEETING  
STATE OF CALIFORNIA  
AIR RESOURCES BOARD

ZOOM PLATFORM

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY  
BYRON SHER AUDITORIUM  
1001 I STREET  
SACRAMENTO, CALIFORNIA

THURSDAY, SEPTEMBER 25, 2025

9:06 A.M.

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

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## APPEARANCES

### BOARD MEMBERS:

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Hector De La Torre

John Eisenhut

Dean Florez (Remote)

Eric Guerra

Lynda Hopkins

Patricia Lock Dawson (Remote)

Dawn Ortiz-Legg

Tania Pacheco-Werner, PhD

Cliff Rechtschaffen

Susan Shaheen, PhD

Diane Takvorian

### STAFF:

Steve Cliff, PhD, Executive Officer

Edie Chang, Deputy Executive Officer, Planning, Freight & Toxics

Shannon Dilley, Chief Counsel

Chanell Fletcher, Deputy Executive Officer, Environmental Justice

Christopher Grundler, Deputy Executive Officer, Mobile Sources and Incentives

Edna Murphy, Deputy Executive Officer, Internal Operations

APPEARANCES CONTINUED

STAFF:

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Rajinder Sahota, Deputy Executive Officer, Climate Change and Research

Courtney Smith, Principal Deputy Executive Officer

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Tony Brasil, Chief, Transportation and Clean Technology Branch, MSCD

Michelle Buffington, Division Chief, MSCD

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Michael FitzGibbon, Branch Chief, Atmospheric Science and Climate Strategies Branch, RD

Chris Franceschi, Air Resources Supervisor, In-Use Control Measures Section, MSCD

Brandon Kline, Senior Attorney, Legal Office

Toshihiro Kuwayama, PhD, Branch Chief, Policy, Planning, and Administrative Branch, RD

Dillon Miner, Staff Air Pollution Specialist, Industrial Strategies Division

Nehzat Motallebi, PhD, Lands and Climate Science Section, RD

Molly Munz, Air Pollution Specialist, In-Use Control Measures Section, MSCD

Claudia Nagy, Senior Attorney, Legal Office

Lucina Negrete, Assistant Division Chief, MSCD

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STAFF:

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Elizabeth Scheehle, Division Chief, RD

ALSO PRESENT:

Randa AbuShaban, Orange County Sanitation District

Susie Berlin, Northern California Power Agency

Drew Bessinger, City of Clovis Councilmember

Sean Bigley, City of Roseville

Nick Blair, Association of California Water Agencies

Thomas Bradley, PhD, Colorado State University

Maurissa Brown, Greenlining Institute

Anthony Budicin, Eastern Municipal Water District

Greg Bundesen, Sacramento Suburban Water District

Kimberly Burr

Justin Caporusso, Mountain Counties Water Resources Association

Nick Chiappe, California Trucking Association

Ellis Chiu, Los Angeles Department of Water and Power

Damon Conklin, League of California Cities

Casey Dunn, Southern California Edison

Mary Elise Conzelmann, Citrus Heights Water District

Elisabeth de Jong, Southern California Public Power Authority

APPEARANCES CONTINUED

ALSO PRESENT:

Sarah Deslauriers, California Association of Sanitation Agencies

Syrus Devers, De Luz Community Services District

Evan Edgar, California Compost Coalition

Sean Edgar, Clean Fleets

Joshua Elliott, Renaissance Philanthropy

Noam Elroi, CR&R Environmental Services

Raul Fletes, Los Angeles Department of Water and Power

Harmony Gates, TRC Clean Transportation Solutions

Tom Greene, Rancho California Water District

Andy Haussler, City of Clovis

Danae Hernandez-Cortes, PhD, Arizona State University

Moses Huerta

Kasha Hunt, California Bus Association

Greg Hurner

Steve Jepsen, Clean Water SoCal

Ryan Kenny, Clean Energy

Alex Kozak, Reflective

Karen Lange, California Animal Welfare Association

Katherine Larson, Sacramento Municipal Utility District

Julia Levin, Bioenergy Association of California

Bill Magavern, Coalition for Clean Air

Jason Maruca, Burbank Water and Power

APPEARANCES CONTINUED

ALSO PRESENT:

Sakereh Maskal, Pesticide Action & Agroecology Network,  
Californians for Pesticide Reform

Noelle Mattock, City of Roseville

John McNamara, CR&R Environmental Services

Matt Miyasato, PhD, First Element Fuel

Gracyna Mohabir, California Environmental Voter

Mark Neuburger, California State Association of Counties

Warisa Niizawa, Los Angeles County Sanitation Districts

Peter Okurowski, California Council for Environmental and  
Economic Balance

Antonio Ortega, Imperial Irrigation District

Edward Parson, University of California, Los Angeles

Tony Pastore, Terra Verde Energy

Curtis Paxton, Las Gallinas Valley Sanitary District

Julie Pullen

Priscilla Quiroz, California Municipal Utilities  
Association

Jesus Martinez Ramirez, Santa Clarita Valley Water

Laura Renger, California Electric Transportation Coalition

Nicole Rice, California Renewable Transportation Alliance

Laura Rodarte, Placer County Water Agency

David Rothbart, Clean Water SoCal

Nicholas Schneider, Georgetown Divide Public Utility  
District

APPEARANCES CONTINUED

ALSO PRESENT:

Jake Schwartz, Chesapeake Climate Action Network

Craig Segall

Mikhael Skvarla, California Hydrogen Coalition

Muriel Strand

Joe Sturges, Inland Empire Utilities Agency

Claire Sullivan, California Public Policy Group

Anthony Tannehill, California Special Districts  
Association

Kimberly Thorner, Olivenhain Municipal Water District

Alison Torres, Clean Water SoCal

Charles Watson, West Valley Water District

Sam Wilson, Union of Concerned Scientists

Damon Wyckoff, Calaveras County Water District

<u>INDEX</u>	<u>PAGE</u>
Call to Order	1
Roll Call	1
Opening Remarks	3
Item 25-6-1, 25-6-2, 25-6-3, 25-6-3, 25-6-4, 25-6-5	
Chair Randolph	7
Executive Officer Cliff	7
Kimberly Burr	11
25-6-1 Motion	12
Vote	12
25-6-2 Motion	13
Vote	13
25-6-3 Motion	14
Vote	14
25-6-4 Motion	16
Vote	16
25-6-5 Motion	17
Vote	17
Item 25-6-6	
Chair Randolph	18
Executive Officer Cliff	19
Thomas Bradley, PhD	20
Danae Hernandez-Cortes	22
Motion	23
Vote	24
Item 25-6-7	
Chair Randolph	25
Executive Officer Cliff	26
Staff Presentation	28
Julia Levin	48
Evan Edgar	50
Jake Schwartz	52
Alex Kozak	54
Sakereh Maskal	55
Kimberly Burr	57
Julie Pullen	59
Craig Segall	60
Joshua Elliott	61
Edward Parson	62
Board Discussion and Vote	63
Motion	85
Vote	85



INDEX CONTINUED

	<u>PAGE</u>
Item 25-6-8	
Chair Randolph	86
Executive Officer Cliff	89
Staff Presentation	91
Matt Miyasato, PhD	103
Nick Blair	105
Sarah Deslauriers	106
Steve Jepsen	109
Damon Wyckoff	110
Priscilla Quiroz	111
Susie Berlin	113
Elisabeth de Jong	115
Justin Caporusso	117
Noelle Mattock	118
Syrus Devers	120
Antonio Ortega	122
Nicholas Schneider	123
Nick Chiappe	125
Mary Elise Conzelmann	126
Evan Edgar	128
Laura Rodarte	129
Katherine Larson	131
Julia Levin	133
Bill Magavern	134
Sean Edgar	136
Anthony Tannehill	138
Charles Watson	139
Casey Dunn	140
Noam Elroi	141
Mark Neuburger	142
Jesus Martinez Ramirez	144
Karen Lange	146
Mikhael Skvarla	148
Nicole Rice	148
Closed Session	150
Afternoon Session	151
Item 25-6-8 (continued)	
David Rothbart	152
Anthony Budicin	153
Drew Bessinger	155
Kasha Hunt	156
Maurissa Brown	158
Joe Sturges	160

INDEX CONTINUED

	<u>PAGE</u>
Item 25-6-8 (continued)	
Curtis Paxton	161
Greg Bundesen	163
Ellis Chiu	164
Randa AbuShaban	165
Kimberly Thorner	167
John McNamara	169
Laura Renger	170
Claire Sullivan	172
Warisa Niizawa	173
Tom Greene	174
Tony Pastore	175
Peter Okurowski	177
Damon Conklin	178
Alison Torres	180
Sam Wilson	181
Raul Fletes	183
Sean Bigley	185
Andy Haussler	187
Gracyna Mohabir	188
Ryan Kenny	190
Jason Maruca	191
Harmony Gates	192
Staff Response to Comments	193
Board Discussion and Q&A	197
Motion	264
Vote	264
Retirement Presentation to Chair Randolph	266
Public Comment	
Greg Hurner	281
Evan Edgar	283
Muriel Strand	284
Moses Huerta	285
Adjournment	287
Reporter's Certificate	288

PROCEEDINGS

CHAIR RANDOLPH: Okay. Good morning, everyone.  
The September 25th, 2025 public meeting of the California  
Air Resources Board will come to order. Board Clerk, will  
you please call the roll.

BOARD CLERK FRENCH: Dr. Balmes.

BOARD MEMBER BALMES: Here.

BOARD CLERK FRENCH: Mr. De La Torre.

Mr. Eisenhut.

BOARD MEMBER EISENHUT: Here.

BOARD CLERK FRENCH: Senator Florez.

BOARD MEMBER FLOREZ: Senator Florez here.

BOARD CLERK FRENCH: Mr. Gloria.

Mr. Guerra.

BOARD MEMBER GUERRA: Here.

BOARD CLERK FRENCH: Ms. Hopkins.

BOARD MEMBER HOPKINS: Present.

BOARD CLERK FRENCH: Assemblymember Jackson?

Mr. Kracov.

Ms. Ortiz-Legg.

BOARD MEMBER ORTIZ-LEGG: Here.

CHAIR RANDOLPH: Board Member Kracov is not on  
the Board anymore. I wonder if you have an old --

BOARD MEMBER RECHTSCHAFFEN: That's no excuse for  
missing the meeting.

1 (Laughter.)

2 BOARD CLERK FRENCH: Ms. Ortiz-Legg.

3 BOARD MEMBER ORTIZ-LEGG: Here.

4 BOARD CLERK FRENCH: Dr. Pacheco-Werner.

5 BOARD MEMBER PACHECO-WERNER: Here.

6 BOARD CLERK FRENCH: Mr. Rechtschaffen.

7 BOARD MEMBER RECHTSCHAFFEN: Here.

8 BOARD CLERK FRENCH: Dr. Shaheen.

9 BOARD MEMBER SHAHEEN: Here.

10 BOARD CLERK FRENCH: Senator Stern?

11 Ms. Takvorian.

12 Chair Randolph.

13 CHAIR RANDOLPH: Here.

14 BOARD CLERK FRENCH: Madam Chair, we have a  
15 quorum.

16 CHAIR RANDOLPH: Excellent. Thank you very much.

17 BOARD MEMBER LOCK DAWSON: Hi. Excuse me. I  
18 think you do have an old list I am no Kracov.

19 CHAIR RANDOLPH: Oh, sorry, Mayor.

20 BOARD MEMBER LOCK DAWSON: Hi. My name didn't  
21 get called and I think I'm probably Gideon Kracov on that  
22 list. So I am here.

23 BOARD CLERK MOORE: Yes. I apologize. I'm sorry  
24 for that.

25 CHAIR RANDOLPH: All right. Thank you, Mayor

1 Lock Dawson. Okay. We will start with our housekeeping  
2 items before get started. We conducting today's meeting  
3 in person, as well as offering remote options for public  
4 participation both by phone and in Zoom. Anyone who  
5 wishes to testify in person should fill out a  
6 request-to-speak card available in the foyer outside the  
7 Board room. Please turn it into Board assistant prior to  
8 the commencement of the item. If you are participating  
9 remotely, you will raise your hand in Zoom or dial pound  
10 two, if calling in by phone. The clerk will provide  
11 further details regarding how public participation will  
12 work in a moment.

13 For safety reasons, please note the emergency  
14 exit to the rear of the room through the foyer. In the  
15 event of a fire alarm, we required to evacuate this room  
16 immediately and go down the stairs to the lobby and out of  
17 the building. When the "All Clear" signal is given, we  
18 will return to the auditorium and resume the meeting.

19 A closed captioning feature is available for  
20 those of you joining us in the Zoom environment. In order  
21 to turn on subtitles, please look for a button labeled  
22 "CC" at the bottom of the Zoom window as shown in the  
23 example on the screen now. I would like to take this  
24 opportunity to remind everyone to speak clearly and from a  
25 quiet location, whether you are joining us in Zoom or

1 calling in by phone.

2 Interpretation services will be provided today in  
3 Spanish for both in-person and Zoom attendees. If you are  
4 joining us using Zoom, there is a button labeled  
5 "Interpretation" on the Zoom screen. Click on that  
6 interpretation button and select Spanish to hear the  
7 meeting in Spanish. If you are joining us here in person  
8 and would like to listen to the meeting in Spanish, please  
9 speak to a Board assistant and they will provide you with  
10 further instructions. I want to remind all of our  
11 commenters to speak slowly and pause intermittently to  
12 allow the interpreters the opportunity to accurately  
13 interpret your comments.

14 THE INTERPRETER: Good morning, Madam Chair and  
15 Board members. This message will be provided in Spanish.

16 (Interpreter translated in Spanish).

17 THE INTERPRETER: Thank you.

18 CHAIR RANDOLPH: Thank you.

19 I will now ask the Board Clerk to provide more  
20 details regarding public participation.

21 BOARD CLERK FRENCH: Thank you, Chair Randolph.

22 Good morning, everyone. I will provide  
23 additional information on public participation for today's  
24 meeting.

25 We will first call in-person commenters who have

1 turned in a request-to-speak card and then call commenters  
2 who are joining us remotely. If you are joining us  
3 remotely and wish to make a verbal comment, you must be  
4 using Zoom webinar or calling in by phone. If you are  
5 watching in the webcast, but you wish to comment remotely,  
6 please register for the Zoom webinar or call in.  
7 Information for both can be found on the public agenda  
8 today's meeting.

9 To make a verbal comment, we'll be using the  
10 raise hand feature in Zoom. If you wish to speak on a  
11 Board item please virtually raise your hand as soon as the  
12 item has begun to let us know you wish to speak. If you  
13 are using a computer a tablet, there is a raise hand  
14 button and if you are calling in on the telephone, please  
15 dial pound two to raise your hand.

16 When the comment period begins, the order of  
17 commenters is determined by who raises their hand first.  
18 We will call each commenter by name and will activate each  
19 commenter's audio when it's their turn to speak. For  
20 those calling in, we will identify you by the last three  
21 digits of your phone number. We will announce the next  
22 three or so commenters in the queue, so you're ready to  
23 testify when we come to you. Please note, your testimony  
24 will not appear by video. For all commenters, please  
25 state your name for the record before you speak. This is

1 especially important for those calling in by phone.

2           Each commenter will have a time limit of two  
3 minutes, although this may change at the Chair's  
4 discretion. During public testimony, you will see a timer  
5 on the screen. For those calling in by phone, we will let  
6 you know when you have 30 seconds left and when your time  
7 is up. For anyone giving verbal comments today in  
8 Spanish, please indicate so at the beginning of your  
9 testimony and our interpreter will assist you. During  
10 your comment, please follow any instructions the  
11 interpreter provides. Please note, your time will be  
12 doubled if you require Spanish interpretation.

13           If you have any additional remarks regarding  
14 other topics, please sign up to speak during the open  
15 public comment period, which will take place at the  
16 conclusion of this meeting. To submit written comments,  
17 please visit CARB's "Comment on Board Items" box on the  
18 public agenda on our website for links to submit your  
19 comment. Written comments will be accepted until the  
20 Chair closes the record.

21           If you experience any technical difficulties,  
22 please call (805)772-2715 so an IT person can assist.

23           Thank you. I'll turn the microphone back to  
24 Chair Randolph.

25           CHAIR RANDOLPH: Thank you very much.



1           For our first agenda item, we have five proposed  
2 research contracts on our consent calendar today. I will  
3 ask the Executive Officer to give a brief summary for each  
4 contract, then we will hear from the public and then we  
5 will vote on each contract.

6           If you are here with us in the room and wish to  
7 comment on all or one of these research contracts, please  
8 fill out a request to speak card as soon as possible and  
9 submit it to a Board assistant. If you are joining us  
10 remotely and wish to comment, please click the "Raise  
11 Hand" button or dial pound two now. We will call on both  
12 in-person and remote commenters when we get to the public  
13 comment portion of this item.

14           The first item is a contract with UC Berkeley  
15 that must comply with Board approval requirements in  
16 Government Code section 1091. Therefore, Board Member  
17 Shaheen will abstain for the -- from the vote on the first  
18 item only, because she is affiliated with UC Berkeley.

19           Board Member Shaheen is free to vote on the  
20 remaining four contracts.

21           Dr. Cliff, would you please summarize these  
22 items.

23           EXECUTIVE OFFICER CLIFF: Thank you, Chair  
24 Randolph and good morning. Our first proposed research  
25 contract is with UC Berkeley, as you mentioned, title,

1 "Laboratory and Community Evaluation of Advanced Portable  
2 Air Cleaners and HVAC filters for Indoor Gas Pollutants."  
3 This study will evaluate the effectiveness and costs of  
4 different air cleaning technologies at removing odor  
5 causing chemicals, VOCs and nitrogen dioxide from indoor  
6 air spaces. The results can support efforts to protect  
7 residents, who are experiencing poor indoor air quality.  
8 Indoor air quality can be influenced by both indoor  
9 sources, such as appliances, and outdoor sources, such as  
10 wildfires.

11 Our second proposed research contract is with UC  
12 Irvine, titled, "Improving Estimates of CO2 and Methane  
13 Emissions from Southern California Coastal Wetlands and  
14 Biogenic VOC Emission Estimates from All California  
15 Landscapes." The objective of this study is to measure  
16 carbon dioxide, methane and soil carbon rate changes in  
17 Southern California coastal wetlands. It will also  
18 measure biogenic volatile organic compound emissions to  
19 improve vegetation emission factors. The results can be  
20 used to support future Scoping Plan and Natural and  
21 Working Lands carbon inventory updates and inform the  
22 State Implementation Plan.

23 Our third proposed research contract is with UC  
24 Davis titled, "Accelerated Evaluation of Ambient PM2.5 in  
25 Regions Affected by the 2024 National Ambient Air Quality

1 Standards Update." This project will expand CARB's high  
2 resolution PM2.5 measurement efforts using advanced  
3 Aerosol Chemical Speciation Monitors in the nonattainment  
4 areas throughout California to address the Environmental  
5 Protection Agency's new annual PM2.5 National Ambient Air  
6 Quality Standards criteria -- the criteria of nine  
7 microgram per cubic meter. The results can be used to  
8 support the State Implementation Plans to guide targeted  
9 mitigation strategies.

10 Our fourth proposed research contract is with UC  
11 Davis titled, "Assessing Long-Term Health Effects of  
12 Wildfire Smoke Exposure: Insights from an Established  
13 Birth Cohort Study." This project will leverage existing  
14 data and the associated biospecimens to investigate the  
15 long term health impacts associated with wildfire-related  
16 pollutants. The project will also explore differences by  
17 sociodemographic and neighborhood factors to evaluate  
18 wildfire-related health disparities. The results can be  
19 used to enhance CARB's health analyses, support the  
20 evaluation of wildfire risk reduction programs and inform  
21 public health messaging.

22 Our fifth and final proposed research contract is  
23 with UC Riverside titled, "Improving Commercial Cooking  
24 Emissions Estimates in California." This project will  
25 update the restaurant activity data to improve particulate

1 matter PM2.5 nitrogen oxides and volatile organic  
2 compounds emissions estimates. The study will conduct  
3 laboratory controlled studies to update and expand  
4 emission factors from various cooking devices for  
5 different cooking processes. The results can be used to  
6 refine emissions estimates from commercial cooking  
7 operations in California.

8 That concludes my summaries of the proposed  
9 research contracts.

10 Thank you.

11 CHAIR RANDOLPH: All right. Thank you. We will  
12 now hear from the public who raised their hand to speak on  
13 this item. At the beginning of your comment, please state  
14 the research contract on which you are commenting. Will  
15 the Board Clerk please call the commenters.

16 BOARD CLERK MOORE: Yes. Thank you.

17 We will call on one Zoom Commenter today. We  
18 currently have one Zoom commenter with his hand -- with  
19 their hand raised. I apologize in advance if I  
20 mispronounce your name.

21 Kimberly Burr. I have --

22 KIMBERLY BURR: Yes.

23 BOARD CLERK MOORE: I'm sorry. Yes. Can you  
24 please start your comment.

25 KIMBERLY BURR: Thank you so much. Good morning

1 everyone. I'm just curious about study number four that  
2 has to do with the smoke. I've been reading some studies  
3 that show that the smoke -- the CO2 related to forest  
4 fires is not as significant as some would think, and that  
5 there's a lot of emissions associated with logging,  
6 hauling, burning biomass, burning piles. And so, I would  
7 love to see that study just kind of do a comparison and  
8 look at the literature that's out there already and by  
9 independent scientists that speak to the short-term  
10 impacts of wildfire smoke, the relative significance of  
11 the CO2 that's associated with wildfires, and then what's  
12 the emissions associated with the -- you know, kind of the  
13 big State programs for thinning, prescribed burns, et  
14 cetera. Thank you very much.

15 BOARD CLERK MOORE: Thank you. That concludes  
16 our commenters for the research contract items -- or for  
17 this item.

18 CHAIR RANDOLPH: Okay. Thank you.

19 I will now close the record on these agenda items  
20 and we will go through each of these contracts. Do I have  
21 a motion and a second to approve the proposed research  
22 contract with UC Berkeley titled, "Laboratory and  
23 Community Evaluation of Advanced Portable Air Cleaners and  
24 HVAC Filters for Indoor Gas Pollutants," and have staff  
25 proceed with executing this contract? Please note Board

1 Member Shaheen has abstained from this item.

2 BOARD MEMBER BALMES: I'll move.

3 BOARD MEMBER EISENHUT: Second.

4 CHAIR RANDOLPH: All right, a motion. Second.

5 Board Clerk, will you please call the roll.

6 BOARD CLERK FRENCH: Dr. Balmes?

7 BOARD MEMBER BALMES: Yes.

8 BOARD CLERK FRENCH: Mr. Eisenhut?

9 BOARD MEMBER EISENHUT: Yes.

10 BOARD CLERK FRENCH: Senator Florez?

11 Senator Florez?

12 Senator Florez?

13 Mayor Gloria?

14 Mr. Guerra?

15 BOARD MEMBER GUERRA: Guerra aye.

16 BOARD CLERK FRENCH: Ms. Hopkins?

17 BOARD MEMBER HOPKINS: Yes.

18 BOARD CLERK FRENCH: Mrs. Lock Dawson?

19 BOARD MEMBER LOCK DAWSON: Aye.

20 BOARD CLERK FRENCH: Ms. Ortiz-Legg?

21 BOARD MEMBER ORTIZ-LEGG: Yes.

22 BOARD CLERK FRENCH: Dr. Pacheco-Werner?

23 BOARD MEMBER PACHECO-WERNER: Yes.

24 BOARD CLERK FRENCH: Mr. Rechtschaffen?

25 BOARD MEMBER RECHTSCHAFFEN: Yes.

1 BOARD CLERK FRENCH: Chair Randolph?

2 CHAIR RANDOLPH: Yes.

3 BOARD CLERK FRENCH: Madam Chair, the motion  
4 passes.

5 CHAIR RANDOLPH: Thank you. Do I have a motion  
6 and a second to approve the proposed research contract  
7 with UC Irvine titled, "Improving Estimates of CO2 and CH4  
8 Emissions from Southern California Coastal Wetlands and  
9 BVOC Emission Estimates from All California Landscapes,"  
10 and you have staff proceed with executing this contract?

11 BOARD MEMBER HOPKINS: So moved.

12 BOARD MEMBER EISENHUT: Second.

13 CHAIR RANDOLPH: Mr. Eisenhut.

14 Board Clerk will you please call the roll.

15 BOARD CLERK FRENCH: Dr. Balmes?

16 BOARD MEMBER BALMES: Yes.

17 BOARD CLERK FRENCH: Mr. Eisenhut?

18 BOARD MEMBER EISENHUT: Yes.

19 BOARD CLERK FRENCH: Senator Florez?

20 Mr. Guerra?

21 BOARD MEMBER FLOREZ: Aye.

22 BOARD MEMBER GUERRA: Aye.

23 BOARD CLERK FRENCH: Ms. Hopkins?

24 BOARD MEMBER HOPKINS: Yes.

25 BOARD CLERK FRENCH: Ms. Lock Dawson?

1 BOARD MEMBER LOCK DAWSON: Aye.

2 BOARD CLERK FRENCH: Ms. Ortiz-Legg?

3 BOARD MEMBER ORTIZ-LEGG: Yes.

4 BOARD CLERK FRENCH: Dr. Pacheco-Werner?

5 BOARD MEMBER PACHECO-WERNER: Yes.

6 BOARD CLERK FRENCH: Mr. Rechtschaffen?

7 BOARD MEMBER RECHTSCHAFFEN: Yes.

8 BOARD CLERK FRENCH: Dr. Shaheen?

9 BOARD MEMBER SHAHEEN: Aye.

10 BOARD CLERK FRENCH: Chair Randolph?

11 CHAIR RANDOLPH: Yes.

12 BOARD CLERK FRENCH: Madam Chair, the motion  
13 passes.

14 CHAIR RANDOLPH: Thank you.

15 Do I have a motion and a second to approve the  
16 proposed research contract with UC Davis titled,  
17 "Accelerated Evaluation of Ambient PM2.5 in Regions  
18 Affected by the 2024 National Ambient Air Quality  
19 Standards Update," and have staff proceed with executing  
20 this contract?

21 BOARD MEMBER ORTIZ-LEGG: So moved.

22 BOARD MEMBER RECHTSCHAFFEN: Second.

23 CHAIR RANDOLPH: We have a motion and a second.

24 Board Clerk, would you please call the roll.

25 BOARD CLERK FRENCH: Dr. Balmes?



1 BOARD MEMBER BALMES: Yes.  
2 BOARD CLERK FRENCH: Mr. De La Torre?  
3 Mr. Eisenhut?  
4 BOARD MEMBER EISENHUT: Yes.  
5 BOARD CLERK FRENCH: Senator Florez?  
6 BOARD MEMBER FLOREZ: Florez aye  
7 BOARD CLERK FRENCH: Mayor Gloria?  
8 Mr. Guerra?  
9 BOARD MEMBER GUERRA: Aye.  
10 BOARD CLERK FRENCH: Ms. Hopkins?  
11 BOARD MEMBER HOPKINS: Yes.  
12 BOARD CLERK FRENCH: Ms. Lock Dawson?  
13 BOARD MEMBER LOCK DAWSON: Aye.  
14 BOARD CLERK FRENCH: Ms. Ortiz-Legg?  
15 BOARD MEMBER ORTIZ-LEGG: Aye.  
16 BOARD CLERK FRENCH: Dr. Pacheco-Werner?  
17 BOARD MEMBER PACHECO-WERNER: Yes.  
18 BOARD CLERK FRENCH: Mr. Rechtschaffen?  
19 BOARD MEMBER RECHTSCHAFFEN: Yes.  
20 BOARD CLERK FRENCH: Dr. Shaheen?  
21 BOARD MEMBER SHAHEEN: Aye.  
22 BOARD CLERK FRENCH: Chair Randolph?  
23 CHAIR RANDOLPH: Yes.  
24 BOARD CLERK FRENCH: Madam Chair, the motion  
25 passes.

1 CHAIR RANDOLPH: Thank you.

2 Do I have a motion and a second to approve the  
3 proposed research contract with UC Davis titled,  
4 "Assessing Long-Term Health Effects of Wildfire Smoke  
5 Exposure: Insights from an Established Birth Cohort  
6 Study," and have staff proceed with executing this report.

7 BOARD MEMBER BALMES: So moved.

8 BOARD MEMBER ORTIZ-LEGG: Second.

9 CHAIR RANDOLPH: All right. I have a motion and  
10 a second. Board Clerk would you please call the roll.

11 BOARD CLERK FRENCH: Dr. Balmes?

12 BOARD MEMBER BALMES: Yes.

13 BOARD CLERK FRENCH: Mr. Eisenhower?

14 BOARD MEMBER EISENHUT: Yes.

15 BOARD CLERK FRENCH: Senator Florez?

16 BOARD MEMBER FLOREZ: Florez.

17 BOARD CLERK FRENCH: Mr. Guerra?

18 BOARD MEMBER GUERRA: Aye.

19 BOARD CLERK FRENCH: Mr. Hopkins?

20 BOARD MEMBER HOPKINS: Yes.

21 BOARD CLERK FRENCH: Ms. Lock Dawson?

22 BOARD MEMBER LOCK DAWSON: Mayor Lock Dawson aye.

23 BOARD CLERK FRENCH: Apologies. Mayor Lock  
24 Dawson.

25 Ms. Ortiz-Legg?

1 BOARD MEMBER ORTIZ-LEGG: Yes.

2 BOARD CLERK FRENCH: Dr. Pacheco-Werner?

3 BOARD MEMBER PACHECO-WERNER: Yes.

4 BOARD CLERK FRENCH: Mr. Rechtschaffen?

5 BOARD MEMBER RECHTSCHAFFEN: Yes.

6 BOARD CLERK FRENCH: Chair Randolph?

7 CHAIR RANDOLPH: Yes.

8 BOARD CLERK FRENCH: Madam Chair, the motion  
9 passes.

10 CHAIR RANDOLPH: Okay. So we have -- okay.  
11 Lastly, Do I have a motion and second to approve the  
12 proposed research contract with UC Riverside titled,  
13 "Improving Commercial Cooking Emissions Estimates in  
14 California," and have staff proceed with executing this  
15 contract.

16 BOARD MEMBER PACHECO-WERNER: Move to approve.

17 BOARD MEMBER SHAHEEN: Second.

18 CHAIR RANDOLPH: All right. I have a motion and  
19 a second. Board Clerk, will you please call the roll.

20 BOARD CLERK FRENCH: Dr. Balmes?

21 BOARD MEMBER BALMES: Yes.

22 BOARD CLERK FRENCH: Mr. Eisenhut?

23 BOARD MEMBER EISENHUT: Yes.

24 BOARD CLERK FRENCH: Senator Florez?

25 Senator Florez?

1 BOARD MEMBER FLOREZ: Florez aye.  
2 BOARD CLERK FRENCH: Ms. Hopkins?  
3 BOARD MEMBER HOPKINS: Yes.  
4 BOARD CLERK FRENCH: Mayor Lock Dawson?  
5 BOARD MEMBER LOCK DAWSON: Aye.  
6 BOARD CLERK FRENCH: Ms. Ortiz-Legg?  
7 BOARD MEMBER ORTIZ-LEGG: Yes.  
8 BOARD CLERK FRENCH: Dr. Pacheco-Werner?  
9 BOARD MEMBER PACHECO-WERNER: Yes.  
10 BOARD CLERK FRENCH: Mr. Rechtschaffen?  
11 BOARD MEMBER RECHTSCHAFFEN: Yes.  
12 BOARD CLERK FRENCH: Dr. Shaheen?  
13 BOARD MEMBER SHAHEEN: Aye.  
14 BOARD CLERK FRENCH: Chair Randolph?  
15 CHAIR RANDOLPH: Did we miss Board Member Guerra.  
16 BOARD MEMBER GUERRA: Yeah. Guerra aye.  
17 CHAIR RANDOLPH: Okay.  
18 BOARD CLERK FRENCH: Apologies.  
19 Chair Randolph.  
20 CHAIR RANDOLPH: Okay. Aye.  
21 BOARD CLERK FRENCH: Madam Chair, the motion  
22 passes.  
23 CHAIR RANDOLPH: Thank you very much.  
24 Okay. The next item on the agenda is Item number  
25 25-6-6, public meeting to consider two proposed new member

1 for the California Air Resources Board Research Screening  
2 Committee.

3 If you would like to comment on staff's proposal  
4 as posted on CARB's website, please raise your hand in  
5 Zoom or dial pound two now. When we get to the public  
6 comment portion of this item, we will call on in-person  
7 commenters who have submitted a request-to-speak card  
8 followed by those who have virtually raised their hand.

9 Dr. Cliff, would you please introduce the item?

10 EXECUTIVE OFFICER CLIFF: Thank you, Chair  
11 Randolph.

12 The Research Screening Committee is a body of up  
13 to 11 members with diverse expertise who provide  
14 scientific peer review for CARB's Research Program.  
15 Today, staff ask the Board to consider the two proposed  
16 new RSC members, Dr. Thomas Bradley of Colorado State  
17 University and Dr. Danae Hernandez-Cortes of Arizona State  
18 University. They would fill current vacancies and expand  
19 the expertise in the RSC. Dr. Bradley an Dr.  
20 Hernandez-Cortes were selected through a public nomination  
21 and application process, which began with public outreach  
22 in December of 2024. Staff reviewed all submissions and  
23 top candidates were interviewed in May of this year.

24 Dr. Thomas Bradley demonstrated expertise in  
25 transportation systems and vehicle technology. And Dr.

1 Danae Hernandez-Cortes demonstrated experience in  
2 environmental justice and community-based research. If  
3 appointed, they will help the RSC continue to uphold the  
4 scientific rigor of CARB funded research that supports and  
5 informs the goals and priorities of this agency. Their  
6 expertise complements the existing expertise on the RSC  
7 and deepens the RSC's ability to provide meaningful  
8 feedback on vehicle technology, climate change,  
9 community-based research, and environmental justice.

10 Staff is in the process of recruiting for other  
11 expertise on the RSC as existing members come to the end  
12 of their terms. I will now ask Dr. Bradley and Dr.  
13 Hernandez-Cortes to introduce themselves.

14 Dr. Bradley.

15 Is Dr. Bradley online?

16 BOARD CLERK MOORE: Give -- one moment, please.

17 EXECUTIVE OFFICER CLIFF: Thanks.

18 BOARD CLERK MOORE: Okay. Dr. Bradley, I have  
19 promoted you to panelist. Can you please unmute and  
20 begin?

21 DR. THOMAS BRADLEY: I'm hopeful. Thank you and  
22 good morning. My name is Tom Bradley. I serve as the  
23 Woodward Professor and Department Head for the Department  
24 of Systems Engineering here at Colorado State University  
25 in Fort Collins, Colorado. I'm honored to be able to be

1 considered to join the Research Screening Committee. And  
2 I have a background that I think will serve the interest  
3 and needs of the stakeholders for this research program.

4 I'm a graduate of the College of Engineering at  
5 the University of California at Davis and the School of  
6 Mechanical Engineering at Georgia Tech. I've worked in  
7 the automotive and the utility industries, where I have  
8 performed automotive engineering and analysis of  
9 transportation electrification systems, grid integration  
10 and biofuels assessment. Since 2008, I have worked here  
11 at Colorado State University my research and teaching have  
12 really sought to advance knowledge around transportation  
13 electrification and sustainable transportation in general.

14 I've worked with Colorado's sort of ecosystem of  
15 advanced transportation research and policymaking, and I  
16 think have been able to make minor contributions,  
17 productive contributions to the state policy around  
18 hydrogen fuel transportation, low-carbon fuels, public  
19 transit and much more. So I'm really hoping that the  
20 opportunity to participate in the Research Screening  
21 Committee can be that I will -- you know, that I will be  
22 able to really support and identify research that can  
23 generate durable knowledge for CARB's local and global  
24 stakeholders.

25 Thanks so much for the opportunity to speak to my

1 work, and to, I think, my hopes for engagement with CARB.  
2 I'll be honored to participate in the Research Screening  
3 Committee. Thanks.

4 EXECUTIVE OFFICER CLIFF: Thank you very much.

5 And, Dr. Hernandez-Cortes, are you on?

6 DR. DANAЕ HERNANDEZ-CORTES: Hello. Good  
7 morning. Thank you so much. My name is Danae  
8 Hernandez-Cortes and I'm an assistant professor in the  
9 School for the Future of Innovation in Society and the  
10 School of Sustainability at Arizona State University here  
11 in Tempe.

12 My interdisciplinary work investigates questions  
13 of environmental justice from a quantitative perspective  
14 and it also uses community engagement that's to evaluate  
15 communities' perspectives of different environmental and  
16 energy policies. My contributions to this body include  
17 expertise in both quantitative and community-based  
18 research methods, as well as experience evaluating  
19 research developed by federal agencies, which I hope makes  
20 me a good candidate to serve in the Research Screening  
21 Committee.

22 I previously served in the EPA Science Advisory  
23 Board in Environmental Justice Science and Analysis Review  
24 Panel, which was charged to evaluate the review of revised  
25 technical guidance for assessing environmental justice in



1 regulatory analysis. And as part of the Panel, I  
2 contributed in reviewing the technical guidance and  
3 provided expertise in environmental justice analysis as  
4 well as community research methods. I am hoping that this  
5 opportunity to participate in the Research Screening  
6 Committee will allow me to identify relevant research that  
7 evaluates different priorities set by CARB. And I'm  
8 hopefully that my experience both as a researcher and as a  
9 peer reviewer at the federal level will allow me to  
10 provide good expertise in those matters.

11 Thank you.

12 CHAIR RANDOLPH: All right. Thank you, Dr.  
13 Bradley and Dr. Hernandez-Cortes.

14 Board clerk, have any witnesses signed up to  
15 testify on this item?

16 BOARD CLERK MOORE: There are no current people  
17 signed up to testify for this item.

18 CHAIR RANDOLPH: All right. I will now close the  
19 record on this agenda item. Board members, do you have  
20 any questions?

21 Seeing none, the Board has before them resolution  
22 number 25-7. Do I have a motion and a second?

23 BOARD MEMBER BALMES: So moved.

24 BOARD MEMBER SHAHEEN: Second.

25 CHAIR RANDOLPH: All right. We have a motion and

1 a second. Clerk, will you please call the roll.

2 BOARD CLERK FRENCH: Dr. Balmes?

3 BOARD MEMBER BALMES: Yes.

4 BOARD CLERK FRENCH: Mr. Eisenhut?

5 BOARD MEMBER EISENHUT: Yes.

6 BOARD CLERK FRENCH: Senator Florez?

7 Senator Florez?

8 Mr. Guerra?

9 BOARD MEMBER GUERRA: Aye.

10 BOARD MEMBER FLOREZ: Florez aye.

11 BOARD CLERK FRENCH: Florez aye. Thank you.

12 Ms. Hopkins?

13 Ms. Hopkins?

14 BOARD MEMBER HOPKINS: Yes.

15 BOARD CLERK FRENCH: Mayor Lock Dawson?

16 BOARD MEMBER LOCK DAWSON: Aye.

17 BOARD CLERK FRENCH: Ms. Ortiz-Legg?

18 BOARD MEMBER ORTIZ-LEGG: Yes.

19 BOARD CLERK FRENCH: Dr. Pacheco-Werner?

20 BOARD MEMBER PACHECO-WERNER: Yes.

21 BOARD CLERK FRENCH: Mr. Rechtschaffen?

22 BOARD MEMBER RECHTSCHAFFEN: Yes.

23 BOARD CLERK FRENCH: Dr. Shaheen?

24 BOARD MEMBER SHAHEEN: Aye.

25 BOARD CLERK FRENCH: Chair Randolph?

1 CHAIR RANDOLPH: Yes.

2 BOARD CLERK FRENCH: Madam Chair, the motion  
3 passes.

4 CHAIR RANDOLPH: All right. Thank you and thank  
5 you Drs. Bradley and Hernandez-Cortes for being willing to  
6 serve in this capacity. We really very much appreciate  
7 it.

8 Okay. The next item on the agenda is item number  
9 25-6-7, the proposed Five-Year Strategic Research Plan for  
10 2025 to 2030.

11 If you are here with us in the room and wish to  
12 comment on this item, please fill out a request-to-speak  
13 card as soon as possible and submit it to a Board  
14 assistant. If you are joining us remotely and wish to  
15 comment on this item, please click the raise hand button  
16 or dial pound two now. We will first call on in-person  
17 commenters followed by any remote commenters when we get  
18 to the public comment portion of this item.

19 For nearly 60 years, CARB has helped clear  
20 California's skies with science-driven policies that have  
21 fueled major breakthroughs in clean technology and  
22 pollution reduction.

23 Investing in robust evidence-based research is  
24 especially important in this moment as science is being  
25 politicized and attacked when it supports action to hold

1 polluters accountable and to minimize threats to public  
2 health and the environment. Peer-reviewed and  
3 expert-verified science provides the foundation for  
4 transparent, accountable and forward-looking decisions,  
5 and supports policies that can adapt to changing  
6 environmental and economic conditions, while pursuing  
7 long-term goals.

8           The Research Program guides CARB's air quality  
9 planning efforts providing the scientific foundation for  
10 regulatory decision-making and supporting efforts to meet  
11 federal air quality standards and State climate targets,  
12 while identifying ways to close health and opportunity  
13 gaps across communities. The Program also facilitates  
14 important collaborations with other research funding  
15 organizations. CARB's Research Program is committed to  
16 remaining responsive to emerging topics to address the  
17 Agency's evolving goals and legislative mandates and  
18 priorities with scientifically-rigorous research.

19           Dr. Cliff, would you please introduce the item?

20           EXECUTIVE OFFICER CLIFF: Thank you, Chair  
21 Randolph. Today, staff will present the proposed  
22 Five-Year Strategic Research Plan for 2025 through 2030.  
23 This five-year plan is a key tool for public engagement  
24 and internal coordination across CARB programs to pursue  
25 timely research that supports CARB's mission, vision, and

1 roadmap for protecting public health and the environment.  
2 Staff will also share how the agency has leveraged  
3 research to push back on efforts to undermine climate  
4 science at the national level.

5 CARB is committed to supporting policymaking with  
6 robust data-driven research. This approach is  
7 increasingly important as a growing body of scientific  
8 evidence highlights the significant human and economic  
9 costs of inaction on air pollution and climate change.  
10 The research initiatives in the five-year plan were  
11 developed in an open public process and in consultation  
12 with community-based organizations. This process included  
13 public virtual workshops, in-person workshops, and other  
14 public engagement opportunities.

15 The proposed research priorities outlined in this  
16 five-year plan support CARB's regulatory priorities  
17 related to health, environmental justice, air pollution,  
18 and climate change. Future research will also consider  
19 how inaction on pollution and climate will impact public  
20 health, the environment and the economy. In addition to  
21 supporting California policy, CARB's research can inform  
22 other states and jurisdictions.

23 With a limited research budget to support the  
24 Agency's long-term goals, CARB focuses on holistic  
25 projects that leverage partnerships and collaboration with

1 other research entities to make our budget go farther.

2 CARB remains committed to maintaining a  
3 comprehensive and strategic research program that  
4 identifies emerging vulnerabilities, informs  
5 cost-effective interventions, and supports  
6 decision-makers.

7 CARB continues to prioritize research that can  
8 identify and help address health and opportunity gaps  
9 across communities. This strengthen CARB's programs and  
10 ensures that policies benefit all Californians.

11 If approved by the Board, this proposed five-year  
12 plan will guide the selection of research projects for  
13 funding over the next five years. Approval by the Board  
14 will also delegate authority to the Executive Officer to  
15 approve the contracts proposed under the five-year plan.

16 For this item, we're going to have two staff  
17 presenting, and I'm now going to hand it over to Elizabeth  
18 Scheehle of the Research Division to begin.

19 RESEARCH DIVISION CHIEF SCHEEHLE: Thank you, Dr.  
20 Cliff and good morning Chair Randolph and members of the  
21 Board.

22 (Slide presentation).

23 RESEARCH DIVISION CHIEF SCHEEHLE: I'm Elizabeth  
24 Scheehle. I'm head of -- Chief of the Research Division.  
25 I'm here with my staff to speak on the importance of

1 robust science and reliable data and to present the  
2 proposed Five-Year Strategic Research Plan. At CARB,  
3 science is our foundation. It is how we protect people,  
4 safeguard the environment and build healthier future for  
5 California.

6 [SLIDE CHANGE]

7 RESEARCH DIVISION CHIEF SCHEEHLE: History has  
8 taught us that real progress doesn't come from guesswork  
9 or shortcuts. It comes from rigorous, transparent,  
10 peer-reviewed science, whether we're talking about air  
11 pollution, climate change, or technological innovation.  
12 For nearly 60 years, CARB has relied on that science to  
13 clear our skies, reduce harmful emissions and support  
14 major breakthroughs in clean technology and fuels. And  
15 the results speak for themselves. Cleaner air and steady  
16 reductions in greenhouse gas emissions are proof that when  
17 science-based evidence guides policy, California can make  
18 responsible decisions that shape the air we breathe and  
19 the climate we pass on to the next generation.

20 [SLIDE CHANGE]

21 RESEARCH DIVISION CHIEF SCHEEHLE: Today, science  
22 remains as the foundation of our progress in protecting  
23 public health, guiding informed decisions, and helping us  
24 achieve healthier communities. That same foundation gives  
25 us confidence in addressing one of our most urgent

1 challenges, climate change. The scientific consensus on  
2 the relationship between human activities and global  
3 temperature rise is clear and supported by evidence from  
4 hundreds of scientists worldwide. This body of evidence  
5 shows not only the scale of the challenge, but also the  
6 solutions. Cutting emissions from the transportation  
7 sector, for example, is essential to achieve the State's  
8 climate goals and to continue demonstrating that advancing  
9 clean vehicle standards not only benefits climate, but  
10 also helps to protect public health and a more resilient  
11 economy.

12 [SLIDE CHANGE]

13 RESEARCH DIVISION CHIEF SCHEEHLE: The urgency to  
14 reduce greenhouse gas emissions is evidence from --  
15 evident from the consequences of climate change already  
16 being experienced in this state. The wildfires that  
17 devastated Los Angeles earlier this year are already  
18 estimated to have caused tens of billions in property  
19 losses and hundreds of billions in total damages and  
20 economic loss. They claimed more than two dozen lives,  
21 displaced ten of thousands of residents, and now rank  
22 among the costliest natural disasters in U.S. history.

23 Each event serves as a reminder that the growing  
24 costs of inaction and a need for a more united path to  
25 fight climate change globally to strengthen protections,



1 accelerate innovation and safeguard communities, the very  
2 people who depend on us to get this right.

3 [SLIDE CHANGE]

4 RESEARCH DIVISION CHIEF SCHEEHLE: CARB recently  
5 filed public comments debunking the study by the U.S.  
6 Department of Energy that is being used by the U.S. EPA to  
7 eliminate federal climate programs. In line with hundreds  
8 of other scientists, research studies and robust data, we  
9 reinforced the strength of science by highlighting that  
10 climate change impacts both public health and the economy;  
11 that reducing greenhouse gases delivers significant  
12 co-benefits; that addressing climate-related risks is  
13 increasingly urgent; and that the scientific -- global  
14 scientific consensus on climate impacts remains strong.  
15 We will continue to press forward with rigorous science  
16 and remain committed to advancing research that guides  
17 real-world solutions.

18 [SLIDE CHANGE]

19 RESEARCH DIVISION CHIEF SCHEEHLE: Our Research  
20 Program is central to that mission and the proposed  
21 Five-Year Strategic Research Plan is a key tool for  
22 shaping California's future on air quality and climate.  
23 The Plan includes CARB's research priorities that advance  
24 robust, evidence-based science that allows our decisions  
25 to remain transparent, accountable and forward-looking.

1           It also provides the flexibility to adapt to  
2 changing environmental Challenges and economic conditions,  
3 while staying focused on the State's long-term climate  
4 goals -- or long-term goals. With reliable data and  
5 rigorous analysis, policymaking becomes proactive,  
6 resilient against misinformation and more effective at  
7 addressing the complex challenges that affect public  
8 health, environment and the economy.

9           I will now turn the presentation over to Dr.  
10 Sonya Collier who will present on the proposed Five-Year  
11 Strategic Research Plan.

12                               [SLIDE CHANGE]

13           DR. SONYA COLLIER: Thank you, Division Chief  
14 Scheehle.

15           The Legislature recognized this need for robust  
16 science to support policy and establish CARB's Research  
17 Program in 1971 to provide the scientific foundation for  
18 effective air pollution control.

19           The Research Program follows a structured annual  
20 research planning process to identify and fund research  
21 aligned with CARB's mission and emerging needs. This  
22 process incorporates community engagement, internal  
23 expertise, and collaboration with academic institutions,  
24 government agencies and non-governmental organizations to  
25 prioritize research that delivers actionable data,

1 addresses air quality and climate challenges, and  
2 evaluates the consequences of inaction.

3 With an annual budget of four to eight million  
4 dollars, approximately five to 12 projects are selected  
5 each year. This enables the funding of external research  
6 contracts, where proposals and draft final reports are  
7 reviewed by an independent advisory body of experts called  
8 Research Screening Committee. CARB also performs in-house  
9 research and collaborates on research with other agencies  
10 and institutions. Research results from these efforts in  
11 turn inform CARB's programs and policies.

12 In previous years, CARB put out yearly strategic  
13 plans. We moved toward multi-year plans and the Board  
14 approved the delegation of authority to the Executive  
15 Officer to approve annual research contracts. Our first  
16 multi-year strategic plan was the triennial plan covering  
17 the years 2021 through 2024. This year, we're publishing  
18 a five-year plan covering 2025 through 2030 and asking for  
19 approval to renew the Executive Officer's delegated  
20 authority to approve contracts for the life of the  
21 proposed Five-Year Strategic Research Plan.

22 [SLIDE CHANGE]

23 DR. SONYA COLLIER: CARB's Research Program plays  
24 an important role in shaping California's air quality and  
25 climate policies by identifying emerging vulnerabilities.

1 Research informs emission inventories, models, and  
2 measurement methods that can support cost-effective  
3 interventions. It also advances innovative strategies to  
4 reduce air pollution and greenhouse gas emissions, and  
5 evaluates the health and environmental benefits of  
6 mitigation efforts.

7 Research results support decision-makers in  
8 navigating complex decisions, incorporating environmental,  
9 economic and public health priorities. While focused on  
10 California, CARB's research provides valuable insights for  
11 other regions confronting similar challenges. CARB's  
12 research projects have often led to big impacts or grown  
13 into major programs. A few examples of these impactful  
14 efforts will be shared next.

15 [SLIDE CHANGE]

16 DR. SONYA COLLIER: Based on over a decade of a  
17 research, remote sensing was shown to be highly effective  
18 at identifying concentrated methane plumes. Many of those  
19 methane plumes were leaks that could be quickly fixed. In  
20 response to this research, the Legislature allocated \$105  
21 million in 2022 for the State to acquire satellite-based  
22 remote sensing of methane plumes and work with  
23 communities. CARB is now getting near daily observations  
24 in California of methane plumes and immediately notifying  
25 operators to take action leading to methane reductions.

1           The California Oil and Gas Methane Regulation has  
2 been updated to mandate action and is taken by operators,  
3 and similar regulatory action is being considered for  
4 other sectors. California is actively working with other  
5 jurisdictions to expand the use of satellite data.

6           In October, we will be presenting an update to  
7 the Board on this policy, so -- or on this topic, so stay  
8 tuned.

9                               [SLIDE CHANGE]

10           DR. SONYA COLLIER: Starting in 2013, CARB  
11 partnered with research institutions, industry partners  
12 and federal, State and local governments to investigate  
13 the technological feasibility of achieving a 90 percent  
14 NOx reduction of heavy-duty engine emissions. This  
15 consisted of a \$6 million investment by CARB and included  
16 significant staff time across various programs. Diesel  
17 engines use selective catalytic reduction technology for  
18 NOx control, which, when combined with advanced emission  
19 control technologies and strategies, had the potential to  
20 achieve our goal of low NOx demonstration.

21           Due to the complexity of engine and emission  
22 control technologies, successfully demonstrating low NOx  
23 emissions from then diesel engines was an enormous  
24 challenge. After investigating multiple NOx technology  
25 pathways, we successfully demonstrated that it is feasible

1 to significantly reduce NOx emissions without imposing  
2 fuel and other emission penalties.

3 This successful demonstration led to the  
4 development of a low-NOx standard, which was one of the  
5 core components of the Omnibus Regulation, which the Board  
6 adopted in 2020. Our low NOx work also helped provide the  
7 technical justification for a national engine emissions  
8 control program. The U.S. EPA adopted a low NOx rule in  
9 2022 to substantially reduce NOx emissions from heavy-duty  
10 engines, which is similar to our Omnibus Regulation.

11 [SLIDE CHANGE]

12 DR. SONYA COLLIER: Those were just two examples,  
13 both of which are featured in this proposed five-year  
14 plan, which I will focus on more next.

15 The five-year plan has various key roles in the  
16 Research Program. It is an outreach tool that helps  
17 interested parties understand the type of research CARB  
18 funds and their connection to CARB programs. It also  
19 fosters collaboration, to identify future research  
20 priorities that align with other research funding  
21 institutions. We use these plans to leverage funds and  
22 resources to ensure that our research dollars go further  
23 than our budget alone.

24 It helps the public understand the research we  
25 fund and its evolution over time by summarizing past and

1 current research and highlighting impactful research  
2 projects. It lays out a strategy for meeting Program  
3 needs by connecting remaining research gaps and future  
4 policy goals. And finally, it guides CARB in the  
5 selection of research projects for funding during each  
6 fiscal year. Note that not all priorities listed in the  
7 five-year plan will result in funded projects due to  
8 budget limitations, and the fact that CARB leverages  
9 results and studies funded by other agencies.

10 [SLIDE CHANGE]

11 DR. SONYA COLLIER: Each fiscal year, CARB has  
12 approximately four to eight million dollars available for  
13 external research resulting in the funding of about five  
14 to 12 contracts a year. CARB also performs in-house  
15 research by collecting and analyzing data, developing and  
16 running models, and writing high-impact, peer-reviewed  
17 journal articles. CARB provides co-funding for larger  
18 research projects to leverage external funds and Research  
19 Program staff leverage internal monitoring equipment to  
20 conduct studies or collaborate with existing efforts.

21 The five-year plan contains high level  
22 policy-relevant research priorities, which will be  
23 leveraged at the beginning of each annual research  
24 planning cycle. Each planning cycle will begin with an  
25 internal review to select the most timely research

1 priorities. This will enable Research Program staff to  
2 create a list of approximately 15 proposed research  
3 priorities that have the potential to become feasible and  
4 impactful research concepts. CARB will then share the  
5 list with the public and collect comments on the  
6 priorities.

7 CARB will use the public input, as well as  
8 internal input, to inform the selection of a short list.  
9 Once approved, CARB Research Program staff will focus on  
10 developing top priorities into full project concepts and  
11 preparing them for solicitation, Research Screening  
12 Committee review, and contract development.

13 [SLIDE CHANGE]

14 DR. SONYA COLLIER: The proposed Five-Year  
15 Strategic Research Plan was created using three parallel  
16 processes. An internal process incorporated extensive  
17 internal discussions to identify program needs and  
18 research gaps. Starting in early 2024, a public process  
19 incorporated public meetings and surveys to collect input  
20 from the general public, community-based organizations and  
21 academic partners. In addition, CARB collaborated with  
22 seven community-based organizations to develop research  
23 questions informed by community and environmental justice  
24 needs. CARB met with the community-based organization  
25 partners to develop and refine research questions and then



1 co-hosted regional in-person roundtables to get the  
2 on-the-ground community perspective and refined  
3 priorities. CARB Research Program staff then leveraged  
4 input from all three processes to draft future research  
5 priorities and incorporate them throughout the proposed  
6 five-year plan.

7 [SLIDE CHANGE]

8 DR. SONYA COLLIER: Over the past four years, the  
9 Research Division has incorporated environmental justice  
10 and community engagement into our research planning and  
11 research projects. This slide provides an example of how  
12 we've leveraged new tools, like the community engagement  
13 model, the racial equity lens, and community-informed  
14 research to incorporate community needs into robust  
15 research projects.

16 CARB was made aware of community health concerns  
17 related to increasing dust in the Salton Sea through AB  
18 617 community meetings in the Eastern Coachella Valley.  
19 In response, CARB collaborated with UC San Diego to  
20 research dust composition exposures and health impacts in  
21 the Salton Sea. As the project development progressed,  
22 CARB's engagement tools were leveraged to further  
23 understand community health concerns and incorporate them  
24 into the project.

25 With funding from the U.S. EPA, CARB contracted

1 with UC Riverside to co-develop and co-host a series of  
2 community webinars to discuss existing research and  
3 emerging community and scientific research needs. The  
4 community webinars included a Planning Committee with two  
5 tribes, five community-based organizations, and two  
6 universities. Four online forums were held in 2022, and  
7 together the researchers and communities identified five  
8 major priorities, one of which included developing a  
9 better understanding of the environmental and health  
10 impacts from dust and dust mitigation efforts.

11 As part of our efforts to develop the five-year  
12 plan, we pilot tested, the CARB -- the CARB Community  
13 Engagement Model and partnered with seven community-based  
14 organizations, including two from the Imperial Valley. We  
15 co-hosted a series of community meetings, including one in  
16 Bombay Beach with United for Justice. There, we worked  
17 with community members to identify and prioritize their  
18 research needs. Concerns about playa dust and health  
19 impacts emerged as a top priority. Outcomes from these  
20 processes added to the community-informed development of  
21 the Salton Sea Dust Project.

22 As the scope of work was being developed and  
23 refined, staff and management used CARB's racial equity  
24 lens to understand who would be impacted by this research,  
25 which communities should be engaged and how, and ways to

1 ensure the research supports CARB's mission. Together,  
2 these approaches inform the community-engaged research  
3 project, "Dust on the Horizon," led by UC San Diego and UC  
4 Riverside in partnership with Los Amigos de la Comunidad.

5 Together, they will: measure the dust and  
6 chemicals in the dust, determine how much dust residents  
7 are inhaling, and whether chemicals in the dust may cause  
8 health problems; estimate the potential for health effects  
9 based on existing health data; predict how climate change  
10 might affect the amount of dust coming from the Salton  
11 Sea; and suggest actions that might reduce the dust or  
12 health problems.

13 This example demonstrates some of the many ways  
14 that the Research Division has changed, both our research  
15 planning and our projects to address Board Resolution  
16 20-33, pilot test and incorporate CARB-wide tools, like  
17 the racial equity lens and the Community Engagement Model,  
18 and weave community needs into our projects to produce  
19 robust and defensible research that supports CARB's  
20 mission.

21 [SLIDE CHANGE]

22 DR. SONYA COLLIER: Next, I will provide a  
23 high-level summary of the research priorities proposed in  
24 the five-year plan for each area of research we cover in  
25 our program.

1 [SLIDE CHANGE]

2 DR. SONYA COLLIER: CARB's health research plays  
3 an important role in advancing understanding of the health  
4 impacts of air pollution and climate change, calculating  
5 the benefits of pollution reductions and understanding the  
6 co-benefits of carbon reduction policies. Health research  
7 also provides valuable information that can be used to  
8 develop outreach materials to share tools and provide  
9 guidance to communities on health protective measures.

10 In response to wildfire events, health research  
11 is developing a deeper understanding of the short-term  
12 impacts of wildfire smoke exposure and planning to expand  
13 work on understanding long-term impacts. Our research is  
14 studying the impacts of multiple climate stressors on  
15 communities including smoke, air pollution, and heat. We  
16 have developed community-engaged research to study  
17 benefits of climate change mitigations, such as heat  
18 reduction strategies in vulnerable communities.

19 CARB's research informs the health analysis used  
20 to calculate quantitative and qualitative health benefits  
21 of air quality rules and programs. A key priority is  
22 examining how socioeconomic factors influence air  
23 pollution exposure, health impacts, and disparities.  
24 Cumulative impacts continues to be a priority, including  
25 studying the impacts of air pollution, combined with

1 community stressors in vulnerable communities.

2 Future research priorities will include:  
3 expanding research on the impacts of climate change and  
4 wildfire smoke; studying indoor pollution sources,  
5 exposures, and mitigation strategies; expanding health  
6 analysis work to study more pollutants and health outcomes  
7 at State, regional and smaller scales; expanding our  
8 understanding of the impacts of air toxics; and continuing  
9 to study community-level exposures and health disparities.

10 [SLIDE CHANGE]

11 DR. SONYA COLLIER: CARB's ambient air quality  
12 research supports California's efforts to attain the  
13 health-based California and National Ambient Air Quality  
14 Standards set under State and federal law respectively.  
15 California developed State Implementation Plans to meet  
16 those mandated standards. Research in this area aims to  
17 support understanding of directly emitted pollutants such  
18 as PM2.5, ammonia, volatile organic compounds, and air  
19 toxics, as well as the atmospheric conditions that lead to  
20 the formation of additional harmful pollutants like ozone  
21 and secondary organic aerosols.

22 Advanced measurement techniques, laboratory  
23 experiments, intensive field campaigns, and long-term  
24 monitoring are leveraged to identify major sources of  
25 PM2.5 and inform air quality forecasting models. Other

1 key priorities include: investigating the sources of  
2 volatile organic compounds, especially air toxics from  
3 industrial, agricultural, and transportation sectors, and  
4 assessing their impacts on air quality, public health, and  
5 the environment.

6 Future studies will also examine how changing  
7 meteorological patterns and land management practices  
8 influence air quality, especially as climate change drives  
9 more extreme heat, wildfire smoke, and related stressors.  
10 The findings are expected to inform the State  
11 Implementation Plan strategies and help address air  
12 quality disparities. As many other states face similar  
13 challenges in meeting current and previous air quality  
14 standards, CARB will prioritize sharing findings to  
15 support broader national efforts.

16 [SLIDE CHANGE]

17 DR. SONYA COLLIER: CARB's climate research  
18 priorities support the Scoping Plan and inform strategies  
19 to achieve California's statutory greenhouse gas emission  
20 reduction goals while assessing the consequences of  
21 inaction. These efforts generate scientific insights that  
22 can guide climate actions in other states. Key focus  
23 areas include quantifying carbon sequestration potential  
24 in natural and working lands, such as coastal wetlands,  
25 forests, and agricultural soils; and evaluating

1 sustainable land management practices and emission  
2 reduction technologies in agriculture.

3 Other priorities include research on short-lived  
4 climate pollutants, such as methane from dairies,  
5 ultra-low-global warming potential refrigerants, and the  
6 impacts of wildfires on carbon storage and land  
7 management.

8 CARB also emphasizes assessing the health,  
9 environmental, and economic impacts of inaction on climate  
10 change, especially cross different communities and  
11 evaluating the co-benefits of integrated air quality and  
12 climate strategies across diverse populations.

13 [SLIDE CHANGE]

14 DR. SONYA COLLIER: CARB's mobile sources  
15 research priorities focus on supporting emissions  
16 characterization across all vehicle types with an emphasis  
17 on high-emitting vehicles and malfunctioning vehicles.  
18 This includes deploying advanced sensors for and data  
19 analysis to monitor emissions from legacy vehicles and  
20 assess the effectiveness of both current and future  
21 regulations.

22 As zero-emission vehicles become more prevalent,  
23 research is expected to focus on improving zero-emission  
24 vehicle efficiency, optimizing operational characteristics  
25 to support broader adoption, and leveraging vehicle

1 batteries to support grid stability. The scientific  
2 findings can offer valuable insights to California and  
3 other states pursuing cleaner transportation. Research  
4 also targets emission reductions from off-road vehicles  
5 and accelerating zero-emission vehicle adoption in that  
6 sector.

7 A growing focus is on non-exhaust emissions, such  
8 as brake, tire, and wheel wear to better understand their  
9 air quality and public health impacts. Remote sensing  
10 technologies will continue to play a key role in tracking  
11 fleet emissions and informing to regulatory programs.

12 [SLIDE CHANGE]

13 DR. SONYA COLLIER: CARB's sustainable  
14 transportation, housing, and community research will  
15 continue to support the development of sustainable,  
16 inclusive, and accessible communities. Key research areas  
17 include strategies to increase access to sustainable  
18 transportation, housing, and key destinations for people  
19 of all incomes, reduce transportation-related emissions,  
20 and advance the decarbonization of buildings and  
21 transportation systems.

22 The primary focus is promoting high-occupancy  
23 transportation and fostering more walkable, bikeable, and  
24 transit-accessible communities.

25 Future research priorities include understanding



1 how the use of low-carbon materials affects housing costs  
2 and development. CARB is also expected to work on  
3 identifying tools, metrics, and policy coordination  
4 strategies to help accelerate sustainable and resilient  
5 community growth and the infrastructure that is needed.

6 [SLIDE CHANGE]

7 DR. SONYA COLLIER: Board approval of the  
8 proposed Five-Year Strategic Research Plan will authorize  
9 staff to proceed with developing the research priorities  
10 outlined in the report into research projects over the  
11 next five years. Approval by the Board will also renew  
12 the delegation of authority to the Executive Officer to  
13 approve contracts for fiscal years 2025-26, 2026-27,  
14 2027-2028, 2028-2029, 2029-2030, and 2030 to 2031. Staff  
15 will provide regular updates to the Board on key research  
16 priorities similar to the presentation you will hear next  
17 month on methane satellites.

18 Thank you so much for your attention. That's the  
19 end of the presentation.

20 CHAIR RANDOLPH: All right. Thank you, Dr.  
21 Collier. We will now hear from the public who signed up  
22 to speak on this item, Either by submitting a  
23 request-to-speak card or a raised hand in Zoom.

24 I will ask the Boar Clerk to begin calling the  
25 public commenters.

1           BOARD CLERK FRENCH: Thank you, Chair Randolph.  
2 We currently have two public commenters to speak in person  
3 and four public commenters to speak on Zoom. We will  
4 first be calling on in-person public commenters. In  
5 advance, I apologize if I mispronounce your name and I  
6 would like to remind all commenters to please speak slowly  
7 and clearly for our interpreters and court reporter.

8           As a reminder, if you have comments not related  
9 to the item, please save those remarks for the open public  
10 comment at the end of this meeting.

11           The first in-person commenter is Julia Levin.

12           JULIA LEVIN: Thank you. Good morning. Julia  
13 Levin with the Bioenergy Association of California. I  
14 want to start by thanking and acknowledging you, Chair  
15 Randolph. I was very sorry to see the announcement about  
16 your retirement, much as it's very much deserved. You  
17 have been an amazing public servant over several decades.  
18 I had the privilege of working with you at the Resources  
19 Agency in your service at the PUC, and here at the Air  
20 Board. You have shown incredible decency, and integrity,  
21 attention to science and to the law, and you will be  
22 missed. So thank you.

23           Speaking of attention to science, I am also here  
24 on behalf of the Bioenergy Association of California in  
25 strong support of the Air Board's proposed Research Plan.

1 Climate research is absolutely critical. There's no way  
2 we can meet our goals without a strong underpinning of  
3 science. And especially with the federal government  
4 walking away from climate change, this Board's emphasis on  
5 climate change research is all the more important. So we  
6 strongly support the agenda.

7 But two comments on the proposed priorities.  
8 We're really happy to see the increased focus on wildfire  
9 emissions. Obviously, wildfire is a huge source of  
10 climate and air pollution, just staggeringly so, but we  
11 urge you also to focus on planned burning, whether it's  
12 pile burning of forest waste or open burning of  
13 agricultural waste. Those are also large sources of  
14 climate and air pollution. They need to be included when  
15 we talk about emissions from fires.

16 The second area is methane reduction. While the  
17 ongoing methane monitoring is critical, we urge to connect  
18 that to policies to better capture and beneficially use  
19 biomethane. To use landfills as an example, between the  
20 amount of methane leakage and the amount that is flared,  
21 it's equivalent to billion gallons of gasoline a year. We  
22 could be putting all that biomethane to beneficial use to  
23 replace diesel in near-zero emission natural gas trucks or  
24 to replace fossil fuels in hard-to-electrify end uses.

25 So, we urge you to move forward with the

1 research, but also put the research into action. And  
2 methane, particularly in solid waste sector and also the  
3 dairy and other sectors, is a huge opportunity.

4 Thank you again. And again, Chair Randolph,  
5 thank you personally.

6 BOARD CLERK FRENCH: Thank you.

7 Our next public commenter in -- for in-person is  
8 Evan Edgar.

9 EVAN EDGAR: Chair and Board members, my name is  
10 Evan Edgar. I'm an engineer for the California Compost  
11 Coalition, plus I'm a Board member of the Bioenergy  
12 Association of California and support the comments of  
13 Julia today.

14 I'm here to support climate research as part of  
15 the soil organic comp -- soil organic carbon for natural  
16 and working lands. Right now, there is a protocol at  
17 Climate Action Reserve for soil enrichment 2.0. It's not  
18 really cutting it. It needs some more research, so  
19 hopefully you can include that in your future research.  
20 What is working is the ecological restoration of  
21 rangelands under Verra. And we're doing the research  
22 right now with a project right here in Sacramento County.  
23 And as a whole, soil has three times more potential than  
24 forest as a carbon sink. And California Compost Coalition  
25 supports big soil and not big oil.

1 I've got to recognize Board Member Guerra today,  
2 because the City of Sacramento last week supported a  
3 15-year contract to collect green waste in their RNG,  
4 which is a city new RNG station to take it to a compost  
5 facility where we got a 15-year contract to actually  
6 restore ecological restoration rangelands at Van Vleck  
7 Ranch. Now, this is a project that is high integrity,  
8 nature based, voluntary carbon credits in our backyard,  
9 where we reduce VMTs. And right now, the science there is  
10 actually exceeding default modeling. So there's a lot of  
11 good science we're doing in the last three and a half  
12 years to show that the soil carbon is increasing.

13 On climate research we feel that with AB 1207,  
14 the Irwin bill, that was chaptered this last week, that  
15 there's an opportunity for climate change and market-based  
16 climate mechanisms. And over the last couple of years the  
17 Climate Offset Protocol Task Force needs to have more  
18 protocols so we can go to four percent to six percent  
19 within 1207. We feel that -- and part of the Scoping Plan  
20 that endorses this, we need more protocols in a regulatory  
21 marketplace. So we support 1207 in order to bring natural  
22 based solutions to the regulatory protocols.

23 Thank you.

24 BOARD CLERK MOORE: Thank you.

25 We currently have four commenters with their

1 hands raised in Zoom. I apologize in advance if I  
2 mispronounce your name. I would like to remind all  
3 commenters to please speak slowly and clearly for our  
4 interpreters and court reporter.

5 Our first Commenter is Jake Schwartz followed by  
6 Alex Kozak, and Sakereh Maskal. Jake, I have activated  
7 your mic. Please unmute and you may begin.

8 JAKE SCHWARTZ: Thank you, Chair and Board  
9 members. My name is Jake Schwartz and I'm here with CCAN,  
10 an national climate advocacy nonprofit that's worked for  
11 decades to combat the climate crisis. Given California is  
12 already such a leader in the environmental movement, I  
13 want to clarify that your research plan includes work on  
14 climate intervention strategies as an option, specifically  
15 the concept of solar radiation management, which has grown  
16 almost exponentially as a focus of academic and political  
17 attention just in the last six months.

18 However, despite the need for more research, not  
19 less, this year alone, bills banning such research have  
20 been proposed in over 70 percent of states, and passed in  
21 three, Tennessee, Louisiana, and Florida. While  
22 politicians attack this novel research, scientists around  
23 the country and the world continue to fight to better  
24 understand what is possible. Criminalization of this  
25 research with proposed punishments, including five years

1 in prison, have a potential chilling effect on the  
2 exploration of our world.

3 While this topic is now being openly discussed in  
4 the halls of state capitols, Congress, and foreign  
5 capitals in over a dozen countries. The time for there to  
6 be a leader and a guardian of climate intervention  
7 research in the United States is now. With a difficult  
8 political landscape in state capitals, and many states  
9 still playing catch up in their climate mitigation goals,  
10 there's no obvious answer for who that champion would be,  
11 unless it is CARB. It would be more than a missed  
12 opportunity, but rather a structural setback to the  
13 climate movement, if CARB passed on the opportunity to  
14 help lead this field.

15 By making California the counter to Tennessee,  
16 Louisiana, and Florida, and by making California the place  
17 where innovation that could potentially save the world is  
18 supported, instead of a place where university researchers  
19 are arrested, CARB could place the State at the helm of  
20 this burgeoning field. CCAN urges CARB to note that  
21 climate intervention strategies, including sunlight  
22 reflection can be studied under its plan. By fighting for  
23 at its inception, CARB has the ability to ensure that the  
24 course of this work is equitable and built alongside a  
25 governance structure.

1           BOARD CLERK MOORE: Thank you.

2           Our next commenter is Alex Kozak. I've activated  
3 your microphone. Please unmute and you may begin.

4           ALEX KOZAK: Thank you. My name is Alex Kozak  
5 and I'm here representing a California based NGO --  
6 climate NGO, a not for profit, called Reflective. Our  
7 mission at Reflective is to accelerate research into  
8 sunlight reflection methods that are deliberate  
9 interventions into the earth's radiation budget that would  
10 increase the amount of sunlight reflected off the  
11 atmosphere.

12           Our organization is focused on supporting  
13 research into primarily stratospheric aerosol injection  
14 that would mimic the cooling effect of volcanic eruptions  
15 by introducing sulfur into the atmosphere. So, given the  
16 negative impacts of overshooting the Paris targets for an  
17 extended period, we think it's imperative to be  
18 researching the efficacy and impacts of these methods now,  
19 so that they could create more time for decarbonization.

20           There are a lot of scientific uncertainties. So  
21 we are not advocating for deployment, but we do believe  
22 the policymakers will need access to credible evidence and  
23 a really strong understanding of these methods and their  
24 impacts grounded in science and probably a lot sooner than  
25 we might prefer otherwise.



1           So given that -- given that CARB is moving to a  
2 five-year research cycle and the very rapidly increasing  
3 interest in these topics, we're just encouraging you to  
4 give yourself the flexibility to study these topics and  
5 sunlight reflection in particular and SAI in this cycle.  
6 So we think it would helpful for CARB, in particular, to  
7 study the impacts in California of a temperature overshoot  
8 in the coming decades and then compare it sort of apples  
9 to apples, with various scenarios that deploy sunlight  
10 reflection methods.

11           So that's it. Thank you and we're happy to  
12 advise in more detail in the future.

13           BOARD CLERK MOORE: Thank you.

14           Next commenter is Sakereh Maskal. I've activated  
15 your microphone. Please unmute and you may begin.

16           SAKEREH MASKAL: Hi. Can you hear me?

17           BOARD CLERK MOORE: Yes.

18           SAKEREH MASKAL: Oh, thank you. Thank you. My  
19 name is Sakereh Maskal. And I'm the policy and advocacy  
20 leader for Pesticide Action and Agroecology Network, also  
21 speaking on behalf of Californians for Pesticide Reform.  
22 We wanted to thank CARB for emphasizing the impacts of  
23 environmental toxicants on communities disproportionately  
24 exposed to harmful air pollution and for committing to  
25 researching the impacts of pesticides on GHG emissions.

1           The importance of these issues cannot be  
2 understated and we're excited to follow the development of  
3 these endeavors. However, we do see places where the  
4 strategic plan could be strengthened as it relates to  
5 pesticides. First, while we're happy to see CARB  
6 analyzing GHG emissions from fumigant pesticides, we think  
7 the design of scientific studies must be carefully  
8 considered, and that the proper control for a study  
9 analyzing GHG emissions from fumigant pesticides, for  
10 example, is not follow agricultural land, but rather  
11 agricultural operations that do not use fumigant  
12 pesticides.

13           This will allow us to see true difference in GHG  
14 emissions from an operation that uses fumigants versus  
15 non-fume practices, such as some agricultural operations  
16 in the Healthy Soils Program. We also encourage CARB to  
17 champion community-based, sustainable, regenerative  
18 agricultural, in all avenues, via CARB's website,  
19 webinars, social media, et cetera.

20           There's so many co-benefits associated with  
21 diverse climate-smart cropping systems, including more  
22 nutrient-dense food that will inevitably decrease chronic  
23 health conditions, better carbon sequestration, job  
24 creation, effective pest management, and the  
25 revitalization of our ecosystems versus the continual

1 degradation of all environmental media via harmful  
2 pesticides.

3           The Department of Pesticide Regulation through  
4 their Sustainable Pest Management Roadmap has already  
5 committed to transitioning away from highly hazardous  
6 pesticides. So CARB should really be an ally in this work  
7 by funding research that highlights the numerous benefits  
8 of SPM-aligned agriculture.

9           Second, we encourage CARB to pay more attention  
10 to the formation of ozone and particulate matter from  
11 VOC-emitting pesticides. Thank you awe very much.

12           BOARD CLERK MOORE: Thank you.

13           Our next three commenters are Kimberly Burr,  
14 Julie Pullen, and Hannah Safford.

15           Kimberly, I have activated your mic. Please  
16 unmute and you may begin.

17           KIMBERLY BURR: Thank you. Thank you again. I  
18 just wanted to thank staff for an incredible report and  
19 incredible work. I mean, it's exhaustive what you guys  
20 have done. And I think it's very important that you have  
21 covered so many important areas. The one area that I'm  
22 still kind of worried about is I'm a tree person, is that  
23 we have not really incorporated into the models yet the  
24 emissions associated with logging. And I know that  
25 there's been some work done on trying to study the

1 emissions from fires, but there hasn't been any study on  
2 the emissions from logging like the running of tractors  
3 all day, the running of chainsaw all day.

4 BOARD CLERK MOORE: Kimberly, can you hold one  
5 moment. We're having some technical difficulty.

6 KIMBERLY BURR: Sure.

7 BOARD CLERK MOORE: Sorry. You amy continue.  
8 I'm sorry.

9 KIMBERLY BURR: Oh, boy, I don't know where to  
10 begin. Anyway, my concern is that we incorporate in our  
11 models right away the emissions associated with the large  
12 scale logging that's going on. We've done a great job  
13 incorporating emissions from small vehicles, and cooking,  
14 and the like, but the logging is a very large-scale,  
15 high-impact activity, and we should be incorporating the  
16 emissions associated with that, like the all-day running  
17 of tractors, and hauling of trucks, trucks hauling trees,  
18 all-day use of chainsaws and chippers. There's a lot of  
19 emissions that I am very curious about and I hope that the  
20 Board is, so we can actually make the models accurate and  
21 reliable and some people can trust.

22 So, thank you for -- again for all your  
23 incredible work, and I support you guys, and hope that the  
24 models can be improved to accurately reflect some of these  
25 other emissions that are not being counted right now.

1 Thank you so much for all your work.

2 BOARD CLERK MOORE: Thank you.

3 Our next commenter is Julie Pullen. I have  
4 activated your mic. Please unmute and you may begin.

5 JULIE PULLEN: Hello. My name is Julie Pullen.  
6 I'm an independent earth systems scientist and I'm on the  
7 Board of Ocean Visions. And I wanted to add my voice to  
8 those in support of the inclusion of research on climate  
9 engineering and to research plan, in particular, for  
10 research on the full spectrum of potential ways to  
11 intervene to the (inaudible) of our climate, whether that  
12 includes methane removal, carbon dioxide removal and other  
13 forms that have been mentioned today like solar radiation  
14 management.

15 And I think the potential for California to  
16 really take a leading role here to benefit the health of  
17 their citizens -- our state's citizens as well as the full  
18 country is really a powerful stance to take in relation to  
19 advancing research.

20 So thank you for letting me share my views.

21 BOARD CLERK MOORE: Thank you.

22 Our last commenter on this item is Hannah  
23 Safford. I've I have activated your mic. Please unmute  
24 and you may begin.

25 It looks hannah lowered her hand.

1 Hannah, are you there?

2 Okay. It looks like we have two more commenters,  
3 one is Craig Segall. Craig, I have activated your  
4 microphone. Please unmute and you may begin.

5 CRAIG SEGALL: Hi, there. Craig Segall, CARB  
6 alum just speaking for myself. Like the letter you  
7 received from the Federation for American Scientists and  
8 also the letter I put in the record this morning from a  
9 hundred scientists, including the former White House  
10 climate advisor, I think it's quite important that staff  
11 clarify today that this excellent plan includes the  
12 possibility of research into methods to address extreme  
13 heat, especially in the valley and other climate  
14 interventions, so everything from white roofs, to sunlight  
15 reflection, to ocean carbon removal.

16 These interact with every aspect of the core plan  
17 priorities from public health to air quality, as the FAS  
18 letter notes, but do I think it's worth clarifying, given  
19 the wave of attacks on the science, that it is critical  
20 California has room to research those matters. I think  
21 that's implicit in the plan. I think it would be useful  
22 to make it explicit, largely through discussion today,  
23 given the major attacks on the science across the  
24 waterfront, including attacks on this from the Hill from  
25 Representative Green and attacks. And as an early

1 commenter mentioned, 70 percent of the states deeply  
2 appreciate CARB's work.

3 And hello to everyone and congratulations, of  
4 course, to the Chair on a truly extraordinary run.

5 Thank you.

6 BOARD CLERK MOORE: Thank you. I'll try Hannah  
7 one more time. Hannah, I have activated your microphone.  
8 Please unmute and you may begin.

9 Okay. We'll move to Joshua Elliott.

10 It looks like we have two more commenters.  
11 Joshua Elliott, I have activated your mic. Please unmute  
12 and you may begin.

13 JOSHUA ELLIOTT: Thank you so much. So my name  
14 is Joshua Elliott. I'm the Chief Scientist of an  
15 organization called Renaissance Philanthropy that works on  
16 some of the hardest problems in science and technology  
17 trying to advance those problems for the social good. I  
18 also formerly was a program manager at DARPA in the U.S.  
19 government, a program with almost \$600 million in federal  
20 R&D spending on some of these topics.

21 I just want to advocate here in particular for  
22 CARB to think deeply about how -- about what the kinds of  
23 catastrophic risks and risk trends that we're seeing in  
24 the future as climate change evolves and we enter into  
25 this sort of nonlinear phase of climate change,

1 accelerated wildfires, you know, the policy crisis,  
2 whatever you want to call it, catastrophic risks and  
3 tipping points and evaluating what options we can do to  
4 try and advance the science, advance the R&D around those  
5 topics to try and mitigation those extreme risks,  
6 particularly for the most vulnerable populations in the  
7 world.

8 Thanks.

9 BOARD CLERK MOORE: Thank you. Our final  
10 commenter is Edward Parson. I have activated your mic.  
11 Please unmute and you may begin.

12 EDWARD PARSON: Thank you for the opportunity to  
13 comment on the research plan. And I commend CARB for this  
14 really visionary research plan and want to highlight  
15 CARB's unique importance as a leading voice in  
16 comprehensive strategic research on climate and related  
17 environmental risks. I'm Edward Parson. I am a professor  
18 of law at the UC -- at UCLA School of Law and I'm the  
19 faculty director of the Emmett Institute for Climate  
20 Change and the Environment.

21 I would like to add my voice to those supporting  
22 the importance of CARB's research plan, including  
23 consideration of the potential climate emergencies related  
24 to tipping points and integrated effects, and also  
25 research on consideration of the entire suite of potential



1 options that might serve to mitigate those risks, even if  
2 not completely, and even in the context of the need for a  
3 complete strategic response that is international and  
4 covers all aspects from rapid cuts of emissions, to  
5 adaptation, to carbon dioxide removal.

6 And, yes, it is imperative to have more  
7 understanding, and insight, and broader research and other  
8 consultations on interventions of solar geoengineering or  
9 solar radiation modification that might serve as  
10 potentially -- potential complements and extinctions to  
11 the capability of other responses to reduce risks.

12 Thank you very much.

13 BOARD CLERK MOORE: Thank you. That concludes  
14 our commenters for this item.

15 CHAIR RANDOLPH: All right. Thank you.

16 Staff, are there any issues raised in the  
17 comments you want to address?

18 EXECUTIVE OFFICER CLIFF: No, Chair.

19 CHAIR RANDOLPH: All right. I will now close the  
20 record on this agenda item.

21 Board members, do you have any questions or  
22 comments?

23 Dr. Shaheen.

24 BOARD MEMBER SHAHEEN: Thank you, Chair. I just  
25 wanted to just start out by thanking you, Elizabeth, and

1 Dr. Collier for celebrating and raising up the importance  
2 of research in air quality and climate. I am really  
3 impressed by how much you're doing with such a modest  
4 research budget. I really think four to eight million is  
5 a very small amount right now, in light of all the needs.

6 So we heard from a lot of stakeholders and I took  
7 a lot of time last night to actually read the docket. And  
8 we got a lot of, I think, outstanding research ideas for  
9 us to consider in the five-year plan. We heard a lot of  
10 the same commenters here today that submitted comments,  
11 including looking at prioritization and measurements of  
12 agriculture nitrous oxide emissions, expanding our  
13 pesticide reform and agroecology research, a whole range  
14 of climate interventions strategies, including sunlight  
15 reflection, solar radiation management.

16 So I guess my question for you, right, is that as  
17 the challenges just get greater for us in the road ahead,  
18 how are we going to balance these near-term priorities  
19 with a emerging research needs while ensuring that we're  
20 being transparent about the selection process, stakeholder  
21 engagement, and all of that, again with a modest budget.

22 RESEARCH DIVISION CHIEF SCHEEHLE: Thank you, Dr.  
23 Shaheen. And so we do have a modest budget and we do try  
24 to balance all the different priorities. Obviously, we  
25 have to have research that meets the needs of the agency

1 and can feed into regulatory processes, plans, and things  
2 like that. And in order to do that, we meet internally to  
3 understand what all those processes and work very closely  
4 with other groups. We also do have a public process every  
5 year where we ask for input on what priorities we're  
6 looking at that year. And we are also moving towards a  
7 process this year where we're starting a little bit  
8 earlier with the priorities that we're looking at. And  
9 for those that are more interest to the public, we'll have  
10 more opportunity to have public input on the statements of  
11 work as well.

12 So those are some of the ways that we try to look  
13 at what is needed at CARB in terms of research and what  
14 some of those larger issues. But, of course, we're not  
15 going to be able to fund everything that we would like to,  
16 because we only have a fairly small budget to do that.

17 BOARD MEMBER SHAHEEN: Yeah. Thank you for that,  
18 Elizabeth. I was curious with so many of these topics  
19 that were mentioned, many of which I'm not particularly  
20 familiar with, as a scientist myself. Are any of those  
21 ideas that were mentioned today things that you're looking  
22 at in terms of the five-year plan?

23 RESEARCH DIVISION CHIEF SCHEEHLE: Yes. And many  
24 of -- many of those projects are ideas in terms of  
25 pesticides, and looking at prescribed burning, and things

1 like that, we do cover that within the five-year plan.

2 And we actually have some projects ongoing on that.

3 DEPUTY EXECUTIVE OFFICER SAHOTA: Dr. Shaheen,  
4 I'll just jump in. The research plan, you know, it takes  
5 quite awhile to go through the public process and the  
6 internal process to develop. There are new things  
7 emerging, especially as we see research efforts being  
8 rolled back and closed up at the federal level. So we are  
9 still getting a lot of incoming about priorities that are  
10 getting dropped at the national level. And so we're are  
11 trying to find ways to either keep those going, either  
12 with partnerships with other organizations, or if we can  
13 seed some of that work until large philanthropy can jump  
14 in and help keep that research going.

15 So we're mindful of the needs here at home with  
16 our formal research plan. And we're also keeping an eye  
17 on how to keep the work going on a more broader level.  
18 And some of the work that you heard today, such as the  
19 solar reflective emerging research, that is an area where  
20 I think there is a lot of interest. It is emerging.  
21 There's a lot of misinformation. And so, as these things  
22 come up, we'll be taking a more detailed view as to how we  
23 can help, when is the right time to help, and how do we  
24 find that external philanthropy partnership to make sure  
25 that those continue to be funded.

1           BOARD MEMBER SHAHEEN: Thanks so much for  
2 addressing the attack on research at the federal level. I  
3 really appreciate it and it just continues to shine a  
4 light on CARB and on the State of California, and the  
5 importance of independent thought and thinking, and just  
6 really hundred percent behind you all on this.

7           Thank you.

8           CHAIR RANDOLPH: Thank you.

9           Board member Guerra

10          BOARD MEMBER GUERRA: Thank you, Chair. First,  
11 you know, I think on the overall concept a supporting  
12 science, I think that's -- one, I want to thank all the  
13 scientists that work for our agency and those who have  
14 continued to push this. And frankly, I think it's absurd  
15 that we have elected officials at the national level that  
16 are failing to recognize science. So, I think, one, it  
17 does require us, you know, know to engage our youth also  
18 more on the concept of, and the value of science, and the  
19 fun of science. And I'm now a Board member of the Museum  
20 of Science and Curiosity here in Sacramento. I encourage  
21 everyone to come and participate when you're visiting  
22 Sacramento. So, maybe increase the ticket sales for us,  
23 but that's a side plug.

24          But nonetheless, I think it's -- that -- in a  
25 serious note, I think that's an important point I wanted

1 to make sure that we highlighted. So I appreciate all of  
2 our staff who are out there advocating for that  
3 importance. And I just know myself that, you know, when I  
4 was entered in the profession of engineering and that --  
5 how life-changing that was and how a pursuit to the values  
6 of the IEEE to improve the quality of life of people is  
7 important.

8 To that point, you know, Sacramento, the region  
9 here, we entered into an important milestone, and that was  
10 to -- that we met our ozone attainment levels -- federal  
11 attainment levels for the first time. That was -- that  
12 was done because of science and it was a significant  
13 celebration. A lot of folks from diff -- were involved  
14 from industry, from community, from different parties were  
15 all engaged in it, understanding the impacts of ground  
16 level ozone.

17 And so, a few weeks ago, we all met to celebrate  
18 that accomplishment, but where we are still behind is in  
19 particulate matter. And we still faced a lot of that  
20 because of the challenges that we face with unrealistic or  
21 unviable alternatives to agricultural pile burning and the  
22 challenges that also we face here. So one, I think, you  
23 know, our history in California, one was built on  
24 agriculture. It's provided a large economy with us. But  
25 I feel like our focus here -- and when I see -- I looked

1 at the different pots of buckets here, I want to, you  
2 know, highlight the comments made by Julia here earlier  
3 about the importance of looking at better agricultural  
4 biomass utilization and our research in that, and those  
5 priorities. With the little bit of dollars that we do  
6 have, I strongly believe that our research dollars should  
7 move forward to advance and build, not only the  
8 improvements on air quality, but also at the same time  
9 advance and support our agricultural industry here,  
10 because the issues that happen up in Shasta County affect  
11 us here. And we know that through the work that the  
12 Sacramento Basinwide Pollution Control Council sees and  
13 manages.

14           So I think, number one, addressing -- I think  
15 that however staff looks at this moving forward in which  
16 bucket it lands in, whether it's -- in which category I  
17 think addressing the viable agricultural residue carbon  
18 capture with a focus on beneficial use, because, yes, we  
19 could just say you can't burn at all, but then what  
20 happens in that what we've seen now unfortunately is  
21 entire orchards being ripped out. And then we are dealt  
22 with that massive fuel that's sitting out. So, I think,  
23 number one, on that.

24           And then -- and though when that fuel has to be  
25 burned, it ends up going through Colusa, Sacramento, and

1 sitting in this area, and been a -- it's been a challenge  
2 for us to meet those issues. So I think that our research  
3 should focus on the advancement of that agricultural  
4 closed loop system.

5 Second, I want to also, you know, thank Mr. Edgar  
6 for his comments on how we advance the research on again  
7 biomass utilization through our organic waste diversion to  
8 support again soil -- restructuring to soil-beneficial  
9 uses in that context, because I've had a chance to see how  
10 unfortunate -- the unfortunate history of California  
11 mining had ripped out and basically left entire valleys of  
12 what was once fertile land now just pure clay and unable  
13 to use for agriculture. But through this new method of  
14 ensuring that we don't send our green waste to landfills  
15 and using it as a soil amendment, we're reclaiming back  
16 that land that was basically only left for star thistle to  
17 grow.

18 So I'd like to -- again that's a long way of  
19 saying that I want to make sure that the research that  
20 we're -- the limited dollars that we're using go to  
21 further advance that closed loop agricultural system that  
22 helps us address our air quality standards.

23 And I think sometimes, when I've looked at some  
24 of these, they could be myopic at points. So I want to --  
25 I'd like to see if staff can respond on how we do that,



1 and particularly a concern of mine in this air basin is  
2 biomass utilization and how we advance that effort, so...

3 EXECUTIVE OFFICER CLIFF: Thank you, Councilman.

4 So, I'll just start by saying that there are a  
5 lot of great ideas and we would certainly love to enhance  
6 the research budget. We bring items to the board each  
7 year with the goal of continuing to get as much funding as  
8 we can for research. And we want to remain flexible. You  
9 hear the word "leverage" a lot in this conversation,  
10 because that's, in fact, how we approach this. If we can  
11 put a little money into a project that gets something  
12 specific for CARB, maybe of a larger project, that can be  
13 a really effective way for us to get information and help  
14 get a project across the finish line. So we're definitely  
15 interested in expanding the role of our research and  
16 looking at these other opportunities.

17 I am aware, and I don't have a lot of information  
18 on it, but I believe the Governor recently signed SB 88,  
19 which would require some new work in this area, so it will  
20 be something that we're, you know, continuing to work on.  
21 And I know, through conversations that you and I have had  
22 of your continued interest here, I think to the extent  
23 that we can find other support and leverage our research  
24 dollars in such a way that we can advance the state of  
25 knowledge on beneficial uses of biomass that avoid

1 combustion and its -- and its health impacts -- associated  
2 health impacts is a really great use of our research  
3 dollars.

4 I should also note, and I didn't stress this  
5 enough, although we did talk about this and elizabeth  
6 touched on it a bit, that the Research Plan is sort of our  
7 formal research plan, we do have contracts that are  
8 research and science-based that support all of our various  
9 regulatory efforts. So some of that is -- while it's  
10 coordinated with work that's going on in the Research  
11 Division, it's not always part of the Research Plan. So,  
12 there's other opportunities for doing research that don't  
13 necessarily fall directly into the Research Plan  
14 specifically.

15 Does staff have anything more to add about the  
16 specific question?

17 DEPUTY EXECUTIVE OFFICER SAHOTA: Good morning.  
18 So the two things that are required in SB 88 that speak  
19 directly to some of the comments and requests that you're  
20 making, Councilman, are a report by January 2028 related  
21 to the use of forest and agricultural biomass, and that is  
22 to also account for wildfire risk and land management  
23 action. So really tying the nature-based side of what we  
24 need to accomplish there to help minimize some of those  
25 public health impacts from like PM and smoke impacts to

1 where do we take that material and then put it to  
2 beneficial use in broader economy. And then a year later,  
3 we are to publish a comprehensive statewide strategy to  
4 support things like carbon removal for biochar, soil  
5 amendment, those kinds of pieces.

6           Whereas, before we were trying to find a way to  
7 make sure that we could fund and do the work here, we now  
8 have legislation with resources dedicated to two specific  
9 (inaudible) staffing resources that we're requesting to  
10 help push this on a faster pace.

11           BOARD MEMBER GUERRA: Thank you. I appreciate  
12 that. And again, the advance figuring out how we do it in  
13 a where it advances our current strength in our  
14 agricultural economy I think that's a key thing, but I  
15 appreciate that. Thank you for your response.

16           CHAIR RANDOLPH: Thank you.

17           Dr. Pacheco-Werner.

18           BOARD MEMBER PACHECO-WERNER: Thank you so much  
19 to you all for just a fantastic strategic plan. I wanted  
20 to just start off talking about how within the priorities  
21 that you've already listed, we can incorporate really  
22 the -- understanding a little bit more our impact in this  
23 equitable transition. And this really comes from just  
24 over the years, the last two years specifically, really  
25 hearing from folks in the San Joaquin Valley who are sort

1 of, in a lot of respects, ground zero for our equitable  
2 energy transition kind of understanding some of the  
3 impacts of like, for example, large-scale energy projects,  
4 landfills for batteries, right? And also, in terms of the  
5 pesticides, right, because we've shifted some of that use,  
6 one of the things that we've -- I've been hearing is about  
7 small farmers mixing pesticides with unknown effects  
8 both -- you know, obviously it's a personal risk, but also  
9 the community risk.

10           So I know that a lot of it is focused in the  
11 strategic plan specifically on the emission aspect. And I  
12 think that a second layer to the emission aspect is also,  
13 you know, what is -- what is being put in the air, right?  
14 And so, I think those are -- those are just a few  
15 opportunities.

16           I do think that, you know, while many of the  
17 divisions do work with the air districts on numerous  
18 research questions, I think some of the -- you know,  
19 because you specifically call out the NAAQS here and the  
20 challenges, I do think that, you know, working together  
21 and across, so that these researchers from these different  
22 universities can actually, you know, start with a baseline  
23 of those lessons learned that don't always get published  
24 by the air districts, but that they certainly have the  
25 on-the-ground experience around some of that.

1           So I would just encourage more collaboration on  
2 that end as well in terms of like the researchers that  
3 are -- that are contracted. And finally, I do appreciate  
4 the public's comments on really, you know, trying to  
5 highlight more on and focusing on the climate research.  
6 And I would say that I think that we know a lot already.  
7 We have a lot of evidence. I think what maybe we could  
8 encourage more of is public forums where, you know, the  
9 different State agencies, as well as researchers can  
10 really highlight for the public a more cohesive narrative  
11 about what we already know.

12           So really I do think that we already have a lot  
13 and I know that you -- you know, it's tough to prioritize  
14 everything. And so I do feel like that's one of the --  
15 one of the pieces where why don't we start with what we  
16 have already and actually try to strategize around telling  
17 the story about what we already know in a more cohesive  
18 way. And however I can be a support of that, please let  
19 me know. So thank you.

20           CHAIR RANDOLPH: All right. Thank you.

21           Board Member Takvorian.

22           BOARD MEMBER TAKVORIAN: Thank you, Chair. Thank  
23 you to the research team. I absolutely support the  
24 plan -- the five-year plan and I appreciate the enormous  
25 amount of work that has gone into it. I think it further

1 emphasizes the foundational role that science plays in  
2 CARB's rulemaking as well as our implementation of rules.  
3 Although I think the T-shirts are doing an excellent job  
4 of doing that as well. So if folks aren't seeing those on  
5 the wide shot, I hope you'll notice them. Appreciate  
6 that.

7 I have watched our research arm over the years  
8 that I've been on the Board, but I have really appreciated  
9 the evidence of the science and data-driven response that  
10 we have had as a state as well as an agency to the federal  
11 assault on climate and air pollution regulation. So, I  
12 think speaking for myself, but I think many of us are  
13 appreciating you every day when we open the -- open the  
14 media. So appreciate that.

15 And also that over my time on the Board, the  
16 emphasis on the racial equity lens has really enlarged and  
17 I appreciated your discussion of that in the plan. It's  
18 long been an ignored area of data that impacts communities  
19 of color and low-income communities. And that's further  
20 supported in the five-year plan and I appreciate that  
21 continuance.

22 Also, I wanted to mention the appreciation for  
23 the real-world engagement that the Research team has. You  
24 mentioned with the Imperial 617 effort and I appreciated  
25 that as well as having been engaged in the one in the

1 Portside communities in San Diego. It really makes a  
2 difference I think with research capacity in forming the  
3 kinds of rule -- not just rulemaking, but planning that  
4 local communities can do as well.

5           So, this may go along with what Dr.  
6 Pacheco-Werner said, but I think the one area that feels  
7 lacking to me, and I'm not sure how we address it, and  
8 that is understanding, while there is limited capacity,  
9 I'd like to hear more about how CARB's research can be  
10 more effectively shared with local governments in their  
11 decision-making. I'm often seeing that the information  
12 that we have here at the State level is essentially  
13 missing at the local level.

14           And so, it's something that we bring up  
15 oftentimes when we talk about land use regulation and the  
16 impact that particular projects may have. And I'd love to  
17 think about with you and be able to move forward more  
18 effective ways of sharing that information with local  
19 government, so that they can use it more effectively in  
20 their permitting and decision-making. And I don't expect  
21 a two sentence -- you might have one. You may have a  
22 perfect solution, but I just want to put it out there as  
23 something that I hope we can work on further in the  
24 future. Thank you.

25           CHAIR RANDOLPH: All right. Thank you.

1 Supervisor Ortiz-Legg.

2 BOARD MEMBER ORTIZ-LEGG: Thank you, Chair.

3 Thank you very much. It is really nice to see your  
4 T-shirts. It's go science. I love that and really  
5 appreciate all your work on this. It's not a very big  
6 budget to do a lot of things. The one thing I wanted  
7 to -- first off, I wanted to go along with comments from  
8 Mayor Guerra on the biomass and again looking for  
9 solutions for a lot of the material that is out there that  
10 continues to provide us with opportunities in regards to  
11 electricity generation in the long run. And I think that  
12 there's some -- a lot of viable opportunities there, so,  
13 you know, eventually like to hopefully see that.

14 What I wanted to just address quickly and that is  
15 not something that I know we can do right now, but just to  
16 put it out there, which is -- continues to be my concern  
17 in regards to the equitable transition to a low-carbon  
18 future. And, all of that, the one piece that I notice --  
19 and it's not just within this agency, but it's a  
20 collaboration amongst the agencies. I think we're  
21 starting to see a little bit more in California amongst  
22 our regulatory agencies that look at power generation.  
23 But when we look at upstream generation and how we try to  
24 collaborate and strategically place it, in order to really  
25 get to those areas that was referred to, whether it's the



1 San Joaquin Valley, whether it's rural areas, that we  
2 really could be a help in saying, you know, we're working  
3 very hard towards that transition, but we can't do it  
4 without having that generation out there.

5           And I think that mapping out things a little bit  
6 better would be something for, you know, in the future.  
7 Obviously, your plate is full right now. But again, I  
8 just wanted to post that comment in regards to that  
9 transition, whether it's transmission, distribution,  
10 energy sourcing, any of the things to really generate,  
11 because all of this is really hard to do without that  
12 clean energy generation.

13           So those are my comments and thank you for your  
14 work.

15           CHAIR RANDOLPH: Thank you, Supervisor. I will  
16 add that we have been very, very, very closely engaged  
17 with the Energy Commission and the Public Utilities  
18 Commission on the SB 100 report, which is the document  
19 that will update the public on our progress towards the  
20 100 percent retail sales of zero-emission energy. So we  
21 will -- so we, like I said, have been very closely  
22 engaged. And so I think that report will have an  
23 opportunity to really share with the public kind of where  
24 we are and what the challenges and opportunities that we  
25 are encountering throughout that process are.

1 BOARD MEMBER ORTIZ-LEGG: Thank you.

2 CHAIR RANDOLPH: Board Member Rechtschaffen.

3 BOARD MEMBER RECHTSCHAFFEN: Thank you. I have a  
4 general comment and a specific comment. The general  
5 comment is to underscore what the Chair said, what  
6 Elizabeth said, what Board Member Takvorian just said, the  
7 importance of the research budget and the science  
8 investigation that CARB's done. One of the reasons that  
9 CARB standards have been so adorable and they've been  
10 replicated nationally and internationally, and that CARB  
11 has the extraordinary reputation that it has is that over  
12 decades air quality and climate regulations by this agency  
13 have been based on science before it was fashionable.

14 So that's a very important foundation on what  
15 we're -- on what we're building -- that we're building on.  
16 And, of course, as folks have said, this work is more  
17 important than ever, given the evisceration of research  
18 funding by the federal government and its war on science.

19 The specific comment concerns research into  
20 control measures for industrial sources. And I mentioned  
21 this in my briefing with staff. We -- industrial -- GHG  
22 emissions from industrial sources are the second largest  
23 source of our greenhouse gas emissions in this state.  
24 Apart from Cap-and-Trade, we don't have any direct  
25 regulation of industrial sources.

1           Last year, the Legislature passed SB 941, which  
2   directed us in the next Scoping Plan to look at -- and do  
3   a detailed analysis of industrial source emissions,  
4   sources where there are zero-emission controls and where  
5   there aren't ones. We know that the federal government  
6   has dramatically cut back funding to support  
7   commercialization and research into controls on industrial  
8   sources.

9           I think within the climate research prong of the  
10   proposed research budget there's room for looking at these  
11   control technologies and I hope that we're able to do that  
12   going forward.

13           CHAIR RANDOLPH: Thank you.

14           Supervisor Hopkins.

15           BOARD MEMBER HOPKINS: Thank you. My colleagues  
16   pretty much covered everything, but I do have one request,  
17   which is that next time you bring the awesome nerdy  
18   science shirts, you give us a heads-up, so that we can  
19   coordinate with all of you and stand up in support of  
20   science.

21           You know, and then just to add to my chorus of  
22   disgust over the current federal administration's  
23   dismissal of science. You know, it strikes me that so  
24   much of science is about questioning things and about  
25   honestly evolving forward and getting better with every

1 single study. And so scientists question other  
2 scientists, because they want to improve methodology,  
3 right, because they want to improve models.

4 And I just want to point out that that is very  
5 different than throwing out all of science and questioning  
6 the fundamental value of science, which is what's  
7 happening right now. And I think that unfortunately too  
8 often folks who don't understand a subject matter, don't  
9 honestly even understand the scientific method or  
10 scientific processes, capitalize on that uncertainty, and  
11 that sometimes disagreement within the scientific  
12 community. And I think that we need to draw a bright line  
13 between, you know, scientific small disagreements, right,  
14 when there is a consensus majority opinion and on just  
15 throwing out the entire discipline and essentially coming  
16 up with an alternate reality and alternate facts.

17 So thank you all so much for our T-shirts. It  
18 makes me really happy and next time I want to be part of  
19 the team, so give us a heads-up.

20 CHAIR RANDOLPH: All right. Thank you.

21 Dr. Balmes.

22 BOARD MEMBER BALMES: Thank you, Chair Randolph.  
23 And thank you, Supervisor Hopkins, for that vote for  
24 science and T-shirts. I would agree. I'd like one too.

25 As a scientist, I appreciate all my fellow Board

1 member comments, several of whom are also scientists. And  
2 I asked to go last, because, you know, I'm the longest  
3 serving current Board member, and I've worked closely with  
4 this Research Division almost that entire time. Matter of  
5 fact, I meet almost monthly with Elizabeth and Bonnie  
6 Holmes-Gen. You know, I'm mostly dealing with the public  
7 health part of the Research Program, but they run other  
8 things past me too.

9           And I really appreciate the engagement of my  
10 fellow Board members. I mean, it's great. You all -- in  
11 addition to being angry about the evisceration of  
12 scientific work across the board, not just in terms of the  
13 environment, by the current administration, and a  
14 President who literally said that climate change  
15 mitigation was ruining western democracy, western  
16 civilization at the UN, to say that's an embarrassment is  
17 putting it mildly, but I -- this Board appreciates science  
18 and so I appreciate this Board for that.

19           And one problem I have with delegating research  
20 project approval to the Executive Officer -- and I'm not  
21 against that, but one concern I have is making sure that  
22 there's sufficient engagement with Board members who are  
23 really showing their interest in, you know, various  
24 aspects of the work that we, you know, could fund with our  
25 limited budget. So, I guess I would end by commending the

1 Research Division for trying hard to do the best they can  
2 to meet all the different needs that we have for research  
3 to advance our regulatory program. Every discussion I  
4 have with Elizabeth and Bonnie always focuses on what  
5 science would help advance the regulatory agenda of the  
6 agency.

7           You know, obviously, a lot of other things were  
8 brought up here. So I would -- I would encourage the  
9 Executive Officer and colleagues to bring a discussion of  
10 research every year, even if we don't have to, you know,  
11 review every project, which I support the Executive  
12 Officer having that delegation.

13           So I want to thank the Research Division. I want  
14 to thank my fellow Board members and, yes, we have to save  
15 science.

16           CHAIR RANDOLPH: All right. Thank you. I just  
17 have a few comments repeating some of the comments of my  
18 colleagues. First, the community engagement efforts that  
19 the Research Program has undergone over the last several  
20 years have been, you know, truly amazing, very thoughtful,  
21 and careful, and effective, and I just really appreciate  
22 that work.

23           And I also just have to express my deep  
24 appreciation for the takedown on the DOE endangerment  
25 finding report, which was just appalling. And it's -- you

1 know, it's a wonderful example of how we have all of this  
2 expertise and articulating to the public the  
3 misinformation, the problematic analysis, and, you know,  
4 being really effective, clear about that work was  
5 impressive and important, and I very, very much  
6 appreciate.

7 So with that, the Board has before them  
8 Resolution number 25-8. Do I have a motion and a second?

9 BOARD MEMBER BALMES: So moved.

10 BOARD MEMBER SHAHEEN: Second.

11 CHAIR RANDOLPH: Okay. I have a motion and a  
12 second. Clerk, will you please call the roll.

13 BOARD CLERK FRENCH: Dr. Balmes.

14 BOARD MEMBER BALMES: Yes.

15 BOARD CLERK FRENCH: Mr. De La Torre?

16 BOARD MEMBER DE LA TORRE: Yes.

17 BOARD CLERK FRENCH: Mr. Eisenhut?

18 BOARD MEMBER EISENHUT: Yes.

19 BOARD CLERK FRENCH: Senator Florez?

20 Senator Florez?

21 Councilman Guerra?

22 BOARD MEMBER GUERRA: Aye.

23 BOARD CLERK FRENCH: Supervisor Hopkins?

24 BOARD MEMBER HOPKINS: Yes.

25 BOARD CLERK FRENCH: Mayor Lock Dawson?

1 BOARD MEMBER LOCK DAWSON: Aye.

2 BOARD CLERK FRENCH: Supervisor Ortiz-Legg?

3 BOARD MEMBER ORTIZ-LEGG: Yes.

4 BOARD CLERK FRENCH: Dr. Pacheco-Werner?

5 BOARD MEMBER PACHECO-WERNER: Yes.

6 BOARD CLERK FRENCH: Mr. Rechtschaffen?

7 BOARD MEMBER RECHTSCHAFFEN: Yes.

8 BOARD CLERK FRENCH: Dr. Shaheen?

9 BOARD MEMBER SHAHEEN: Aye.

10 BOARD CLERK FRENCH: Ms. Takvorian?

11 BOARD MEMBER TAKVORIAN: Yes.

12 BOARD CLERK FRENCH: Chair Randolph?

13 CHAIR RANDOLPH: Yes.

14 BOARD CLERK FRENCH: Madam Chair, the motion  
15 passes.

16 CHAIR RANDOLPH: Okay. Thank you.

17 Okay. The last item on the agenda is Item number  
18 25-6-8 Proposed Amendments to the Advanced Clean Fleets  
19 and Low Carbon Fuel Standard Regulations.

20 If you are here with us in the room and wish to  
21 comment on this item, please fill out a request-to-speak  
22 card, as soon as possible, and submit it to a Board  
23 assistant. If are joining us remotely and wish to comment  
24 on this item, please click the raise-hand button or dial  
25 pound two now. We will first call on in-person commenters



1 follow by any remote commenters when we get to the public  
2 comment portion of this item.

3           Air pollution is a silent killer that causes  
4 heart and lung diseases and cancer. Over the last 50  
5 years, the State's clean air efforts have saved \$250  
6 billion in health costs through reduced illness, including  
7 by reducing diesel related cancer risk by nearly 80  
8 percent.

9           Although California's actions have dramatically  
10 improved air quality, vehicles in California are still the  
11 greatest contributor to criteria pollutants under State  
12 and federal law, including most fine particulate matter  
13 and ozone precursor emission. Vehicles also contribute to  
14 approximately half of statewide greenhouse gas emissions  
15 when accounting for transportation fuel production and  
16 delivery. The State's critical role in goods movement for  
17 the nation and its unique geography means continued  
18 progress on reducing vehicle emissions is required to meet  
19 State and federal standards.

20           The Advanced Clean Fleets Regulation was adopted  
21 by the Board in April of 2023 in an effort to keep  
22 improving air quality for Californians. The Regulation  
23 set requirements for State and local government fleets,  
24 high priority fleets, and drayage fleets to reduce  
25 emissions with zero-emission technology everywhere

1 feasible, and establish a hundred percent zero-emission  
2 sales requirement on truck manufacturers starting in 2036.

3 The Advanced Clean Fleets Regulation was designed  
4 to deliver critical air quality and climate benefits,  
5 which are necessary to meet those federal air quality  
6 attainment standards and the State's air quality and  
7 climate targets.

8 In October of 2023, Assembly Bill 1594 was  
9 enacted, which requires CARB to amend the State and local  
10 government requirements of the Advanced Clean Fleets  
11 Regulation in response to concern from public agency  
12 utilities. The bill defines a public agency utility and  
13 makes some of the existing exemptions more accessible to  
14 them.

15 On August 26th, 2024, the Office of  
16 Administrative Law approved non-discretionary changes,  
17 which implemented portions of the bill on an expedited  
18 timeline.

19 Earlier this year, CARB withdrew its request for  
20 a waiver and authorization from the federal government for  
21 the Advanced Clean Fleets Rule, because it was clear that  
22 the U.S. EPA would not act on it before the change in  
23 Presidential administrations, and the incoming  
24 administration had indicated that it was not going to  
25 approve the request.

1           So today's item has three components. The first  
2 two are amendments to the Advanced Clean Fleets Regulation  
3 to implement AB 1594 and to repeal the portions of the  
4 regulation pertaining to drayage trucks and high priority  
5 fleets. And the third component is a minor technical fix  
6 to the Low Carbon Fuel Standard that provides enhanced  
7 crediting support for hydrogen fuel cell electric  
8 vehicles.

9           Dr. Cliff, would you please introduce the item?

10           EXECUTIVE OFFICER CLIFF: Thank you, Chair  
11 Randolph. The Advance Clean Fleets Regulation consists of  
12 requirements that reduce tailpipe emissions by phasing in  
13 zero-emission medium- and heavy-duty vehicles. It is part  
14 of California's comprehensive strategy to reduce the  
15 transportation sector's outsized contribution to air  
16 pollution.

17           However, given the absence of a federal waiver or  
18 authorization, we are recommending that the high-priority  
19 fleets and drayage portions of the regulation be repealed  
20 to avoid confusion for these entities.

21           Despite the market uncertainty and disruption  
22 brought on by the federal government, California remains  
23 steadfast in its commitment to work with medium- and  
24 heavy-duty fleets to keep moving towards cleaner  
25 transportation, while also reducing harmful and costly air

1 pollution. In June, Governor Newsom signed Executive  
2 Order N-27-25, which directed our agency to maintain a  
3 list of fleets that voluntarily comply with the Advanced  
4 Clean Fleets Regulation as one way we can continue working  
5 with fleets who are taking action to reducing their  
6 emissions.

7 Before we discuss the proposed amendments to the  
8 State and local government fleets requirements, we also  
9 want to acknowledge the important work our public agency  
10 utilities do every day to maintain reliable services even  
11 in the face of increasingly -- increasing threats caused  
12 by climate change.

13 Earlier this year, the devastating wildfires,  
14 public utility agencies requested we take more time in  
15 this rulemaking to consider other flexibilities that go  
16 beyond the solutions identified in AB 1594.

17 The 45-day proposal includes the amendments to  
18 implement AB 1594, but staff has continued to work with  
19 State and local governments on additional changes to add  
20 more flexibility. These changes would be reflected in a  
21 15-day package. Also, in the resolution that is being  
22 presented today, staff is emphasizing our continued  
23 commitment to continue to work with State and local  
24 governments to ensure that we're supporting their fleet  
25 electrification efforts and maintaining their ability to

1 respond to emergency situations.

2 Lastly, we recommend approving a technical  
3 amendment to the Low Carbon Fuel Standard Regulation that  
4 provides stronger crediting support for ZEVs under the  
5 hydrogen fueling infrastructure provision.

6 I will now ask Molly Munz of the Mobile Source  
7 Control Division to begin the staff presentation, which  
8 explains these proposed amendments and further proposed  
9 modifications for State and local government fleets.

10 Molly.

11 (Slide presentation).

12 MSCD AIR POLLUTION SPECIALIST MUNZ: Thank you,  
13 Dr. Cliff and good morning Chair Randolph and members of  
14 the Board.

15 [SLIDE CHANGE]

16 MSCD AIR POLLUTION SPECIALIST MUNZ: I'll start  
17 today's presentation by providing a background on the  
18 Advanced Clean Fleets Regulation. Then I'll briefly go  
19 over the proposed repeal, followed by a discussion on the  
20 State and local government fleet requirements and those  
21 proposed amendments. Lastly, I will discuss a minor  
22 technical fix to the Low Carbon Fuel Standard Regulation.

23 [SLIDE CHANGE]

24 MSCD AIR POLLUTION SPECIALIST MUNZ: The Advanced  
25 Clean Fleets Regulation was adopted by the Board two years

1 ago. The Regulation applies to medium- and heavy-duty  
2 vehicles. There are three separate fleet requirements.  
3 One that applies to State and local government agency  
4 fleets, another that applies to high priority and federal  
5 fleets, and a third that applies to drayage trucks.

6 [SLIDE CHANGE]

7 MSCD AIR POLLUTION SPECIALIST MUNZ: The proposed  
8 amendments would repeal the requirements for the high  
9 priority and federal fleets, and drayage trucks. Earlier  
10 this year, CARB withdrew its request for a waiver from the  
11 federal government as it was clear the incoming  
12 administration was not likely to grant one. The repeal is  
13 necessary because keeping such elements in place may cause  
14 confusion and uncertainty for private fleets.

15 At last[SIC] month's Board hearing, we will be  
16 discussing the lost health benefits associated with recent  
17 federal actions and substantial emission reductions needed  
18 to meet ozone attainment in the South Coast and statewide.  
19 Also, at next month's Board hearing, we will provide an  
20 overview of the ZEV Forward dialogue sessions and  
21 recommendations made in response to Governor Newsom's  
22 Executive order N-27-25, and our next steps to make up the  
23 projected emission reductions that the Advanced Clean  
24 Fleets would have achieved, if it could have been  
25 enforced.

1 [SLIDE CHANGE]

2 MSCD AIR POLLUTION SPECIALIST MUNZ: Now, I will  
3 provide background on the State and local government  
4 agency fleet requirements, which remain in effect.

5 [SLIDE CHANGE]

6 MSCD AIR POLLUTION SPECIALIST MUNZ: This slide  
7 shows the weight class composition of California's State  
8 and local government fleet. More than 50 percent of our  
9 fleet is in weight Class 2B to 3. Primarily, these  
10 vehicles are configured as pickup trucks, vans, and  
11 smaller service body trucks, as shown on the right side of  
12 the screen.

13 The other half of the fleet is comprised of  
14 weight Class 4 and up. Two very common vehicle  
15 configurations in the larger weight classes are dump  
16 trucks and larger service body trucks both shown on the  
17 left side of the screen.

18 [SLIDE CHANGE]

19 MSCD AIR POLLUTION SPECIALIST MUNZ: Now, I will  
20 briefly discuss the current compliance requirements for  
21 the State and local government agencies. California's  
22 public fleets have two compliance options. The default  
23 compliance pathway is the ZEV purchase schedule. Under  
24 this path, half of all annual purchases must be  
25 zero-emission or near-zero emission vehicles. The

1 California map on the right side of the slide shows the  
2 designated low population counties in red. Fleets located  
3 in red areas and small fleets with 10 or less vehicles in  
4 the white parts of California are not required to purchase  
5 any ZEVs yet. The other compliance pathway is the ZEV  
6 milestone option. This schedule is based on meeting  
7 fleetwide ZEV targets by key deadlines, which are based on  
8 the suitability of the vehicles for electrification.

9 [SLIDE CHANGE]

10 MSCD AIR POLLUTION SPECIALIST MUNZ: I would like  
11 to follow up on part of the direction staff received from  
12 the Chair at last month's Board hearing. Over the last  
13 month, staff met with numerous groups including California  
14 Association of Sanitation Agencies and Clean Energy to  
15 discuss their request that the Advanced Clean Trucks and  
16 Advanced Clean Fleets count combustion vehicles that burn  
17 renewable natural gas as NZEV. As you know, ACF counts --  
18 and ACT count NZEVs the same as ZEVs. Sorry. ACF counts  
19 NZEVs the same as ZEVs until the 2035 model year.

20 These -- the definition of an NZEV is a vehicle  
21 with both a combustion engine and a powertrain capable of  
22 operating for a minimum number of all-electric miles.  
23 These vehicles are commonly known as plug-in hybrids.  
24 Combustion vehicles, such as those only powered by  
25 renewable natural gas, or RNG, do not meet our NZEV



1 definition. Staff are not suggesting the Board make any  
2 changes to the NZEV definition for a few reasons.

3 First, engines that combust natural gas or CNG  
4 engines sold today are no cleaner than diesel engines, and  
5 second, RNG and other renewable fuels are already  
6 supported by the Low Carbon Fuel Standard. Lastly, a key  
7 objective of the Advanced Clean Trucks and the Advanced  
8 Clean Fleets regulations are to achieve emission  
9 reductions beyond what can be achieved with conventional  
10 technologies.

11 Ultimately, staff concluded giving credit to  
12 combustion vehicles would result in lost emission benefits  
13 and would not meet the main objectives of Advanced Clean  
14 Trucks and Advanced Clean Fleets regulations. Staff are  
15 following Newsom's Executive Order N-27-25 and will  
16 continue to advance progress towards the deployment of  
17 clean air vehicles and technologies in the state, and are  
18 engaging stakeholders and concepts for future rulemakings.

19 [SLIDE CHANGE]

20 MSCD AIR POLLUTION SPECIALIST MUNZ: Now, I will  
21 briefly touch on the exemptions listed on the slide,  
22 because we are proposing to make some improvements to  
23 them. Under the ZEV purchase exemption, a fleet can  
24 purchase a new combustion vehicle when a ZEV is not  
25 available in the configuration they need. And the daily

1 usage exemption will allow a fleet to purchase a new  
2 combustion vehicle when the fleet's demonstrated usage  
3 needs exceeds the battery capacity in the ZEV.

4 Finally, the mutual aid assistance exemption  
5 allows up to 25 percent of the vehicle to remain as  
6 combustion provided the fleet has mutual aid agreements in  
7 place. Many public fleets use mutual aid agreements to  
8 aid other jurisdictions outside their service territory in  
9 response to emergency situations such as wildfires and  
10 earthquakes. To access this provision, a fleet must meet  
11 a minimum of 25 percent ZEV.

12 [SLIDE CHANGE]

13 MSCD AIR POLLUTION SPECIALIST MUNZ: Now, I will  
14 transition from the background to why we are amending  
15 these requirements. Over the last year, staff have  
16 visited with fleets to discuss their concerns and see some  
17 of their operations. These photos on the slide are from  
18 our sight visits. Public agency utilities serve  
19 California's population and are essential to maintaining  
20 reliable water and electricity, as well as help to respond  
21 to disasters in an emergency capacity and provide mutual  
22 aid assistance in the State and nationwide.

23 [SLIDE CHANGE]

24 MSCD AIR POLLUTION SPECIALIST MUNZ: Assembly  
25 Bill 1594 was passed by the Legislature and signed into

1 law two years ago. This bill requires changes to the  
2 Advanced Clean Fleets Regulation to allow public agency  
3 utilities to replace their specialized vehicles without  
4 regard to the model year of the vehicle being replaced and  
5 gives these vehicles broader access to the daily use  
6 exemption. Last year, the public agency utilities  
7 requested we implement this bill as soon as possible.  
8 Staff used Section 100 of the Administrative Procedure Act  
9 to define a public agency utility and give those entities  
10 broader access to the daily usage exemption. The section  
11 100 changes were effective starting in October of last  
12 year.

13 [SLIDE CHANGE]

14 MSCD AIR POLLUTION SPECIALIST MUNZ: Now, that  
15 you have a background on the Advanced Clean Fleets  
16 Regulation, I will go into our initial proposal that  
17 implements the remaining parts of AB 1594.

18 [SLIDE CHANGE]

19 MSCD AIR POLLUTION SPECIALIST MUNZ: Staff's  
20 initial proposal required that we define a, "traditional  
21 utility specialized vehicle," and other criteria besides  
22 model year that can be used to determine a vehicle's end  
23 of life. Staff's proposal would allow a public agency to  
24 choose between relying on their predetermined replacement  
25 schedule or a replacement schedule provided in the

1 regulation. Staff also limited the daily use exemption  
2 flexibility to the traditional utility specialized  
3 vehicles to align with the legislative direction.

4 Now, I will discuss some of the reasons why we  
5 are proposing additional changes beyond those envisioned  
6 when AB 1594 was passed two years ago.

7 [SLIDE CHANGE]

8 MSCD AIR POLLUTION SPECIALIST MUNZ: As mentioned  
9 earlier, over the course of this rulemaking, staff  
10 traveled all over California visiting public agency  
11 operations and listening to their concerns. Most of their  
12 concerns are about whether Class 4 and up battery-electric  
13 vehicles can meet the extreme work demands of their  
14 traditional vehicles. But there were many rural agencies  
15 that also expressed there is little opportunity for high  
16 speed charging and smaller volume manufacturers lack a  
17 service support network in their service territories.

18 After hearing their concerns, staff are proposing  
19 new changes that better align the ZEV purchase schedule  
20 with the ZEV market where it is today, while also  
21 recognizing the uncertainty caused by our Federal  
22 administration.

23 [SLIDE CHANGE]

24 MSCD AIR POLLUTION SPECIALIST MUNZ: The hundred  
25 percent ZEV purchase requirement was going to kick in by

1 2027 for all fleets. Staff proposed to delay the hundred  
2 percent ZEV purchase schedule until 2030, which will  
3 reduce the number of exemptions a fleet will need. This  
4 also means that small fleets and those located in low  
5 population counties can continue to wait until 2030 before  
6 they need to purchase any ZEVs at all.

7 Another change, including -- is including  
8 extending the AB 1594 flexibilities to all fleets. This  
9 means allowing early access to exemptions and giving  
10 broader access to the daily use exemption for all  
11 vehicles, not just traditional utility specialized  
12 vehicles. These changes will better align the ZEV  
13 purchase schedule with the ZEV market and give more time  
14 and flexibility to fleets. On the next slide, I will  
15 discuss some additional adjustments that will make it  
16 easier for fleets to access exemptions.

17 [SLIDE CHANGE]

18 MSCD AIR POLLUTION SPECIALIST MUNZ: Staff  
19 propose to give exemptions for vehicles that are stolen.  
20 And staff are proposing to redesign the exemption process  
21 to include fleet expansion rather than limiting exemptions  
22 to vehicle replacements. For the ZEV purchase exemption,  
23 we are adding additional criteria used to determine  
24 whether a vehicle is available as a ZEV. Our newly  
25 proposed criteria ensure that ZEV manufacturers are stable

1 and viable. For the daily use -- usage exemption, we  
2 propose fleets can use periodic records that are routinely  
3 collected, such as fueling logs and odometer readings,  
4 which would give these fleets access to the exemption  
5 without needing daily records. And finally, for the  
6 mutual aid provision, we propose to give fleets earlier  
7 access to the exemption and will postpone the mobile  
8 fueling criteria until 2030.

9 Now, I'll briefly touch on some of the benefits  
10 of these amendments.

11 [SLIDE CHANGE]

12 MSCD AIR POLLUTION SPECIALIST MUNZ: The repeal  
13 provides necessary certainty to private fleets that they  
14 are not subject to the Advanced Clean Fleets Regulation.  
15 These amendments fully meet the requirements of AB 1594  
16 and recognize that the landscape is different now than  
17 when we first adopted the Advanced Clean Fleets  
18 Regulation.

19 And even with these changes, this regulation  
20 still provides a strong signal that California is not  
21 backing down on our commitment to lead the nation in  
22 deploying ZEVs. Now, I will briefly discuss a minor  
23 technical fix to the Low Carbon Fuel Standard Regulation.

24 [SLIDE CHANGE]

25 MSCD AIR POLLUTION SPECIALIST MUNZ: Staff is

1 proposing this Low Carbon Fuel Standard Regulation  
2 provision amendment to provide stronger support for medium  
3 duty ZEVs. The infrastructure credit provision helps to  
4 address the chicken and egg problem of consumers opting  
5 not to buy ZEVs, because there isn't enough fueling  
6 infrastructure and investors not opening new stations  
7 because there aren't enough ZEV drivers to use them.

8           Staff propose to increase the per station  
9 capacity crediting factor within the light- and  
10 medium-duty hydrogen station provision with no net change  
11 to total credits available for hydrogen infrastructure.  
12 This minor technical fix will provide stronger support for  
13 buildout of hydrogen stations that can accommodate  
14 medium-duty ZEVs in line with Board Resolution 24-14.

15           Staff is suggesting this change now because we  
16 have received feedback that the existing provision would  
17 be fully utilized by light-duty stations only but would  
18 not support the cap -- larger capital costs of stations  
19 serving medium-duty vehicles. The proposal will enable  
20 fueling stations to meet the demands of medium-duty ZEVs.

21           This concludes staff's proposal.

22                           [SLIDE CHANGE]

23           MSCD AIR POLLUTION SPECIALIST MUNZ: Staff  
24 recommend you approve the resolution outlining this  
25 proposal, which includes adopting a technical fix to the

1 Low Carbon Fuel Standard infrastructure crediting  
2 provision, as well as the amendments to the Advanced Clean  
3 Fleets Regulation, which were discussed in three parts:

4 One, the proposed repeal which removes the  
5 requirements for private fleets; two, the amendments that  
6 implement AB 1594; and three, staff's newest proposal that  
7 gives more time and flexibility to State and local  
8 government fleets.

9 Staff plan to release the newest amendments for  
10 public comment later this year and will finalize the  
11 rulemaking package next year, so that the changes will be  
12 effective before January 1st, 2027 when the hundred  
13 percent sales were supposed to kick in. Our team  
14 continues to collaborate and identify opportunities to  
15 partner with public agencies, as we all work together to  
16 clean our air and meet our climate targets.

17 That concludes my presentation.

18 CHAIR RANDOLPH: All right. Thank you. We will  
19 now hear from the public who signed up to speak on this  
20 item, either by submitting a request-to-speak card or a  
21 raise hand in Zoom. I will note that we have a fair  
22 number of public comments, so we'll see how far we get  
23 before we need to take a lunch break, but we might need to  
24 have a lunch break in the middle. We'll see.

25 Okay. I'll ask the Board Clerk to begin calling



1 the public commenters.

2 BOARD CLERK FRENCH: Thank you, Chair Randolph.  
3 We currently have 30 public commenters to speak in person  
4 and 24 public commenters to speak on Zoom, but we will  
5 first be calling on in-person.

6 The first public commenter to speak is Dr. Matt  
7 Miyasato

8 DR. MATT MIYASATO: Good morning, Madam Chair,  
9 members of the Board. Madam Chair congratulations on your  
10 impending retirement. You will be missed, but it's well  
11 deserved. I'm Dr. Matt Miyasato, the Chief Public Policy  
12 Officer at First Element Fuel. First Element Fuel is a  
13 small Southern California based company, but we've grown  
14 to be the largest hydrogen station provider in the State  
15 of California, which, by default, makes us the largest in  
16 the U.S., North America, western hemisphere. We're not  
17 sure going on in China. That's why we won't say globally.

18 But be that as it may, we have 39 stations  
19 throughout the State of California, including the largest  
20 fast fill heavy-duty truck station at the Port of Oakland.  
21 That's part of the Norcal Zero Project, which this Board  
22 supported. We want to voice our strong support for  
23 staff's recommendation to remove the D rate on the light-  
24 and medium-duty hydrogen refueling infrastructure and  
25 capacity credit that you just heard at the End of the

1 presentation. That will allow us build stations of  
2 adequate size to support medium-duty trucks, as well as  
3 fuel cell pickup trucks, which are due to be  
4 commercialized at the end of the decade.

5 We would also urge you to consider removing the  
6 one percent deficit cap on single applicants. After we  
7 build our next two hydrogen stations, we will exceed that  
8 cap and so will be disallowed from the HRI program. We  
9 didn't intend to be the market leader in hydrogen fueling  
10 stations. In fact, we'd love other people to join into  
11 the fray. It's just that that's the only thing we do. We  
12 build, design, and operate hydrogen fueling stations, and  
13 we put all of our energy, our engineering, and our focus  
14 into making our stations the best that they can be. And  
15 the fruit of the labor is now that we see our stations at  
16 over 92 percent availability.

17 And so we just ask you not to punish perseverance  
18 and success, and consider allowing us, if not removing  
19 that one percent deficit cap, at least let us grandfather  
20 in the stations that we already have California Energy  
21 Commission grants for, which is about another two dozen.

22 So we thank you for your consideration and we  
23 look forward to working with this Board as you move toward  
24 zero-carbon and zero-emission transportation. Thank you.

25 BOARD CLERK FRENCH: Thank you.

1           The next in-person commenter is Nick Blair.

2           NICK BLAIR: Good morning -- still morning, Chair  
3   Randolph, fellow Board members. My name is Nick Blair,  
4   Senior Policy Advocate with the Association of California  
5   Water Agencies. We represent around 470 public water  
6   agencies throughout the state, which accounts for 90  
7   percent of water delivered. Thank you for the opportunity  
8   to provide today on the proposed ACF resolution.

9           We are supportive of the resolution offered by  
10   staff today with the understanding that CARB will extend  
11   the current purchase requirements on State and local  
12   fleets out to 2030, and continue to work on additional  
13   changes to be seen in a future 15-day package to balance  
14   the goals of ACF with the real-world needs of public water  
15   agencies.

16           Extending the current purchase requirements until  
17   2030 is a reasonable next step to provide flexibility to  
18   public fleets, while we continue to participate in  
19   dialogue with CARB staff and our coalition partners  
20   towards amending exemption pathways for situations where  
21   ZEVs are unavailable to meet public fleet needs. As  
22   stated in our written comments, we feel that there remain  
23   substantial work to be done beyond the 45-day changes to  
24   improve these exemption pathways, such as mutual aid, ZEV  
25   purchase and daily usage. We appreciate that CARB staff

1 sees the ongoing benefit of involving public water  
2 agencies in this process, and through regular dialogue and  
3 coming out on numerous site visits this year.

4           Public water agencies need to be able to maintain  
5 the support for their wide range of operations and ensure  
6 available fleet of vehicles to provide reliable service to  
7 respond to emergencies of any scope. ACF needs to reflect  
8 the limited market availability of ZEVs and consider the  
9 heightened cost increases the public water agencies will  
10 face while other fleets have been removed from compliance  
11 for the time being.

12           Once again, thank you for the opportunity to  
13 speak today. We look forward to the continued dialogue  
14 with CARB staff and the Board on this issue at the  
15 decision today.

16           And congratulations, Chair Randolph, on your  
17 soon-to-be retirement.

18           BOARD CLERK FRENCH: The next in-person  
19 commenter -- I apologize if I pronounce your name wrong.  
20 Sarah Deslauriers.

21           SARAH DESLAURIERS: Good morning, Chair Randolph,  
22 Board members and staff. My name is Sarah Deslauriers. I  
23 serve as Director of Air, Climate, and Energy Programs at  
24 the California Association of Sanitation Agencies,  
25 representing more than 90 percent of the public sewered

1 population of California, responsible for cleaning what  
2 you flush and also recovering resources, including  
3 renewable natural gas.

4           Since adopting ACF in Board Resolution 23-13,  
5 CASA has remained engaged, supporting implementation where  
6 possible, and the current amendment process. The  
7 Resolution emphasized the critical need for coordination  
8 across state agencies, air districts, and CASA for  
9 securing multiple beneficial uses of wastewater RNG for  
10 successful implementation of ACF without undermining SB  
11 1383.

12           While we have met with staff, the level of  
13 coordination that we needed has not yet been established.  
14 In turn, sustainable uses for RNG have not been secured.  
15 A progress report by staff remains due to the Board by end  
16 of 2025. While proposed revisions to the resolution -- or  
17 in resolution 25-9 extend some flexibilities for vehicle  
18 purchases over the next four years, they do not support  
19 the RNG markets needed for us to justify investment in RNG  
20 to fuel available 24/7 mission-capable vehicles needed to  
21 meet current South Cost Air Quality Management District  
22 requirements, while working to demonstrate RNG to  
23 zero-emission technologies.

24           CASA is supported by 14 legislators - the letter  
25 is in your inbox - asks the Board is -- to direct staff to

1 amend the ACF Regulation to include a low-NOx RNG-fueled  
2 vehicle that meets 2027 certified engine standards as an  
3 NZEV option, which is supported by UC Riverside's  
4 scientifically rigorous research presented to South Coast  
5 AQMD last week and found that 95 percent of NOx emissions  
6 reductions between 2025 and 2045 for heavy-duty vehicles  
7 could come from replacing older vehicles with 2027  
8 certified low-NOx vehicles running on diesel or compressed  
9 natural gas. Replaced CNR with RNG, you maximize methane  
10 and nitrous oxide emission reductions.

11 Recall -- we just want to appreciate the  
12 opportunity to comment. We have others coming. We  
13 respectfully request the Board incorporate language in  
14 Resolution 25-9 similar to Resolution 23-13 and require  
15 the 15-day changes.

16 BOARD CLERK MOORE: Thank you. That concludes  
17 your time.

18 SARAH DESLAURIERS: Thank you and  
19 congratulations, Chair Randolph.

20 BOARD CLERK FRENCH: Next commenter will be Steve  
21 Jepsen.

22 STEVE JEPSEN: Good morning, Chair Randolph.  
23 Board, and staff. I'm Steve Jepsen with Clean Water  
24 SoCal, a nonprofit representing 80 public wastewater  
25 agencies serving 20 million people in Southern California.

1 These agencies treat wastewater and produce renewable  
2 biomethane. We worked closely with CASA and support the  
3 comments from CASA and our fellow essential public service  
4 stakeholders. It's unfortunate that in over two years,  
5 there's been no progress on the last paragraph of  
6 resolution 23-13, in which the Board recognized the  
7 implementation of food waste diversion and methane GHG  
8 reductions mandated by SB 1383 are critical to the State's  
9 climate goals, and that multiple, reliable uses of  
10 biomethane will be needed for implementation.

11 The wastewater sector has sufficient already  
12 constructed digester capacity to accept all the food waste  
13 in the state. The wastewater sector can help the State  
14 reduce GHG emissions if multiple, reliable, long-term  
15 pathways for the generated biomethane are established.

16 Here, we are two years later with another chance.  
17 We ask the Board to follow up with the last paragraph of  
18 Resolution 23-13 by adding similar language today's  
19 resolution. We also ask that the upcoming 15-day changes  
20 and a report out from interagency work group be brought to  
21 the Board in a public meeting.

22 At a South Coast Air Quality Management District  
23 meeting earlier this month, a UC Riverside study was  
24 presented clearly showing heavy-duty RNG vehicles are  
25 significantly cleaner than diesel

1 Science. By adding a pathway for RNG heavy-duty  
2 vehicles to the ACF Regulations, we can achieve immediate  
3 affordable emission reductions and encourage food waste  
4 diversion projects, a classic circular economy and a  
5 bridge while reliable zero-emission heavy-duty vehicles  
6 are developed.

7 Thank you.

8 BOARD CLERK FRENCH: Next speaker is Damon  
9 Wyckoff.

10 DAMON WYCKOFF: Good morning, Madam Chair,  
11 members of the Board. My name is Damon Wyckoff. I'm the  
12 Director of Operation for the Calaveras County Water  
13 District. We're a small rural water utility about 70  
14 miles southeast of here. If you've been to Arnold or if  
15 you've jumped frogs in Angels Camp, you've been to  
16 Calaveras County.

17 CCWD supports the comment letters submitted by  
18 ACWA, other statewide agencies, and regional agencies like  
19 the Mountain Counties Water Resources Association, most of  
20 which highlight the need for more time before  
21 implementation to further ensure that the safe, reliable  
22 provision of water and sewer services doesn't turn into a  
23 competing interest with clean air.

24 The proposal before you today to delay the  
25 initiation of ACF compliance for small and low population



1 county fleets until 2030 is a very positive step towards  
2 ensuring future ACF Regulation success and long-term  
3 compliance. This also allows for the continued  
4 operational reliability for water and sewer systems in  
5 rural, isolated, and disadvantaged communities.

6 We ask that you add the extension of the same  
7 delay to our large fleet and urban colleagues to the  
8 amendment and then direct staff to continue working with  
9 California water and sewer districts to refine the  
10 amendments to the regulation, to provide a tangible  
11 opportunity for long-term ACF implementation success.

12 Thank you.

13 BOARD CLERK FRENCH: Next speaker is Priscilla  
14 Quiroz.

15 PRISCILLA QUIROZ: Good morning. My name is  
16 Priscilla Quiroz and I'm here on behalf the California  
17 Municipal Utilities Association, CMUA, representing 85  
18 publicly owned electric, gas, water, and wastewater  
19 utilities statewide. At the core, our members are focused  
20 on providing reliable, affordable, and sustainable utility  
21 services to our customers. We greatly appreciate the time  
22 and effort staff have invested in meeting our members,  
23 visiting facilities and engaging on ongoing conversations  
24 over the last several months. We appreciate staff's  
25 recommendation to extend the 50 percent ZEV purchase

1 requirement to 2030, which acknowledges current market  
2 realities and the proposal of 15-day changes to make  
3 further modifications to the regulatory language.

4           However, this extension does not eliminate the  
5 need for exemptions even the next few years. The  
6 exemptions remain one of the most critical areas for  
7 improvement. While we are well intend -- while  
8 well-intended, as drafted they are -- they remain largely  
9 inaccessible to our members. We strongly encourage CARB  
10 to revise and simplify these provision.

11           In addition to comments that will be provided by  
12 our POU partners on ZEV purchase and mutual aid, I want to  
13 highlight daily usage exemption. This tool is essential  
14 as it acknowledges the demands of certain duty cycles and  
15 may not be met by the ZEVs available at the time of  
16 purchase. However, the exemption is currently too  
17 burdensome and the requirement to obtain comparison data  
18 from ZEVs and historical data limitations create  
19 significant barriers to access.

20           We urge CARB to streamline this process and  
21 remove unnecessary hurdles. Our members are committed to  
22 transitioning to zero-emission fleets, where the  
23 technology is available and economically feasible. But it  
24 is vital that the regulations do not compromise emergency  
25 response, public safety, or the reliability of essential

1 utility services.

2 Overall, we're very supportive of the direction  
3 staff is suggesting, but substantial revisions are still  
4 needed to ensure the rule is workable for public agency.  
5 CMUA values the ongoing collaboration and looks forward to  
6 continue working closely with CARB leadership and staff.  
7 And thank you again for your time and thoughtful  
8 consideration.

9 BOARD CLERK FRENCH: Next is Susie Berlin.

10 CHAIR RANDOLPH: Before you started, I just want  
11 to -- two requests. One, for speakers, speak in closely  
12 to the mic. And then for staff, could we like do a little  
13 more volume on the microphone in the room, because we're  
14 having trouble hearing.

15 EXECUTIVE OFFICER CLIFF: It's all the way up?

16 CHAIR RANDOLPH: Is it really?

17 EXECUTIVE OFFICER CLIFF: Yeah.

18 CHAIR RANDOLPH: Oh, dear. Okay. So speak close  
19 into the mic, all of you commenters.

20 SUSIE BERLIN: Okay. Close into the mic.

21 All right. Good morning. My name is Susie  
22 Berlin and I'm speaking today on behalf of the Northern  
23 California Power Agency. NCPA is a joint powers agency  
24 whose members include publicly-owned electric utilities  
25 that serve nearly 700,000 electric consumers in Northern

1 and Central California.

2 NCPA is very appreciative of the time that staff  
3 spent to visit members and to learn more about the  
4 essential functions the fleets need. We support the  
5 objectives of the ACF, but underscore the need for  
6 revisions. These comments are provided in the interests  
7 of facilitating the successful implementation of the ACF  
8 for the local, publicly-owned electric utility fleets, and  
9 the transition to all-EV fleets.

10 As reflected in Dr. Cliff's opening remarks, the  
11 staff presentation, and the proposed resolution, important  
12 additional changes are needed to achieve these objectives.

13 We support staff's recommendation to move the  
14 hundred percent compliance obligation to 2030. Given the  
15 changes in the EV market since the regulation was first  
16 implemented, that's going to be very important. But the  
17 exemptions that were adopted as part of the regulation are  
18 important and we need to ensure that the utilities are  
19 able to utilize them now. This is true even with the  
20 modified hundred percent timeline.

21 NCPA supports changes to the exemptions, and  
22 specifically I'll speak to the ZEV purchase exemption.  
23 When developing this criteria, NCPA urges CARB to  
24 recognize the core functions of the vehicles and the  
25 expertise of the utilities that develop them. This

1 includes the ability of the vehicles to carry necessary  
2 equipment and payloads, as well as towing capabilities.  
3 These were determined based on the utility's specific  
4 service territory needs and it is imperative that vehicles  
5 that do not meet these essential vehicle specifications be  
6 recognized as unavailable.

7 We appreciate all of the work that staff has done  
8 to get us to this point and we look forward to finalizing  
9 the regulation with the amendments that do, in fact, make  
10 it able for us to achieve these goals.

11 And thank you and good luck.

12 BOARD CLERK FRENCH: Next is Elisabeth de Jong.

13 ELISABETH DE JONG: Thank you. My name is  
14 Elisabeth de Jong. I'm here on behalf of the Southern  
15 California Public Power Authority, or SCPPA, representing  
16 12 local publicly owned electric utilities.

17 SCPPA is committed to supporting the ZEV  
18 transition and prioritizing ZEV purchases for our  
19 publicly -- public agency fleets wherever feasible. The  
20 ACF rule is a top priority for our members. That's why we  
21 sponsored AB 1594 highlighting the critical role utility  
22 vehicles play during emergencies, such as the  
23 unprecedented Southern California fires and wind storm in  
24 January.

25 It's essential that the final ACF Rule preserves

1 utilities' ability to respond to emergencies and maintain  
2 the grid. As written, the 45-day package does not meet  
3 POU needs. However, we're optimistic with the 15-day  
4 changes that that can result in a workable rule.

5 We appreciate the proposal to delay the 100  
6 percent ZEV purchase requirement to 2030 and support  
7 simplifying the rule with practical exemptions. In  
8 addition to comments from our POU partners on the ZEV  
9 purchase and daily usage exemptions, I want to highlight  
10 the mutual aid exemption. While well intentioned, it's  
11 needs adjustments including eligibility regardless of the  
12 current ZEV fleet size, optional up-front designation of  
13 exempt vehicles, flexibility on that 25 percent cap for  
14 fleets with demonstrated need, and as mentioned by staff,  
15 delaying or removing the mobile fueling proof requirement.

16 I want to thank CARB staff for their work on  
17 this, including several conversations with us to work  
18 through technical details. We look forward to continuing  
19 to work together to support the State's electrification  
20 goals, while ensuring public agencies can continue vital  
21 emergency and grid services.

22 Thank you for your time and consideration, and I  
23 wish you the best, Chair Randolph.

24 BOARD CLERK FRENCH: Next is Justin Caporusso.

25 JUSTIN CAPORUSSO: Good morning, Chair, members

1 of the Board. Justin Caporusso, Executive Director for  
2 the Mountain Counties Water Resources Association  
3 representing more than 50 water agencies, counties, local  
4 governments across the Sierra Nevada watershed.

5 As you know, 60 percent of California's developed  
6 water begins in the Sierra Nevada headwaters, making our  
7 members work essential, not only for local ratepayers, but  
8 for the millions of Californians who rely on this  
9 watershed for water supply.

10 First, I'd like to thank CARB staff for  
11 recognizing the challenges with implementing the Advanced  
12 Clean Fleets Regulation and for acknowledging that not all  
13 municipal fleets are the same. That recognition is an  
14 important first step.

15 However, the amendments before you today do not  
16 go far enough. They simply delay rather than solve the  
17 very real challenges facing rural and geographically  
18 diverse water agencies. Our members must be able to  
19 respond to wildfires, atmospheric river events, PSPS  
20 outages, and other emergencies in rugged terrain with  
21 highly specialized fleets. Forcing premature transition  
22 jeopardizes both compliance and public safety.

23 This is ultimately an affordability and public  
24 safety issue. Many of our members serve rural communities  
25 with limited electric grid capacity and inadequate

1 charging infrastructure. The cost of compliance will fall  
2 on low-income customers who can least afford higher rates.

3 California is not a one-size-fits-all state. We  
4 need solutions tailored to agencies operating at high  
5 hazard fire zones, across vast terrain, and under constant  
6 threats from inclement weather and recurring PSPS events.  
7 Our agencies are fully committed to advancing CARB's  
8 climate goals and will do what they can, when they can,  
9 with the resources they have, so long as does not come at  
10 the expense of public safety.

11 Mountain Counties Water looks forward to  
12 continued engagement with CARB to find workable solutions.  
13 The implications of these regulations reach far beyond our  
14 member agencies. They affect Californians who recreate in  
15 the Sierra Nevada and the millions who rely on its  
16 headwaters for the majority of the state's water supply.

17 Lastly, we encourage staff to bring back the 15  
18 day amendments to the full Board. Thank you for the  
19 opportunity to speak.

20 BOARD CLERK FRENCH: Next is Noelle Mattock.

21 NOELLE MATTOCK: Good morning, Chair Randolph and  
22 Board Members. I'm Noelle Mattock with the City of  
23 Roseville. Roseville is a full service city with a  
24 circular economy. My remarks today will focus on  
25 alignment, coordination, reliability, and affordability.



1           First aligning ACF with SB 1383. The 45-day  
2 amendments and the resolution before you do not  
3 accommodate utilities that deliver methane and GHG  
4 reductions today with wastewater derived RNG paired with  
5 low-NOx engines. We respectfully ask you to amend the  
6 resolution directing staff to explore 15-day modifications  
7 that create a practical interim pathway. This will better  
8 align ACF with SB 1383 and circular economy projects like  
9 ours, while advancing climate and air quality goals.

10           Coordination. We encourage the Board to direct  
11 staff to amend Resolution 25-9 directing staff to convene  
12 and lead the interagency work group as outlined in  
13 resolution 23-13.

14           Third, we -- ensuring reliability for essential  
15 services. Cities like Roseville and utilities provide  
16 essential services 24/7, including during emergencies and  
17 natural disasters. Reliability and safety are  
18 nonnegotiable for us. Please ensure the ACF supports  
19 continuity of operations and timely response, while  
20 meeting environmental objectives.

21           Fourth, affordability and fairness. Public  
22 fleets are less than seven percent of California's medium-  
23 and heavy-duty fleet vehicles. Concentrating compliance  
24 on us shifts disproportionate costs on to our ratepayers  
25 to drive innovation in the ZEV market. We urge cost

1 effective pathways that protect customers and avoid  
2 stranding prior RNG investments. We respectfully request  
3 that the Board direct staff to amend the resolution  
4 requiring the forthcoming 15-day amendments be brought  
5 back to the full Board.

6 And I will say we support the comments of CMUA,  
7 CASA and ACWA.

8 BOARD CLERK FRENCH: Thank you. That concludes  
9 your time.

10 NOELLE MATTOCK: Thank you.

11 BOARD CLERK FRENCH: Next is Syrus Devers.

12 SYRUS DEVERS: Thank you. Syrus Devers here for  
13 the De Luz Community Service District. To be clear, we're  
14 not here on the specific amendments before you today, but  
15 to ask that you consider going forward that there might be  
16 a need to expand the exemptions to grant a full waiver  
17 where there is simply no feasible means to comply with  
18 ACF.

19 De Luz is an outlier. They are a community  
20 service district west of Temecula. They are 100 percent  
21 within the mountains of that area. They cover 33 square  
22 miles and have 81 square -- 81 miles of road and about  
23 1,500 residents, which puts them in population density  
24 about the same as Humboldt County as a whole. So, being  
25 an outlier, they've been through this before. They

1 realize the regulatory process can't always meet the needs  
2 of them. They went through this with the organic waste  
3 diversion and CalRecycle. After a year, they were left  
4 with no opportunity but to seek legislation specific to  
5 them.

6 So they fear there's no way that they can ever  
7 comply with ACF, but they're not taking this for granted.  
8 In 2026 -- they're researching right now and in 2026,  
9 they're going to run a test with a ZEV in their district  
10 to see if it's feasible, to see if they compete -- keep  
11 people on the job long enough with a ZEV to make it  
12 viable.

13 Their request is that further consideration and  
14 evidence going forward reveals that there are some  
15 outliers that are just so extreme that they cannot comply,  
16 that you consider granting them a waiver alternative, if  
17 it's just not possible through the difficult regulatory  
18 process, which is arduous to grant them the indulgence  
19 that CalRecycle did as well. CalRecycle neither opposed  
20 nor supported, but participated in the process, kind of  
21 out of sympathy of their situation and we would ask the  
22 same of you.

23 Thank you.

24 BOARD CLERK FRENCH: Next is Antonio Ortega.

25 ANTONIO ORTEGA: Good morning. My name is

1 Antonio Ortega and I am here today representing Imperial  
2 Irrigation District.

3 First, I would like to thank you for listening to  
4 the concerns raised by public utilities about the  
5 challenges we face with ACF implementation. The  
6 amendments you will be discussing and hopefully adopting  
7 here today, as well as the future 15-day changes, are a  
8 welcome step in the right direction.

9 However, IID remains concerned the ACF could  
10 jeopardize our ability to restore essential power and  
11 water services by restricting the availability and  
12 utilization of vehicles in our fleet. Just in the past  
13 three weeks, our communities in Imperial and Riverside  
14 County, or the Coachella Valley, have been hit with two  
15 storm events that downed over 400 power poles and caused  
16 widespread outages. IID's crews worked around the clock  
17 to make repairs and restore service as quickly as  
18 possible, oftentimes with specialty vehicles and rugged  
19 and remote terrains facing challenging conditions.

20 IID's service area is vast at 6,000 square miles  
21 with limited to no EV charging infrastructure in place.  
22 This is just one example of why ACF exemptions must  
23 accommodate the type of specialty vehicles utilities need  
24 to continue responding to emergency events out in the  
25 field. We do not have the luxury to learn on-the-job when

1 every minute counts.

2 In closing, IID suggests further visions to the  
3 ACF that support a workable compliance mechanism in a  
4 manner that safeguards emergency response, service  
5 reliability, and ratepayer affordability. IID's written  
6 comments with more details have been submitted for the  
7 record and are available for your reference.

8 Thank you.

9 BOARD CLERK FRENCH: Next is Nicholas Schneider.

10 BOARD MEMBER DE LA TORRE: Before you start, I  
11 just -- Antonio was a staffer of mine in the building a  
12 long time ago. He was a very good staffer. So thanks  
13 for -- it's always interesting to see where your staff is  
14 doing their thing. And, so it was great to see you,  
15 Antonio.

16 NICHOLAS SCHNEIDER: Thank you. Good morning,  
17 Chair and members of the Board. My name is Nicholas  
18 Schneider. I'm the General Manager of Georgetown Divide  
19 Public Utility District. We're a small water district  
20 that serves the communities east of Folsom Lake in the  
21 foothills of the Sierra Nevadas. We are considered the  
22 headwaters of the state and have challenging terrain and a  
23 large service area that limits our ability to meet the  
24 goals of this regulation.

25 I do want to recognize the work that the CARB

1 staff has provided regarding the many challenges in  
2 implementing the Advanced Clean Fleet Regulation.  
3 However, in meeting with them, they have asked us to  
4 engineer potential solutions to this regulation. Our  
5 issue is that what you have proposed today as amendments  
6 still leave a lot to be figured out into the future.

7           However -- unfortunately, the solutions you are  
8 hoping, we can utilize to meet these regulations simply do  
9 not exist. Due to our terrain and emergency response  
10 requirements, I am not sure and alternative will be ever  
11 developed in the near future. Our terrain limits the  
12 ability for our districts to meet these goals.

13 Additionally, the fleet we operate is very specialized and  
14 alternatives, when developed, will present affordability  
15 Challenges.

16           Finally, due to our location, the power grid that  
17 serves our district is already stressed and we experience  
18 frequent outages. And if our district is required to meet  
19 these goals, this will further limit the -- when we must  
20 respond to emergencies or outages.

21           We are willing to outfit the District with  
22 zero-emission alternatives, but it would continue to ask  
23 for greater flexibility in doing so. Your amendments are  
24 good, but do not go far enough. Thank you for your time  
25 and consideration.

1 BOARD CLERK FRENCH: Next is Nick Chiappe.

2 NICK CHIAPPE: Good morning, Chair and Board  
3 members. My name is Nick Chiappe and I'm here on behalf  
4 of the California Trucking Association.

5 We appreciate the opportunity to comment and urge  
6 the Board to support the staff's recommendations. Going  
7 back even before when ACF was proposed, CTA has worked  
8 with CARB to try to reach policies that would encourage  
9 the use and adoption of zero-emission technologies where  
10 they made sense, but consistently stated that a  
11 one-size-fits-all approach would not meet the diverse  
12 needs of the trucking industry, from higher costs, limited  
13 infrastructure, longer refueling times, reduced payload  
14 from added battery weight and limited range.

15 Significant barriers continue to exist for a  
16 majority of commercial trucking use cases. However, there  
17 continue to be opportunities where this technology can be  
18 successfully applied and adopted. Fleet demand to adopt  
19 ZEVs is there, even without mandates, as we saw earlier  
20 this month when HVIP incentives were fully subscribed in  
21 one day. And, as predicted, we've seen much faster  
22 adoption of smaller use -- smaller class ZEVs that operate  
23 in limited ranges with the ability to return to home base  
24 for overnight charging.

25 In closing, we urge the Board to adopt staff's

1 recommendations and look forward to continuing working  
2 with the agency as CARB considers the future direction of  
3 its ZEVs programs. And with the remaining time, I want to  
4 congratulate the Chair on your retirement and I wish you  
5 the best.

6 Thank you.

7 BOARD CLERK FRENCH: Next is Mary Elise  
8 Conzelmann.

9 MARY ELISE CONZELMANN: Hello. Thank you for  
10 having me. My name is Mary Elise Conzelmann. I'm the  
11 Principal Public Affairs Analyst for the Citrus Heights  
12 what district. We serve parts of Citrus Heights, Fair  
13 Oaks, Orangevale, Carmichael, and Roseville. We serve  
14 approximately 70,000 people, and 30 percent of that  
15 population is considered disadvantaged. We appreciate the  
16 staff's work on the ACF and support the goals of the  
17 regulation. However, like many other local utility  
18 districts throughout the State, we are concerned about  
19 threats to public safety and increased costs to ratepayers  
20 that are very likely to arise as a result of the current  
21 language in the ACF regulations.

22 At Citrus Heights Water, we would face the  
23 following challenges:

24 One, charging infrastructure and accessibility.  
25 Right now, we lack sufficient charging stations at our



1 fleet yards and across the service area. Extended fueled  
2 operations leave little room for downtime to recharge,  
3 risking delayed response times. Many of our water mains  
4 in our service territory were installed in the '60s. The  
5 potential for main breaks is significant, and work to  
6 repair damage and restore service can easily take 16 hours  
7 or more. Many of the specialty vehicles needed to perform  
8 this work can't be electrified or their electric versions  
9 don't have the Capacity to operate for this amount of  
10 time.

11           Second, vehicle availability. Limited  
12 zero-emission vehicle options meet our operational needs.  
13 Some units in our fleet accumulate very low mileage or  
14 serve unique vocational purposes, making full  
15 zero-emission vehicle replacement impractical. Many  
16 current zero-emission vehicles don't have the range or  
17 power for 24/7 operations. As a consequence, the  
18 regulations could lead to service disruptions and slower  
19 response times. We feel that more work is needed to make  
20 compliance with ACF feasible for public agency utilities  
21 like Citrus Heights Water. We thank you for your work and  
22 encourage you to continue working with ACWA and its  
23 members on these exemptions. Thank you and  
24 congratulations to the Chair.

25           BOARD CLERK FRENCH: This is note to all -- to

1 the public. Public comment sign-up has closed as of 11:53  
2 a.m.

3 But moving to the next commenter. We have Evan  
4 Edgar.

5 EVAN EDGAR: Good morning, Chair and Board  
6 members. My name is Evan Edgar and we support the  
7 withdrawal from ACF and support all the comments from the  
8 public agencies, CASA, and from Roseville. I've been  
9 representing the private fleet for 30 years getting off  
10 diesel onto RNG. And by 2030, we're going to have a  
11 hundred percent RNG with a carbon negative fuel of 100.5  
12 minus. We were on the way to doing this till ACF paused  
13 us, but now anaerobic digestion is back and we're building  
14 More facilities. We were plus 600 -- 600,000 metric tons  
15 of CO2 in 2020 would be carbon negative, minus 712 by  
16 2030, 1.3 million tons. Biomethane in the transportation  
17 is forever.

18 On the public side on a 3,000 refuse fleet should  
19 be full withdrawal. Right now, they are carbon negative  
20 in 2024, the public fleet. And you're going to  
21 recarbonize them with Advanced Clean Fleet rule's battery  
22 electric. That's a carbon positive thing and you're  
23 disrupting the circular economy for a dirty, global,  
24 battery electric linear economy that just doesn't work to  
25 disrupt what's going on today, that's working, that's

1 affordable.

2           Now, let's talk about affordability. The City of  
3 LA was paying 35 bucks a household per month for a  
4 three-car SB 1383 service to collect organics. It just  
5 went up to 60 bucks per household per month just for 1383  
6 to -- in order to divert organics, and do biomethane, and  
7 support the RNG infrastructure. You did not bake in the  
8 rates for ZEVs.

9           Now, in order for the City of LA to capitalize on  
10 a residential ZEV programs, it will be \$480 million, \$480  
11 million and will add 50 bucks per householder per month.  
12 So on affordability, we talk about gas, electricity.  
13 Let's talk garbage, because we're going from 30 to 35 to  
14 60 with 1383 to over a hundred dollars per household per  
15 month to bake in ZEVs when we have an RNG system that's  
16 working today. Let's do RNG forever and hydrogen later.

17           So I support all the comments of CASA and  
18 Roseville. Thank you.

19           BOARD CLERK FRENCH: Next commenter is Laura  
20 Rodarte.

21           LAURA RODARTE: Good morning, Chair and members  
22 of the Board. My name is Laura Rodarte with Placer County  
23 Water Agency. We are a special district that serves  
24 44,000 customers and wholesales to the cities of Roseville  
25 Lincoln. We also own and operate California's eighth

1 largest public power project, which provides clean  
2 hydroelectric energy to the grid and water supply for  
3 Placer County. We are not a low population county and are  
4 also an outlier like some other commenters mentioned  
5 today.

6 Our multi-purpose hydroelectric project is  
7 located in the Sierra Nevada Mountains, ranging in  
8 elevations from 1,500 feet to 6,000 feet, and over 50  
9 winding canyon miles from the nearest civilization, let  
10 alone any other charging capabilities. Our project  
11 operates 24/7/365, and it takes approximately four hours  
12 roundtrip to access by vehicle. Our crews leave early in  
13 the morning to commute two hours to the project with all  
14 the tools, equipment, supplies they need for their daily  
15 tasks and do not return until the end of the workday.  
16 This includes towing any necessary heavy-duty vehicle  
17 equipment, such as excavators or loaders, and incremental  
18 weather, such as snow, ice, and freezing temperatures are  
19 normal constraints that they deal with.

20 After hours, call-outs and emergency response  
21 activities may require any number of vehicles or a variety  
22 of vehicles depending on how bad the situation is. Our  
23 employees can't be left stranded in bad weather, because  
24 their service trucks won't have enough charge to make it  
25 back to our yards. The reliability of our fleet is our

1 most basic necessity that we need to function as a  
2 utility.

3 I'd like to thank CARB staff for recognizing the  
4 challenges of implementing the ACF Regulations and urge  
5 them to continue to incorporate flexibility with the  
6 regulations. However, the proposed amendments do not meet  
7 our needs and give us few options for compliance. We  
8 would like to work with CARB staff on developing vehicle  
9 specifications that would quantify and qualify our  
10 specialized vehicles for exemptions. My agency has  
11 already made significant investments in electric vehicles  
12 and charging stations where it makes sense for us to do  
13 so, and we will continue to do that with the resources we  
14 have, but we just can't be com -- we can't compromise the  
15 safety of our employees or the public. Thank you and we  
16 support the comments of the other commenters.

17 BOARD CLERK FRENCH: Next is Katherine Larson.

18 KATHERINE LARSON: Good morning or afternoon,  
19 Board members. My name is Katherine Larson and I am with  
20 SMUD. SMUD is a publicly owned electric utility that  
21 serves the Sacramento region and we have an ambitious goal  
22 to remove all emissions from our power supply by 2030.  
23 Electrification plays a big part in how we get there.

24 SMUD continues to support the ACF's objectives,  
25 but we do have concerns today about our compliance path

1 even in the next few years. We've been deploying ZEV  
2 pickups within our fleet with great success. But once we  
3 get to heavier vehicles, service trucks, aerials, digger  
4 derricks, the options are extremely limited, and if they  
5 even exist. And where they do, prices are extremely high,  
6 double or triple what we're paying for ICE vehicles today.

7 We're optimistic that with time, both vehicle  
8 offerings and pricing will improve. But until then,  
9 reasonable protections are essential for the rule. And  
10 currently, access to exemptions are quite restricted and  
11 there aren't affordability considerations.

12 We greatly appreciate staff taking the time to  
13 meet with us over the past few months and we appreciate  
14 the 15-day concepts. But those only partly respond to the  
15 challenges we're seeing with ZEV development for those  
16 heavier utility vehicles, which represent well over 50  
17 percent of our annual purchases.

18 We, therefore, request 15-day changes also  
19 include specific transparent criteria like payload and  
20 aerial height to determine if a ZEV can meet a fleet's  
21 needs, the ability to switch between compliance options,  
22 some direct or indirect consideration of affordability,  
23 and we also suggest expanding NZEVs to include vehicles  
24 that use electric power take-off to perform work while  
25 stationary, like an aerial with an electric bucket. These

1 are readily available today, and, in fact, I think I saw  
2 one from SMUD's fleet on slide 12. They can deliver  
3 significant tailpipe emissions reductions because of the  
4 way they're used. They're at a much lower cost and we  
5 think they could really Resolve a lot of the near-term  
6 availability challenges that we're seeing.

7           These concepts and other recommendations are in  
8 our comments. Thank you for the time and thank you Chair  
9 Randolph. The SMUD team wishes you the best.

10           BOARD CLERK FRENCH: Next is Julia Levin.

11           JULIA LEVIN: Good afternoon. Again, Julia Levin  
12 with the Bioenergy Association of California. We strongly  
13 support the comments of the California Association of  
14 Sanitation Agencies, Calaveras County Water District.  
15 SMUD, and the many other public agencies that have  
16 testified about the need to expand the definition of  
17 near-zero emission vehicles and provide more options,  
18 particularly for public agencies and essential services.

19           I've testified in front of this Air Board for  
20 almost 30 years. And when the Air Board first adopted  
21 requirements for zero-emission vehicles, partial ZEVs,  
22 ultra low-emission vehicles, et cetera, it made sense in  
23 those days. But the science, back to the conversation  
24 earlier today, means we really need to shift these  
25 programs' vehicle and engine standards over to objective

1 performance-based standards based on life-cycle emissions.  
2 And if the Air Board were to do it, it would become very  
3 clear why ultra low or low NOx natural gas trucks that are  
4 running on low carbon or carbon negative biomethane would  
5 provide actually far greater benefits for air quality and  
6 the climate, than diesel trucks -- certainly than diesel  
7 trucks, which also emit toxic air contaminants and  
8 particulate matter.

9 But particularly, when you look at SB 1383 and  
10 the opportunities to reduce methane and black carbon from  
11 organic waste and burning, back to another theme from the  
12 morning, there is nothing better we can do than put more  
13 low-emission natural gas trucks on the road that are  
14 running on biomethane.

15 So we urge you to go back to the drawing board on  
16 the definition of near-zero emission natural gas -- or  
17 near-zero emission trucks, and include low-NOx natural gas  
18 trucks with a requirement to partner them with biomethane,  
19 and more generally to go to more performance-based  
20 objective lifecycle based standards across the Board's  
21 vehicle and engine standards. Thank you.

22 BILL MAGAVERN: Good afternoon. Bill Magavern  
23 with the Coalition for Clean Air.

24 This situation is sadly similar to your meeting  
25 in June when you had to repeal the In-Use Locomotive



1 Standard. And here again, we're faced with the lack of  
2 waiver from the federal government and seeing most of  
3 Advanced Clean Fleets repealed. The difference here is  
4 that, of course, you can still enforce the provision for  
5 public fleets, which is what's getting all of the  
6 discussion. And we think that it is important for State  
7 and local government fleets to continue the progress to  
8 zero emissions, that it is our public entities that should  
9 be setting an example showing that it can be done, and  
10 helping to advance the technology.

11 At the same time, we want to make sure that  
12 public agencies are not overburdened. I think the staff  
13 proposal in front of you strikes a balance that way. It  
14 does give more delays and more exemptions, which, you  
15 know, we don't love to see from a clean air perspective,  
16 but I think they do strike a balance, and urge you  
17 therefore not to do any additional delay or weakening  
18 beyond the proposal that is in front of you today.

19 Looking beyond today, I think the State needs to  
20 move forward to reduce toxic diesel exhaust on two fronts.  
21 Number one is to continue the progress towards  
22 zero-emission vehicles, which now are over 20 percent of  
23 the new trucks sold in the state. At the same time, we  
24 know that the majority of the trucks being sold are  
25 combustion vehicles. We want them to be as clean as

1 possible and to meet the Heavy-Duty Omnibus Standard,  
2 another standard that's being jeopardized by the federal  
3 government through the illegal congressional resolution.

4           So while that's being litigated, let's see what  
5 we can do to get more of those omnibus-compliant trucks on  
6 the road.

7           And Chair Randolph, thank you for your excellent  
8 leadership over the years.

9           SEAN EDGAR: Chair and Board members, Sean Edgar  
10 the Director of Clean Fleets here in Sacramento. I'm  
11 going to be focusing my comments today on the written  
12 comment letter from Mr. John Kinsey filed on behalf of  
13 Western States Trucking Association, or WSTA. The -- Mr.  
14 Kinsey's letter points out a variety of inadequacies with  
15 the Initial Statement of Reasons, or ISOR, for this  
16 regulatory effort. And I'm going to share a few of those.

17           To quote from the letter, "The ISOR cost  
18 estimates are based on a prior assessment that was itself  
19 deeply flawed, i.e., the ACF Regulation's economic  
20 assessment. Yet, rather than addressing those flaws, the  
21 ISOR compounds them by failing to account for recent  
22 developments and current market conditions that have  
23 fundamentally altered the zero-emission industry  
24 landscape, including the rescission and waiver of  
25 withdrawal of various Clean Air Act waivers and increasing

1 cost of ZEVs."

2 Just to point out a few of those discrepancies,  
3 the ISOR speaks out of both sides of its mouth. On the  
4 one hand, you're led to believe that ZEVs are cheaper to  
5 own and operate and that ZEV costs are declining. On the  
6 other hand, ICCT and other recent studies -- we filed a  
7 study from Ryder System that actually is contradictory to  
8 that. New information is, and I think Board Member De La  
9 Torre expressed some concerns about pricing -- of ZEV  
10 pricing in Europe and how they're so much cheaper in  
11 Europe and more expensive here, so you can't have it both  
12 ways. We can't have declining ZEV costs and at the same  
13 time make the total cost of ownership sound really good,  
14 but we know that ZEV costs are increasing significantly.

15 We also know that private fleets in the context  
16 of the ISOR, because of rates that businesses and  
17 consumers pay for service, my colleague mentioned the  
18 trash situation in LA about increasing rates there,  
19 businesses, as consumers, are going be paying increased  
20 rates. And then finally, we know that if the State and  
21 local government fleets find the regulation is too tight,  
22 then it's time to revisit that.

23 Thank you.

24 BOARD CLERK FRENCH: Next is Anthony Tannehill.

25 ANTHONY TANNEHILL: Good morning, Chair and

1 members. I'm Anthony Tannehill with the California  
2 Special Districts Association. We represent over 1,000  
3 independent special districts, which provide essential  
4 services, everything from fire protection, power, water,  
5 wastewater, parks, flood control, utilities, and more.  
6 And they have to do this in every topography, elevation,  
7 and climate that California has to offer.

8           They do it during emergencies, extreme weather  
9 events, natural disasters, and power outages. Special  
10 districts support the State's air quality goals and are  
11 greatly encouraged by the direction that CARB is taking  
12 with these proposed amendments. But as noted in our  
13 letter, that we submitted to you, we respectfully submit  
14 these proposals must be broadened to protect the public.  
15 Exceptions must be more accessible recognizing the  
16 realities of the present market, cost availability, the  
17 functionality of these new vehicles, and the supporting  
18 infrastructure.

19           Districts must be able to ensure uninterrupted  
20 delivery of essential services in all conditions and  
21 terrains. Pre-purchase requirements of zero-emission  
22 vehicles must be removed as a prerequisite to any waiver  
23 or extension, whether for an infrastructure delay or  
24 mutual aid vehicles. The infrastructure must be in place  
25 before vehicles are purchased. And an emergency vehicle

1 is always an emergency vehicle.

2 So we submit CARB must exclude those vehicles  
3 that respond to and support critical operations related to  
4 emergencies and disasters in austere conditions to protect  
5 the public, our frontline workers, and the communities  
6 they serve rely on vehicles capable of doing the job that  
7 the emergency dictates, even when the power is out.

8 And with that, I'll close -- and I want to thank  
9 you all for your work and effort and consideration on this  
10 project.

11 BOARD CLERK FRENCH: Next is Charles Watson.

12 MR. WATSON: Good afternoon, Chair and members.  
13 Charles Watson on behalf of West Valley Water District.  
14 West Valley Water District provides safe and reliable  
15 drinking water to more than a hundred thousand residents  
16 across Rialto, Colton, Fontana, Bloomington,  
17 unincorporated San Bernardino County, and part of Jurupa  
18 Valley.

19 West Valley operates 76 vehicles including 64  
20 medium- and heavy-duty utility trucks subject to the ACF  
21 Regulation. These vehicles have specific essential  
22 functions, including on-call response, valve operations,  
23 water quality sampling, as well as emergency response,  
24 which must be available 24/7 to protect public health and  
25 safety. Our fleet is dispatched daily for emergencies

1 often running 10 to 12 hours at a time and covering over  
2 125 miles per day. In emergency situations, duty cycles  
3 approach a hundred percent requiring vehicles to stay in  
4 operation until the problem is solved.

5 Current zero-emission vehicle technology does not  
6 yet provide the operational range, rapid refueling and  
7 recharging, or charging infrastructure to meet these  
8 emergency demands. We echo the comments of CMUA, ACWA,  
9 and other water districts. We appreciate the proposed  
10 provisions for mutual aid in emergency vehicles and urge  
11 CARB to provide additional flexibility in these categories  
12 for public agencies like ours that have unique operational  
13 requirements and must prioritize Emergency response and  
14 public health. We look forward to continuing to work with  
15 staff.

16 Thank you.

17 CASEY DUNN: Good afternoon Madam Chair and  
18 members. My name is Casey Dunn speaking on awe behalf of  
19 Southern California Edison today in strong support of the  
20 Advanced Clean Fleets Regulation and Low Carbon Fuel  
21 Standard program. With ongoing federal uncertainty, SCE  
22 appreciates the Board's continued leadership in advancing  
23 the electric transition. These programs are critical to  
24 accelerating California's transition to a cleaner more  
25 sustainable transportation sector.

1           These amendments strike a thoughtful balance  
2 between ambition and achievability, and we commend CARB  
3 staff for their extensive stakeholder engagement and  
4 technical rigor. We urge the Board to adopt these  
5 amendments and continue leading the nation in clean  
6 transportation policy.

7           And congratulations, Madam Chair.

8           BOARD CLERK FRENCH: Next is Mandi Strella.

9           NOAM ELROI: Mandi was a backup in case I had to  
10 be in another meeting. So I'm Noam Elroi, next one up.

11           Sorry about that. Good afternoon, Chair and  
12 members. Noam Elroi on behalf of CR&R Environmental  
13 Services. First echoing the comments of Evan Edgar. We  
14 want to express support for the agenda item and the repeal  
15 of high priority fleets regulation and removal of local  
16 government requirements to contract with ACF-compliant  
17 companies, especially as it relates to waste fleets  
18 running on RNG from their own production anaerobic  
19 digestion.

20           CR&R has been a pioneer in the circular economy,  
21 investing nearly 200 million over the years into anaerobic  
22 digestion, and a fleet that can run on that anaerobic  
23 digestion. They're the first in-state RNG program to  
24 connect to the SoCal pipeline. Our source separation  
25 prevents landfill methane, complies with 1383, and gives

1 local jurisdictions that don't have good uses for other --  
2 or products of organic materials a way to comply with  
3 procurement requirements.

4 We are carbon negative and these investments  
5 take -- they require penciling out over many, many years  
6 dependent on LCFS. And so to prevent rate increases for  
7 our members, we support this change. We can continue to  
8 run our fleets.

9 Thank you very much.

10 MARK NEUBURGER: Good afternoon. Mark Neuburger  
11 on behalf of the California State Association of Counties,  
12 which represents all the 58 counties in the State.

13 We appreciate the opportunity to provide comments  
14 on the proposed amendments to the Advanced Clean Fleet  
15 Regulatory language. We also want to thank staff for the  
16 proposed 15-day amendments and their time working on this  
17 comprehensive regulation package. Additionally, I want to  
18 associate and agree with the comments made by counties,  
19 cities, and other local government associations previously  
20 made.

21 CSAC is requesting CARB consider expanding the  
22 scope of the amendments to the Advanced Clean Fleets to  
23 help facilitate the successful implementation of these  
24 regulations. First, with the many challenges and a  
25 disrupted ZEV marketplace, we respectfully request CARB



1 remove the prohibition on requesting a waiver or extension  
2 before purchasing a ZEV. This necessary change will help  
3 local agencies avert the costly acquisition of unusable  
4 ZEVs before it's possible to install the infrastructure  
5 required to deploy them.

6 Specifically, the requirement to show a purchase  
7 agreement for a vehicle that cannot be fueled or charged  
8 to an infrastructure delay to apply for the infrastructure  
9 delay exemption should be removed. The infrastructure  
10 needs to be in place before a vehicle should -- vehicle  
11 can be -- can be or should be purchased. Additionally,  
12 we're requesting an update to the mutual aid -- mutual aid  
13 exemption. We respectfully request that CARB update and  
14 expand the mutual aid vehicle -- emergency vehicle  
15 exemption to exclude from the regulations those vehicles  
16 that respond to you and support critical operations  
17 related to emergencies and disasters, often under austere  
18 conditions to continue to -- to allow counties to continue  
19 to protect our communities.

20 Our front-line workers and the communities they  
21 serve rely on vehicles that must be able to do the job that  
22 the emergency dictates, even when the power is out. We  
23 respectfully request that CARB reevaluate the ZEV  
24 exemptions related to the purchase to more accurately  
25 reflect the actual needs of local agencies and the actual

1 availability of ZEVs analogous in performance to ICE  
2 vehicles. True availability of vehicles should be  
3 evaluated with criteria reflecting the history and  
4 solvency of the manufacturer's warranty, related parts and  
5 service availability.

6 Vehicles, including heavy equipment, need to be  
7 able and available in sufficient quantities from multiple  
8 reputable vehicle manufacturers to provide --

9 BOARD CLERK FRENCH: Thank you. That concludes  
10 your time.

11 MARK NEUBURGER: -- for services.

12 Thank you.

13 BOARD CLERK FRENCH: Next is Jesus Martinez  
14 Ramirez.

15 JESUS MARTINEZ RAMIREZ: Good afternoon, Board  
16 members, staff and members of the public.

17 My name is Jesus Martinez Ramirez and I am the  
18 fleet and warehousing supervisor for Santa Clarita Valley  
19 Water Agency.

20 We support the comments of other public agencies  
21 and associations like ACWA. And while we appreciate the  
22 work that CARB staff has done with these amendments as  
23 well as the site visits they completed this year,  
24 including at our facility, as other staff highlighted, the  
25 amendments do not go far enough. While we have had some

1 success with deploying electric vehicles in our  
2 non-mission critical assignments, our experience with  
3 wildfires and local emergencies have demonstrated to us  
4 that ZEVs cannot operate effectively during emergencies.

5 For example, in the recently wildfires, we had to  
6 evacuate our yard and lost access to our chargers. We  
7 also could not use our portable chargers to charge the  
8 vehicles because we had to use them to support the rest of  
9 our water infrastructures, including pumps and other  
10 facilities.

11 Public chargers are also ineffective, because  
12 they cannot accommodate the size of utility vehicles. And  
13 lastly, mobil recharging is not effective. For example,  
14 our propane vendor did not want to make deliveries during  
15 the fire, because they had concerns for the safety of  
16 their staff.

17 So, it is through these experiences that we ask  
18 CARB staff to -- and the board to expand the access to a  
19 mutual aid by removing barriers for entry, because the  
20 current market cannot support those limits as well as --  
21 also just provide more effective ways to use the mutual  
22 aid provision.

23 And then last, today's resolution directs the  
24 Executive Director to make sure the regulation doesn't  
25 have an adverse impact to public services. So we just ask

1 CARB staff that you pro -- or the Board to provide greater  
2 or more detailed direction on what the means as it relates  
3 to emergency and costs. Thank you.

4 BOARD CLERK FRENCH: Next is Karen Lange.

5 KAREN LANGE: Good afternoon, Chair and members.  
6 Thank you for having me this morning. Karen Lange on  
7 behalf of the California Animal Welfare Association. That  
8 is the association that represents all of the public and  
9 nonprofit Animal shelters, humane societies, and SPCAs in  
10 the state. Very much the first time I've ever been in  
11 front of you. Not usually our lane here.

12 They're very concerned about their ability to  
13 comply. I know there's a couple supervisors, and mayors,  
14 and city council members on the Board. I would observe  
15 that some cities and counties have their animal control  
16 agencies maybe under law enforcement umbrella so they  
17 could be exempt, but they are not all arranged that way.  
18 They all do respond during emergencies.

19 Certainly, in Sonoma County during the fires, the  
20 animal control agencies are responding and helping with  
21 evacuation, but they are not defined in statute as public  
22 safety, so they don't enjoy the exemptions that exist  
23 under the Board's rules here. And they would like to be  
24 treated that way, because oftentimes they're responding in  
25 a real big hurry and they have to drive long distances in

1 extreme temperatures, which you've heard about already  
2 this morning, and they would appreciate being treated that  
3 way and having the Board give the direction to staff to  
4 make those changes.

5           Secondly, they have -- some of them have tried to  
6 move forward and purchase the Class B trucks. The  
7 manufacturers that make the animal housing units that sit  
8 in the Class B beds, nobody makes a housing unit that fits  
9 in EV that would be usable. So they don't have options  
10 for a safe way to house animals that may have to ride in  
11 the back of the truck for hours. Certainly, the Riverside  
12 staff understand the size of that county. They have nine  
13 shelters in Riverside County and they would have to drive  
14 a long time. They need to keep the animals cool and they  
15 need to keep the warm, and EVs may not last that long. I  
16 saw that there were some changes that might be helpful in  
17 that regard.

18           And finally, there is absolutely no way the  
19 animal shelters can increase their adoption fees to cover  
20 the cost of compliance. I know that the local government  
21 officials on here know shelters are overcrowded, shelters  
22 are underfunded. We receive no general fund support. So  
23 we'd ask you to take their concerns, which they've  
24 submitted in writing into your consideration when you come  
25 back with the changes.

1 Thank you.

2 MIKHAEL SKVARLA: Hi. My name is Mikhael  
3 Skvarla. I'm here on behalf of the California Hydrogen a  
4 Coalition. I want to extend our appreciation to staff and  
5 the Board for the technical fix to the Low Carbon Fuel  
6 Standard with regard to hydrogen refueling and structure  
7 credits for the light/medium duty stations. This was an  
8 important fix that came from the resolution as we  
9 discussed with you last fall. And so we're appreciative  
10 that we're here today to support that change and to help  
11 unlock additional funding from the private sector to allow  
12 us to move, especially in face of the federal headwinds  
13 that we're experiencing right now that have really stalled  
14 things out on the zero-emission space.

15 To that end, I just wanted to extend our support.  
16 And again, Chair Randolph, I really appreciate the years  
17 of service and wish you the best retirement.

18 Thank you.

19 BOARD CLERK FRENCH: Next is Nicole Rice.

20 NICOLE RICE: Good afternoon, Madam Chair and  
21 members. Nicole Rice with the California Renewable  
22 Transportation Alliance.

23 First, I wanted to address the staff presentation  
24 related to the expansion of the NZEV definition to include  
25 clean combustion as a compliance option. The amendments

1 that were offered by Clean Energy at the July 2025 Board  
2 meeting that was offered in support of CRTA focused on the  
3 performance standard of the 50 milligram NOx that was  
4 established under the Omnibus Regulation.

5 Providing this compliance option would ensure  
6 that traditional diesel does not become the default option  
7 for combustion during this time of regulatory uncertainty  
8 and/or when zero-emission vehicles and trucks are not  
9 available. California's 50 milligram Omnibus NOx standard  
10 is currently the most stringent standard for NOx in the  
11 nation. And despite the current status of the regulation  
12 due to federal action, there are at least four engines  
13 that are certified to that standard that are available on  
14 the market today.

15 Furthermore, as it relates to RNG trucks, with  
16 the support of the Low Carbon Fuel Standard, truck --  
17 natural gas trucks powered by RNG can provide substantial  
18 environmental and near-term emission reductions that can  
19 keep California on track to moving forward to achieve its  
20 emission reduction goals, which leads to greater public  
21 health outcomes sooner than later. And I align my  
22 comments with the economic and environmental arguments  
23 that have been made by those that have come before me.

24 So we urge CARB to not miss this opportunity to  
25 accelerate cleaner combustion options that have been

1 defined by your leadership through the Omnibus Regulation  
2 and provide greater certainty and flexibility to fleets  
3 today. Memorialize this option in an expanded NZEV  
4 definition.

5 Thank you and thank you, Chair Randolph, for your  
6 service.

7 BOARD CLERK FRENCH: Chair Randolph, that is the  
8 end of the in-person commenters.

9 CHAIR RANDOLPH: Okay. Let's go ahead and take a  
10 lunch break until 1:15 and we will be -- the Board will be  
11 meeting in closed session as authorized by Government Code  
12 section 11126(e) and as indicated in the public notice for  
13 today's meeting.

14 So we will reconvene at 1:15 and take the Zoom  
15 commenters. Thank you.

16 (Off record: 12:24 p.m.)

17 (Thereupon the meeting recessed into  
18 closed session.)

19 (Thereupon a lunch break was taken.)  
20  
21  
22  
23  
24  
25



1                                    AFTERNOON SESSION

2                    (Thereupon the meeting reconvened open session.)

3                    (On record: 1:15 p.m.)

4                    CHAIR RANDOLPH: All right. So the Board has  
5 completed closed session. No reportable action taken.

6                    We are now ready to resume the Board meeting with  
7 our remote commenters for Item number 26-6-8.

8                    So Clerk, can you please begin calling the remote  
9 commenters?

10                   BOARD CLERK MOORE: Thank you, Madam Chair.

11                   We currently have -- well, we have 27 total  
12 commenters. I just want to remind everyone that comment  
13 signups closed at 11:53 a.m. Our first commenter is David  
14 Rothbart.

15                   I have activated your mic. Please unmute and you  
16 may begin.

17                   DAVID ROTHBART: Good afternoon, Chair Randolph  
18 and Board Members. I'm David Rothbart and I retired from  
19 the Los Angeles County Sanitation Districts earlier this  
20 year. Based upon my 36 years of regulatory compliance  
21 experience with wastewater treatment plans, I would like  
22 to provide some recommendations on the proposed amendments  
23 to the ACF for your consideration.

24                   First and foremost, the revised ACF will only  
25 regulate public fleets, which is less than seven percent

1 of the medium and heavy-duty on-road trucks in California.  
2 This amendment drastically reduces ZEV infrastructure  
3 needed to allow public fleets to be reliable. Due to the  
4 exclusion of private fleets, manufacturers will not have a  
5 robust market for these trucks. This means essentially  
6 public services will effectively become beta testers for  
7 heavy-duty ZEV trucks.

8 Let me be clear, the public sector doesn't object  
9 to zero-emission technology, but those that are  
10 responsible for providing essential public services must  
11 have reliable and resilient trucks 24 hours a day, seven  
12 days a week. I'm recommending the Board look at this  
13 regulation pragmatically in ways to support essential  
14 public services. For example, biomethane will be  
15 generated by wastewater treatment plants as long as people  
16 flush their toilets. This nonfossil carbon-negative fuel  
17 should be used productively rather than wasted in flares.

18 Allowing low-NOx RNG trucks until a zero-emission  
19 technology for this biofuel becomes commercially available  
20 would at minimum reduce greenhouse gas emissions and  
21 provide the reliability needed by the wastewater sector.

22 Please, direct staff to modify the NZEV  
23 definition as recommended by CASA.

24 In conclusion, everyone here today wants CARB to  
25 be successful in cleaning the air, so please don't

1 implement ZEV requirements on public fleets without  
2 considering the unintended consequences of such a narrow  
3 regulation. Thank you very much for your consideration.

4 BOARD CLERK MOORE: Thank you.

5 Our next commenter is Anthony Budicin followed by  
6 Drew Bessinger.

7 Anthony, I have activated your mic. Please  
8 unmute and you may begin.

9 ANTHONY BUDICIN: Hello, Chair Randolph, Board  
10 members, and CARB staff. My name is Anthony Budicin. I  
11 serve as the Director of Environmental and Regulatory  
12 Compliance for Eastern Municipal Water District, also  
13 known EMWD. EMWD is a water, wastewater, and recycled  
14 water agency in southwest Riverside County, serving nearly  
15 one million people. This includes operation of four  
16 wastewater treatment facilities treating about 46 million  
17 gallons per day of wastewater, which can produce renewable  
18 natural gas from wastewater streams.

19 EMWD is a member of CASA and Clean Water SoCal  
20 and we support their comments today. We appreciate  
21 staff's efforts on AB 1594, but there are critical gaps in  
22 the Advanced Clean Fleet Regulations. Public fleets,  
23 which represent less than seven percent of California's  
24 medium- and heavy-duty vehicles are only the fleets  
25 required to transition to near -- or to zero-emission

1 vehicles. Flexibility is imperative to ensure agencies  
2 like ours continue to provide reliable service during  
3 unforeseen events, including wildfires and Public Safety  
4 Power Shutoffs.

5           During emergencies or power shutoffs, our crews  
6 deploy fleets of vector trucks, dump trucks, cranes and  
7 service vehicles around the clock. Current, zero-emission  
8 vehicle options cannot meet these 24-hour emergency  
9 demands and charging downtime is not feasible when public  
10 health and environmental protection are at stake.  
11 Including renewable natural gas as a flexible compliance  
12 option gives public agencies a practical tool to cut  
13 emissions and strengthen community resilience and has been  
14 scientifically demonstrated to be cleaner than diesel.

15           EMWD requests that the Board direct staff to  
16 amend the ACF to increase flexibility by cutting  
17 compliance pathway for an on-road low-NOx vehicle fueled  
18 by renewable natural gas either by further modifying the  
19 definition of zero -- near-zero emission vehicles to  
20 provide a third option or by adding a new definition, and  
21 also remove or extend the near-zero emission vehicle  
22 sunset until wastewater derived hydrogen becomes  
23 commercially viable.

24           On behalf of EMWD, we respectfully request that  
25 the Board direct staff to make these changes and I

1 appreciate your consideration.

2 Thank you.

3 BOARD CLERK MOORE: Thank you.

4 Drew Bessinger, I have activated your mic.

5 Please unmute and you may begin.

6 DREW BESSINGER: Good afternoon, Madam Chair and  
7 members of the Board. Thank you for this opportunity. My  
8 name is Drew Bessinger, Clovis City Councilmember. Clovis  
9 is a city of 130,000 people bordering Fresno, our fifth  
10 largest city. Clovis has decided to retain control of its  
11 own public work functions like solid waste and transit,  
12 while others have privatized due to the cost concern over  
13 the ACF Regulations.

14 The ZEV industry does not currently provide  
15 viable, affordable, and sustainable heavy-duty vehicle  
16 options for many of our uses. Also, our current  
17 electrification infrastructure cannot accommodate this  
18 transition. While the proposed ZEV implementation delay  
19 until 2030 is very promising and we thank you, the HDVs  
20 we've tested were not suitable due to reduced load  
21 capacity and hourly range limitations.

22 The transition of our transit fleet will cost an  
23 estimated \$15 million and our solid waste fleet over \$27  
24 million. This does not include the charger and power  
25 infrastructure concerns. Therefore, we respectfully ask

1 for three actions, a more flexible timeline past 2030 that  
2 reflects the ZEV HDV technology and charging  
3 infrastructure, creation of a more meaningful exemption  
4 process, when no specific specialized ZEV vehicle is  
5 available, and lastly, mandate State coordination with  
6 utility providers.

7 Remember that these costs are borne by the  
8 taxpayers and we appreciate your work on this. And  
9 congratulations, Chair Randolph.

10 BOARD CLERK MOORE: Thank you.

11 Our next few commenters are Kasha Hunt, Maurissa  
12 Brown, Joe Sturges, and Curtis Paxton.

13 Kasha hunt, I have activated your mic. Please  
14 unmute and you may begin.

15 KASHA HUNT: Good afternoon, I'm Kasha Hunt with  
16 Nossaman here on behalf of the California Bus Association,  
17 or CBA. CBA is a nonprofit State trade association  
18 representing private bus and motorcoach fleet operators,  
19 vehicle manufacturers and suppliers. Our members provide  
20 critical transportation services including supporting  
21 education, recreation, emergency response, and defense  
22 activities within the state of California.

23 We're here in support of the repeal of sections  
24 2014 and 2015 of Advanced Clean Fleets Regulation. This  
25 repeal will reduce uncertainty for private flees.

1 However, we would like to emphasize that the more  
2 immediate and pressing issue facing the Bus Association is  
3 compliance with the Heavy-Duty Omnibus Rule. Due to this  
4 rule, we have been unable to purchase new engines or  
5 buses, which has severely impacted our operations. We  
6 respectfully request that CARB suspend its waiver for this  
7 rule until next year.

8           Suspending the waiver would lift current  
9 restrictions on engine availability allowing us to  
10 purchase engines and buses necessary to meet our demands.  
11 At present, there is a shortage of commercially available  
12 engines that comply with this rule's requirements. As we  
13 prepare to accommodate an influx of visitors for major  
14 upcoming events, including the Olympics and the World Cup,  
15 our fleet is not in a position to meet the industry's  
16 needs.

17           Also, our customers generally require buses that  
18 are five years old or newer. Without access to compliant  
19 new engines, we cannot meet those expectations or fulfill  
20 contracts. Furthermore, new safety standards from the  
21 Department of Transportation cannot be met through  
22 retrofits. Compliance will require the purchase of new  
23 buses.

24           Given these constraints, we urge CARB to delay  
25 the waiver until next year to allow time for engine

1 availability to catch up with the regulatory requirements.  
2 This is essential for both the continuity of operations  
3 and safety of the public we serve.

4 Finally, this will also allow fleet operators to  
5 keep bus purchases, registrations, and sales in the state  
6 of California. We look forward to continuing to work with  
7 you. Thank you.

8 BOARD CLERK MOORE: Thank you.

9 Maurissa Brown, I have activated your mic.  
10 Please unmute and you may begin.

11 MAURISSA BROWN: Hello. My name is Maurissa  
12 Brown and I'm representing the Greenlining Institute.  
13 Thank you for the opportunity to provide comments on the  
14 ACF Regulation. We understand the time and dedication  
15 CARB staff brings to this process and we deeply appreciate  
16 your efforts.

17 Chair Randolph. Thank you so much for your  
18 leadership and service. Given the critical state budget  
19 conditions and reckless federal funding and policy attacks  
20 on zero-emission transportation investments, it is  
21 imperative that CARB continues to implement the Advanced  
22 Clean Fleets Regulation with State and local government  
23 agencies.

24 For the first time in more than half a century of  
25 the Clean Air Act, Congress has attempted to take away



1 California's rights to choose clean vehicle standards that  
2 protect their citizens from dangerous air pollution, from  
3 the unprecedented and unlawful use of the Congressional  
4 Review Act to the decision to reconsider the 2009  
5 endangerment finding and greenhouse gas vehicle standards,  
6 polluting industries are being let off the hook.

7           Protect our community -- protecting our  
8 community's health must be our number one priority. We  
9 need zero-emission transportation as of yesterday. We  
10 should not use public subsidies to fund methane burning  
11 trucks. California must maintain its momentum for  
12 healthy, equitable, zero-emission future. For this  
13 reason, we agree with the current regulation and the  
14 balance it strikes.

15           We encourage CARB to continue meeting with local  
16 governments through workshops and develop a central task  
17 force to elevate and address concerns. We encourage CARB  
18 to continue funding local community air monitoring across  
19 the state and invest in statewide and local Indirect  
20 Source Rules to ensure community air is improving. We  
21 encourage CARB to continue prioritizing AB 617 community  
22 emission reduction plan solutions to reduce Transportation  
23 pollution.

24           Thank you.

25           BOARD CLERK MOORE: Thank you.

1 Joe Sturges, I have activated your mic.

2 JOE STURGES: Good afternoon, Chair Randolph and  
3 members of the Board. My name is Joe Sturges and I'm  
4 joining you remotely today on behalf of the Inland Empire  
5 Utilities Agency, serving nearly one million residents in  
6 southwestern San Bernardino County. IEUA is also a member  
7 of CASA, CMUA, and ACWA and we support their comments  
8 today. Our essential services, namely wastewater  
9 treatment, recycled water production, and groundwater  
10 recharge depend on a reliable fleet. Our GapVax combo  
11 JetVac truck are mission critical for emergency response.

12 Just two examples. In the February 2024 and 2025  
13 storms these trucks operated continuously to prevent sewer  
14 overflows. At present, there are no commercially  
15 available zero-emission alternatives that meet their  
16 operational capabilities and remote sites lack the  
17 charging infrastructure necessary to maintain  
18 interruption-free emergency response.

19 If forced to comply prematurely, utilities like  
20 ours would face untenable choices, violate mandates, or  
21 rely on diesel generators to power electric trucks,  
22 thereby undermining emissions goals. That is why we  
23 respectfully request CARB to delay ACF implementation for  
24 public agency fleets by at least five years, expand  
25 emergency exemptions to include mutual aid vehicles, as

1 IEUA alone has responded to six mutual aid events in the  
2 last three years.

3 Establish a transparent appeals process and tie  
4 deadlines to demonstrated infrastructure readiness. We  
5 also support CASA's request to modify NZEV definition to  
6 include RNG fueled low-NOx vehicles. Wastewater agencies  
7 already produce renewable biomethane that can deliver  
8 immediate GHG and NOx reductions, while zero-emission  
9 options are developed.

10 Thank you for the opportunity to speak and for  
11 your thoughtful consideration of the public health and  
12 safety implications of these regulatory decisions.

13 BOARD CLERK MOORE: Thank you.

14 Our next commenter is Curtis Paxton. After  
15 Curtis, we will hear from Greg Bundesen, Ellis Chiu, Randa  
16 AbuShaban, and Kimberly Thorner.

17 Curtis, I've activated your mic. Please unmute  
18 and you may begin.

19 CURTIS PAXTON: Good afternoon, Chair Randolph,  
20 Board members, and staff. My name is Curtis Paxton. I'm  
21 General Manager of the Las Gallinas Valley Sanitary  
22 District in San Rafael which is in Marin County. The  
23 District is a member of the California Association of  
24 Sanitation Agencies, or CASA. We serve a population of  
25 approximately 30,000 people by collecting and treating

1 wastewater and producing recycled water.

2           We fully support the comments and requests made  
3 by Sarah Deslauriers of CASA, and Steve Jepsen of Clean  
4 Water SoCal, and the other comments and requests made by  
5 my other colleagues in the wastewater and other public  
6 sectors. Our District made investment into a heavy-duty  
7 vehicle that has been fueled by renewable non-fossil  
8 biomethane, or RNG, produced at our wastewater plant as  
9 well as the investment into the fueling infrastructure.

10           One request I would like to emphasize is for CARB  
11 to amend the ACF Regulation in an effort to increase  
12 flexibility for public agencies like ours that provide  
13 essential public services by further modifying the  
14 definition of NZEV, near-zero emission vehicles to provide  
15 an option of an on-road low-NOx vehicle fueled by  
16 non-fossil biomethane or hydrogen fuel.

17           I'd also encourage the Board members and staff to  
18 fully consider the UC Riverside study mentioned previously  
19 by Steve Jepsen. We look forward to working with staff to  
20 find multiple reliable uses for the renewable non-fossil  
21 biomethane produced at wastewater plants like ours.

22           Thank you for your time and for the opportunity  
23 to provide comments.

24           BOARD CLERK MOORE: Thank you.

25           Greg Bundesen, I have activated your mic. Please

1 unmute and you may begin.

2 GREG BUNDESEN: Great. Thank you everybody.  
3 Thank you to the Board for this opportunity to comment.  
4 My name is Greg Bundesen Conservation and Communications  
5 Supervisor for Sacramento Suburban Water District serving  
6 about 200,000 customers in the unincorporated suburbs east  
7 of the City of Sacramento. I'm commenting today in  
8 regards to the ACF Regulations compliance and concerns  
9 about its feasibility for public water agencies.

10 First, I'd like to acknowledge that SSWD supports  
11 comments submitted on September 15th by the Association of  
12 California Water Agencies, of which we are a member  
13 agency. SSWD shares ACWA's concerns that the 45-day  
14 changes to -- do not go far enough to make compliance  
15 feasible for public water utilities as required by AB  
16 1594. To maintain reliable service and respond to major  
17 foreseeable events like severe weather, wildfires, and  
18 natural disasters, exemptions to the regulations must be  
19 provided. SSWD encourages the Board to direct staff to  
20 continue collaborating with ACWA and its members to work  
21 toward adopting changes to ensure purchasing zero-emission  
22 vehicles meets a public agency's fleets needs without  
23 causing detrimental effects to operations, particularly  
24 responding to a public water emergency.

25 Thank you.

1 BOARD CLERK MOORE: Thank you.

2 Ellis Chiu, I have activated your mic. Please  
3 unmute and you may begin.

4 ELLIS CHIU: Good morn -- good afternoon, Board  
5 members and staff. My name is Ellis Chiu and I'm  
6 representing the Los Angeles Department of Water and  
7 Power, the nation's largest municipal utility serving more  
8 than four million residents of Los Angeles businesses and  
9 visitors.

10 We thank CARB staff for their ongoing engagement  
11 with the POU's on this issue. As a provider of essential  
12 public service, we believe that ACF Rule, as currently  
13 proposed, does not allow for the effective evaluation and  
14 integration of ZEVs. This will impact our ability to  
15 provide safe and reliable water and power and perform time  
16 and life-critical restoration duties.

17 The recent wind-driven wildfires in the Pacific  
18 Palisades have highlighted the need for continuous duty  
19 vehicles to protect life, property, and worker safety.  
20 Our crews worked around the clock directly with first  
21 responders, including police and fire departments.

22 We strongly recommend CARB provide additional  
23 flexibility under the mutual aid exemption to account for  
24 emergencies and mutual aid assistance. Further more, the  
25 changes and uncertainty in the vehicle market have made it

1 extremely difficult to purchase and replace vehicles with  
2 reliable counterparts to maintain our operations. While  
3 we appreciate CARB's efforts with the exemption  
4 provisions, they still do not consider a vehicle's unique  
5 specifications and job performance. We strongly recommend  
6 that additional criteria regarding vehicle performance and  
7 reliability be added.

8 LADWP remains committed to electrifying our fleet  
9 where feasible under the Los Angeles City Mayor's  
10 directive and our very own EV-first purchasing policy,  
11 which are consistent with the Governor's Executive Order.

12 We continue to evaluate ZEVs for effectiveness as  
13 they become available and look forward to continuing our  
14 collaboration with CARB to further modify the regulation  
15 and ensure a successful transition to ZEVs that are  
16 reliable and mission capable.

17 Thank you.

18 BOARD CLERK MOORE: Thank you.

19 Our next commenter is Randa AbuShaban. I have  
20 activated your mic. Please unmute and you may begin.

21 RANDA ABUSHABAN: Good afternoon, Chair Randolph  
22 members of the Board, and CARB staff. My name is Randa  
23 AbuShaban with the Orange County Sanitation District, OC  
24 San. As an essential public service provider OC San  
25 serves a critical mission for 2.6 million residents in

1 North Central Orange County. That is to protect public  
2 health and the environment by providing effective  
3 wastewater collection treatment and recycling. We want to  
4 thank you Chair Randolph and Dr. Cliff for acknowledging  
5 on July 24th the criticality of wastewater derived biogas  
6 or RNG as a potential bridge in the pursuit of achieving  
7 immediate vehicle emission reductions.

8 Above all, thank you, CARB staff, for your  
9 willingness to collaborate with CASA, in accordance with  
10 Resolution 23-13 in which CARB staff were directed to  
11 establish an interagency working group tasked with  
12 investigating zero-emission technology solutions while  
13 allowing for the continued use of renewable biogas and  
14 finding permanent diversified opportunities for its  
15 beneficial use. We look forward to the establishment of  
16 this interagency work group.

17 In agreement with Resolution 23-13 OC San is also  
18 vested in the successful implementation of SB 1383. As  
19 such, we support the need for multiple, reliable, and  
20 sustainable uses of wastewater derived biogas RNG. To  
21 that end, we ask CARB to reconsider and amend the ACF  
22 Regulation to include NZEV definition that allows for the  
23 use of low-NOx RNG-fueled vehicles. By the inclusion of  
24 the requested amendments, wastewater agencies can purchase  
25 vehicles powered by RNG and achieve the greenhouse gas NOx



1 emission reductions in the near term.

2 Furthermore, wastewater agencies cannot risk any  
3 interruption in service to our communities, while  
4 complying with the proposed purchase exemptions. While we  
5 support CARB's inclusion of Class 8 vacuum trucks to the  
6 streamlined ZEV purchase exemption list, we request the  
7 addition of Class 4 through 7 vacuum trucks and Class 4  
8 through 8 jet or combo vacuum trucks, which are all not  
9 available in ZEV configurations and frequently utilized by  
10 public agencies to maintain reliability of our resource  
11 collection systems, or to respond to emergencies,  
12 overflows and blocked --

13 BOARD CLERK MOORE: Thank you.

14 Next, we'll hear from Kimberly Thorner. After  
15 Kimberly, we'll hear from John McNamara, Jason Maruca,  
16 Laura Renger, and Claire Sullivan.

17 Kimberly, I have activated your microphone.  
18 Please unmute and you may begin.

19 KIMBERLY THORNER: Good afternoon, Chair  
20 Randolph, members of the Board. My name is Kimberly  
21 Thorner. I'm the general manager of Olivenhain Municipal  
22 Water District. We're a public agency that provides  
23 water, wastewater, Parks and Rec, and hydroelectric  
24 services in 48 square miles in San Diego County.

25 I want to convey to you how important the mutual

1 aid exemption modification being requested by both ACWA  
2 and CSDA are to public agencies across the state.  
3 Seventy-five percent of my service area is high risk on  
4 the new Cal Fire map. Fires have broken out seven times  
5 just in my tenure in my service area. When red flag  
6 events break out, power is shut down by SDG&E, sometimes  
7 for days. Simultaneous to this power shutoff, my water  
8 operators deploy throughout our service area. We manually  
9 operate our facilities. We keep the water flowing to  
10 customers and firefighters. We respond to emergencies  
11 side by side with our fire departments and other agencies.  
12 We must have vehicles that can respond immediately and for  
13 extended duration during these power outages and fires.

14 Zero-emission vehicles cannot currently provide  
15 extended mutual aid and emergency response for days when  
16 the power is shut off. We cannot be limited by range,  
17 grid reliability or how many ZEVs are currently in our  
18 fleet. The mutual aid exemption changes requested by ACWA  
19 and CSDA are common sense requests in the real world  
20 operations of public agencies. You need water to fight  
21 fires even when the power is out and the faster we put out  
22 the fires, the better the impact on air quality. We hope  
23 you take our request into consideration. It will save  
24 lives.

25 I also want to thank the CARB staff who have

1 taken the time the past several months to meet with public  
2 agencies. We want to continue the conversation.

3 Thank you for the opportunity to hear our  
4 concerns today.

5 BOARD CLERK MOORE: Thank you.

6 We'll now hear from John McNamara. I have  
7 activated your mic. Please unmute and you may begin.

8 JOHN MCNAMARA: Yeah. Thank you. Good  
9 afternoon, Board and Chair. I appreciate the opportunity  
10 to make comments on the ACF. My name is John McNamara,  
11 Vice President at CR&R. We're a solid waste company in  
12 Southern California and we built the largest organic waste  
13 anaerobic digester plant in California in 2016. It's  
14 connected to the gas supply lines, the first one ever in  
15 the history of California to do that and we're located in  
16 the City of Perris in Riverside County, a disadvantaged  
17 community.

18 Our anaerobic digester treat over 300 tons per  
19 day of organic waste that would have otherwise gone to  
20 landfill and it creates one million gallons of RNG per  
21 year that we use in our solid waste vehicles. So it's a  
22 true circular economy. We are picking up the organic  
23 waste, we're treating it. We're putting it into -- the  
24 gas into our trucks and we're going back out to pick up  
25 that waste material.

1           It is a much cleaner fuel than diesel fuel and  
2   it's carbon neutral, and in some cases some of our  
3   colleagues are carbon negative. Our plant is a living and  
4   successful example of the circular economy and the ability  
5   to meet the State's regulations like Senate Bill 1383.  
6   This facility allows our customers to be in compliance  
7   with 1383 with the State's requirements for organic  
8   diversion and for procurement. So, we're in support of  
9   including RNG in your NZEV definitions, because it's  
10   already clean, already meeting the requirements, and we  
11   can -- we've already deployed it since 2016.

12           Thank you for your time.

13           BOARD CLERK MOORE: Thank you.

14           Laura Renger, I have activated your mic. Please  
15   unmute and you may begin.

16           LAURA RENGER: Thank you. This is Laura Renger  
17   from the California Electric Transportation Coalition.

18           We first want to congratulate Chair Randolph on  
19   your retirement. Although, you will be missed very much.

20           CalETC has long supported the ACF, which was  
21   established to accelerate the on-road truck fleet  
22   transition to zero-emission vehicles. While the original  
23   scope is now limited to only State and local public  
24   agencies, the ACF still presents an important opportunity  
25   to help support the development and deployment of medium-

1 and heavy-duty ZEVs. CalETC remains committed to working  
2 with CARB to ensure that the ACF can be successfully  
3 implemented and used as a model for other states.

4 To do this, we suggest that CARB focuses its  
5 efforts on ZEV adoption, where it is technologically and  
6 economically feasible and does not compromise emergency  
7 response or the safety and reliability of essential  
8 utility services to Californians.

9 Public agency utilities must be able to purchase  
10 vehicles that can completely and reliably meet the fleet's  
11 essential functions and duty cycles, including those  
12 vehicles needed to maintain a safe and reliable electric  
13 grid.

14 While technology in the ZEV truck market is  
15 rapidly evolving, there are still gaps between the ability  
16 of specialized ZEV trucks to meet certain duty cycles and  
17 auxiliary functions required in the field and emergency  
18 response situations. The ACF needs to be flexible enough  
19 to account for fluctuations in the ZEV market and a wide  
20 variety of fleet configurations.

21 We support CARB staff's proposed 15-day changes  
22 to delay the hundred percent purchase requirement for  
23 public fleets in light of current market and federal  
24 regulatory issues. We also support expanding the AB 1594  
25 provisions to all public agency fleets.

1           Lastly, CalETC recommends that CARB make  
2 additional 15-day changes as suggested by the public  
3 utilities. Thank you.

4           BOARD CLERK MOORE: Thank you.

5           Our next commenter is Claire Sullivan. After  
6 Claire we will hear from Warisa Niizawa, Tom Greene, Tony  
7 Pastore and Peter Okurowski.

8           Claire, I've activated you mic. Please unmute  
9 and you may begin.

10           CLAIRE SULLIVAN: Thank you. Good afternoon to  
11 the Board members and Chair. My name is Claire Sullivan  
12 here on behalf of cities of Thousands Oaks, Corona, Rancho  
13 Cucamonga, Bakersfield, Redwood City, and San Mateo. Our  
14 comments align with CASA, CMUA, CSDA, and the City of  
15 Roseville, as well as the letter from the Legislature  
16 dealing -- detailing the conflict between legislation and  
17 regulations.

18           Each of the cities I mentioned and others have  
19 made significant investments of public resources to uphold  
20 the SB 1383 mandate to divert methane emissions while also  
21 reducing reliance on fossil fuels. These innovations are  
22 important stepping stones to achieve California's clean  
23 energy goals. We request CARB modify the resolution to  
24 amend the definition of NZEV to provide a third option for  
25 an on-road low-NOx vehicle fueled by biomethane RNG or

1 hydrogen fuel and removing or at least extending the  
2 sunset for NZEVs.

3 We thank you so much for your leadership and your  
4 consideration and congratulations to Chair Randolph.

5 Thank you.

6 BOARD CLERK MOORE: Thank you.

7 Warisa Niizawa, I have activated your mic.  
8 Please unmute and you may begin.

9 WARISA NIIZAWA: Good afternoon Chair Randolph,  
10 Board members and staff. I'm Warisa Niizawa with the Los  
11 Angeles County Sanitation Districts. Our agency provides  
12 reliable wastewater treatment services for 5.5 million  
13 people and we treat about 400 million gallons of  
14 wastewater per day. Biogas is an unavoidable byproduct of  
15 wastewater treatment. It is also a valuable resource that  
16 will always exist, so we'd rather use it to benefit the  
17 environment rather than waste it by flaring.

18 Our agency currently operates a wastewater  
19 derived biogas-to-vehicle fueling station that provides  
20 RNG to the public. Although our agency strongly supports  
21 ZEVs. In fact, we are one of the early adopters of ZEV  
22 technology. However, current ZEV vehicles on the market  
23 have not been reliably proven to meet our operational  
24 needs.

25 The Los Angeles County Sanitation Districts are

1 committed to protecting public health and the environment.  
2 We support CASA's comments and respectfully urge you to  
3 direct staff to modify the definition of NZEV, near-zero  
4 emission vehicles, to include waste-derived RNG as a  
5 pathway until reliable options for ZEVs are commercially  
6 available.

7 Thank you very much for your consideration.

8 BOARD CLERK MOORE: Thank you.

9 Tom Greene, I have activated your mic. Please  
10 unmute and you may begin.

11 TOM GREENE: Hello. My name is Tom green. I'm  
12 from Rancho California Water District. We serve about  
13 150,000 customers in southwest Riverside County.

14 We are in agreement with the comments made by  
15 ACWA and CMUA, CASA, and the utilities also that have  
16 commented. Our water district had put in 15 Level II  
17 chargers so far, and allowed our employees to test them  
18 for a modest fee. From that, we've upgraded nine of those  
19 chargers. We also have solar panels for 12,000 megawatts  
20 and putting in a 3,000 megawatt hydroelectric generation  
21 system.

22 We ordered some electric trucks in 2022, but the  
23 manufacturer completely canceled the order due to  
24 technical difficulties and rising costs. This year, we  
25 look for service utility body electric vehicles, but



1 couldn't find any to fit our needs, so we purchased six  
2 medium-duty pickups that weren't needed at the time, but  
3 can be used as offsets to get the trucks that we need.  
4 These electric vehicles are coming in November. We  
5 believe there is a lot of work still needed by the -- by  
6 us and CARB to meet the requirements of AB 1594.

7 We hope some of the proposed 15-day changes will  
8 come to fruition, including extending the 50/50 purchase  
9 offset rule to 2030 and not considering a vehicle feasible  
10 until the manufacturer has at least a few on the road with  
11 a proven track record, costs comparable somewhat to ICE  
12 vehicles, and a warranty repairs in our area.

13 There is lot of work needed to make the  
14 exemption work -- process workable. Public water systems  
15 must have the tools that are negli -- that are reliable to  
16 keep the clean drinking water flowing to our customers and  
17 to re --

18 BOARD CLERK MOORE: Thank you.

19 Our next commenter is Tony Pastore.

20 Please unmute and you may begin.

21 TONY PASTORE: Thank you. Good afternoon, Chair  
22 Randolph, Board, staff, and attendees. Thank you for the  
23 opportunity to comment today. My name is Tony Pastore.  
24 I'm a Senior Energy Advisor with Terra Verde Energy. We  
25 are independent energy advisors, who have supported more

1 than 170 California public agencies since 2010. We  
2 provide feasibility, planning, procurement, and  
3 optimization of energy facilities like solar, battery, and  
4 biogas microgrids, including EV charging infrastructure  
5 and ACF compliance planning.

6 Terra Verde is a long-time member of ACWA and  
7 CASA and we support the comments expressed today by Mr.  
8 Blair, Ms. Deslauriers. Further, we support the comments  
9 of Mr. Jepsen, Mr. Wyckoff, Ms. Quiroz and other public  
10 agencies. Terra Verde has supported more than a dozen  
11 water and wastewater agencies with ACF compliance and EV  
12 charging infrastructure planning and implementation. ACF  
13 compliance can be a massive additional challenge for our  
14 already burdened agencies costing millions of dollars in  
15 fleet replacements and EV charging infrastructure as  
16 capital improvement projects.

17 The operational expense is also substantial, and  
18 as noted in earlier comments, may be significantly higher  
19 than forecast. We all know that the cost of electricity  
20 has doubled in most of California over the last five years  
21 alone, so fueling EVs is becoming more costly and should  
22 be a consideration of the Board.

23 Biomethane or biogas, as heavily commented on  
24 today, is a resource generated during anaerobic digestion  
25 at wastewater treatment plants and is also produced in

1 many landfills throughout the state. The best utilization  
2 of biogas as both a transportation fuel and as an on-site  
3 electricity generation fuel should also be thoughtfully  
4 considered as this is essentially a free fuel for some  
5 public agencies. And under SB 1383, California will  
6 produce even more biogas in the future.

7 Terra Verde continues to address California's  
8 aging grid by supporting public agencies, and --

9 BOARD CLERK MOORE: Thank you.

10 Our next commenter is Peter Okurowski. I have  
11 activated your mic. Please unmute and you may begin.

12 PETER OKUROWSKI: Thank you. Good afternoon.  
13 I'm Peter Okurowski with the California Council for  
14 Environmental and Economic Balance, or CCEEB.

15 First, we want to thank staff for working with  
16 our public agency utility members as they considered the  
17 AB 1594 amendments. And CCEEB supports the proposed  
18 amendments as well as the proposed 15-day changes. CCEEB  
19 also supports the Board allowing staff to make additional  
20 changes. And given the nuances of what will be addressed  
21 in the 15-day changes, CCEEB supports staff bringing these  
22 changes back before the Board for full Board adoption.

23 In addition, we reiterate our previous request  
24 that staff recognize the safety concerns associated with  
25 hauling hazardous materials with zero-emission and

1 near-zero emission trucks. And we request the removal of  
2 these trucks from the list of vehicles not eligible for  
3 mutual aid exemption when NZEV alternatives are present.

4 Finally, we support the use of RNG and NZEV  
5 vehicles. RNG is a carbon negative fuel that is readily  
6 available with a robust infrastructure network and can be  
7 an effective part of the climate strategy.

8 We also congratulate Madam Chair on her  
9 retirement. Thank you.

10 BOARD CLERK MOORE: Thank you.

11 Our next commenter is Damon Conklin. After Damon  
12 we'll hear from Alison T, Harmony Gates, Sam Wilson, and  
13 Raul Fletes.

14 Damon, I have activated your mic. Please unmute  
15 and you may begin.

16 DAMON CONKLIN: Thank you very much. Good  
17 afternoon, Madam Chair and members. Damon Conklin, League  
18 of California Cities. We appreciate the opportunity to  
19 provide comments to the proposed amendments to the ACF.  
20 While the current proposed amendments do not address many  
21 of our member concerns. We further support efforts to  
22 amend the ACF as there remain significant work ahead  
23 between CARB staff and stakeholders to address unresolved  
24 issues of availability, costs, and the issues of  
25 extensions and waiver process.

1           It was said earlier that -- by one of the  
2 speakers that local governments must lead by examples, and  
3 we are, but we cannot be expected to go it alone,  
4 especially given the federal administration's views of  
5 ZEVs and the continued uncertainty with current landscape  
6 impacting all these issues of availability, costs, and  
7 timelines. We are respectfully asking that the Board  
8 consider amending the ZEV purchase schedule by extending  
9 out that time period for purchase requirements. And then  
10 also, we would request that local municipalities be able  
11 to use long-term rentals of ZEVs, if they opt to do so.  
12 This helps offset time periods when renting and using a  
13 ZEV, while your infrastructure to refuel is being  
14 constructed. This helps with both compliancy and reducing  
15 requests and extensions for waivers.

16           Local governments, specifically cities and  
17 counties and special districts are making significant  
18 progress with complying with the ACF, but still struggle  
19 and wish to work earnestly with CARB staff to make these  
20 necessary and many more adjustments to increase  
21 compliancy.

22           Thank you very much for your ongoing leadership  
23 and urgently meeting the state's transportation and  
24 climate goals, and we, too, thank the Chair Randolph for  
25 her service.

1 Thank you.

2 BOARD CLERK MOORE: Thank you.

3 Alison T.

4 ALISON TORRES: Good afternoon, Chair Randolph  
5 and Board members. My name is Alison Torres. I am the  
6 Air Quality Committee Chair for Clean Water SoCal.

7 Clean Water SoCal represents 80 public wastewater  
8 agencies in Southern California that manage wastewater for  
9 20 million people and operate 24/7. The non-fossil  
10 Biomethane produced cannot be turned off and will be  
11 generated in perpetuity. Our members remain concerned  
12 that the ACF continues to impose regulatory uncertainty  
13 for the beneficial use of biomethane.

14 While we appreciated Board Resolution 23-13, no  
15 interagency workgroup has been established. A pathway for  
16 the use of biomethane is needed. The ACF now only  
17 regulates less than seven percent of the medium- and  
18 heavy-duty vehicles in California. This is not enough to  
19 sustain the ZEV market. Wastewater providers want to be a  
20 partner in SB 1383. However, regulatory and market  
21 certainty is imperative. Our members are unable to use  
22 the existing waste fleet provisions because they are  
23 extremely limiting. The exemptions and extensions in the  
24 ACF do not provide a pathway for biomethane and do not  
25 address the need for market certainty for capital

1 investments, especially if they're only year-to-year.

2 Adding the use of wastewater biomethane will  
3 support the use of carbon negative fuel in low-NOx  
4 vehicles. It will lead to short-term emission reductions  
5 and will provide sustainable use while ZEV technologies  
6 mature. I request that the Board direct staff amend the  
7 ACF to increase flexibility by adding a compliance pathway  
8 for an on-road low-NOx vehicle fueled by biomethane either  
9 by modifying the definition of NZEV or by adding a new  
10 definition, and also remove or extend the sunset of NZEVs  
11 until zero-emission technologies are commercially  
12 available.

13 I ask the Board to direct staff to present the  
14 15-day changes in a future hearing. And I respectfully  
15 ask the Board to add language to today's resolution to  
16 address these concerns. I support the comments made by  
17 CASA and I thank you for the opportunity to comment today.

18 BOARD CLERK MOORE: Thank you.

19 Harmony Gates, I have activated your mic.

20 Harmony Gates.

21 Okay. We'll move on to Raul Fletes.

22 Oh, actually Sam Wilson. I'm sorry. Sam Wilson,  
23 I have activated your mic. Please unmute and you may  
24 begin.

25 SAM WILSON: Good afternoon, Chair Randolph and

1 members of the Board. My name is Sam Wilson speaking on  
2 behalf of the Union of Concerned Scientists. Thanks for  
3 the opportunity to comment on the proposed amendments to  
4 ACF today.

5 Back when CARB adopted ACF in 2023, it  
6 represented one of the most meaningful regulations ever  
7 adopted by the Board to address climate change, reduce  
8 statewide air pollution, and improve access to clean air  
9 and historically marginalized communities. Now, with the  
10 unfortunate need to repeal the high priority fleet and  
11 drayage truck provisions under the Rule, the State will  
12 lose a massive portion of the rule's anticipated benefits.

13 Even so, we do appreciate that staff have worked  
14 to retain a feasible SLG fleet requirement. Electrifying  
15 public fleets can provide crucial demand certainty, help  
16 derisk OEM production of ZEVs and accelerate economies of  
17 scale in the ZEV supply chain. However, the SLG portion  
18 of ACF alone cannot replace the emission reductions  
19 originally expected from the rule.

20 Without new measures, California faces both an  
21 air quality gap and the risk falling short of our climate  
22 targets. To close this gap, CARB and the State should  
23 pursue dedicated durable funding mechanisms to expand  
24 vehicle purchase incentives, infrastructure deployment on  
25 an accelerated timeline, particularly high-capacity



1 charging for drayage trucks around freight hubs, and the  
2 expansion of Indirect Source Rules and port container fees  
3 statewide.

4           The technical record is clear, heavy-duty vehicle  
5 emissions remain one of the largest barriers to our state  
6 meeting federal ozone standards and addressing climate  
7 change and environmental injustices. State and local  
8 government fleets electrified alone is an essential step,  
9 but is not sufficient on its own. CARB has the regulatory  
10 authority, the market momentum and the moral imperative to  
11 move forward decisively and we look forward to working  
12 with you all and other agencies on this vital work.

13           In conclusion, thanks to staff and the Board for  
14 working to reduce pollution from the freight system and a  
15 special thanks to Chair Randolph for your collaborative  
16 leadership and meaningful service over the past five  
17 years.

18           BOARD CLERK MOORE: Thank you.

19           Raul Fletes. I have activated your mic. Please  
20 unmute and you may begin.

21           RAUL FLETES: Good afternoon, Chair and Board  
22 members. My name is Raul Fletes. I work for the Los  
23 Angeles Department of Water and Power. I'm a senior  
24 manager.

25           As previously stated, you know, I'd like to

1 emphasize the fact that our vehicles and equipment are  
2 used for mutual aid benefits and support. And, you know,  
3 we work directly with first responders as many agencies  
4 have stated. But I'd like emphasize the fact that our  
5 fleet and the things that we do as directly involved with  
6 Cal OES and become a part of their scope of work that  
7 needs to happen.

8           Our vehicle is essential to their needs in order  
9 to do what the function that they need to in order fight  
10 fires, water devastate -- issues that happen with  
11 atmospheric rivers or different events. It's imperative  
12 that -- you know, that that be communicated and  
13 instructive and CARB staff understand that that requires a  
14 specialized type of vehicle and equipment that's needed  
15 for that kind of duty and cycle. There's a reason for why  
16 first responders and policy need those type of vehicles.  
17 We are always embedded with them. And those are the only  
18 agencies that are allowed which is us utilities.

19           In addition to the scope of work that the  
20 Department -- of LA Department of Water and Power does, we  
21 operate in three states, Nevada and Utah. And so the  
22 complexity of having a transverse size of area and scope,  
23 and everything is purchased here locally, is difficult.

24           That said, we still have a tremendous opportunity  
25 to be able to electrify certain areas and specific jobs,

1 but not all. And so, we are working and always trying to  
2 provide support to local and small agencies and groups  
3 that are trying to understand how to navigate the ZEV  
4 fleet as having so many in our fleet. We're first at  
5 seeing what the issues are and we ask that we have the  
6 opportunity to submit our specifications and the things  
7 that we need for our specific vehicles to do our work and  
8 tasks. It is very crucial and, you know, life saving to  
9 the people that need it in the City of Los Angeles and  
10 neighboring around us.

11 So thank you very much for your time.

12 BOARD CLERK MOORE: Thank you.

13 Our next commenter is Sean Bigley. Sean Bigley  
14 will be followed by Andy Haussler, Gracya Mohabir, and  
15 Ryan Kenny.

16 Sean Bigley, I have activated your mic. Please  
17 unmute and you may begin.

18 SEAN BIGLEY: Right. Good afternoon, Chair  
19 Randolph, and Board members. My name is Sean Bigley. I'm  
20 the Director of the Environment and Utilities Department  
21 for the City of Roseville. I want to thank your staff for  
22 recently visiting Roseville to see our circular economy in  
23 action, where we convert biosolids and high strength food  
24 waste into renewable natural gas fueling our low-NOx  
25 refuse fleet to achieve immediate GHG and NOx emission

1 reductions for our community today.

2           Roseville launched this project in 2015 investing  
3 over \$20 million in local ratepayer funds and securing  
4 approximately \$7 million in grants in loan forgiveness.  
5 That investment has allowed us to displace about 250,000  
6 gallons of diesel annually with locally generated RNG.  
7 Yet, when the ACF Rule was adopted in 2023 it foreclosed  
8 our ability to expand upon the success. Instead of  
9 letting us reach our full potential for emissions  
10 reductions with low-NOx RNG trucks, the Regulation forces  
11 us to cap the potential and hold on to diesel vehicles  
12 longer undermining projects by early adopters like  
13 Roseville.

14           It's important to remember State and local agency  
15 fleets represent less than seven percent of the medium  
16 fleet. Yet, because of these federal uncertainties, the  
17 small slice of the total is carrying the burden driving  
18 innovation in the zero-emissions market.

19           This is why Roseville supports CASA's request to  
20 modify the definition of NZEV to provide a third option,  
21 and on-road low-NOx vehicle fueled by biomethane RNG  
22 hydrogen fuel. We also support removing, or at least  
23 extending, the sunset for NZEVs while the wastewater  
24 sector demonstrates generation of low- and zero-emission  
25 technologies. We feel this is a bridge solution that

1 makes sense.

2           Roseville remains committed to California's  
3 carbon neutrality goals. And I invite you all as CARB  
4 members to come out to Roseville to see firsthand how  
5 these projects like ours are delivering community-based  
6 solutions for cleaner air today and resilience in the face  
7 of climate change.

8           Thank you very much.

9           BOARD CLERK MOORE: Thank you.

10           Andy Haussler, I have activated your mic. Please  
11 unmute and begin.

12           ANDY HAUSSLER: Thank you very much, Chair and  
13 members of the Board. My name is Andy Haussler, and I am  
14 with the City Manager for the City of Clovis, a community  
15 of 130,000 residents in the San Joaquin Valley.

16           We appreciate the California Air Resources  
17 Board's commitment to clean air, which is especially  
18 important to communities like ours in the San Joaquin  
19 Valley. Our concern is not whether to transition to  
20 zero-emission fleets, but how. Private fleets continue to  
21 operate without mandates, and this creates an imbalance  
22 undermining essential public services like solid waste  
23 collection, and water, and wastewater services.

24           Operating costs will also fall directly on our  
25 community. We estimate ratepayers could see increases of

1 at least 20 percent for over the next three years. That  
2 level of cost escalation hurts families and small  
3 businesses that are already struggling -- that are already  
4 struggling in today's economy. We respectfully urge CARB  
5 to consider a path that allows cities to succeed in this  
6 transition. That means realistic timelines are to reflect  
7 by actual technology readiness. We appreciate the delay  
8 that's been discussed, meaningful exemptions for  
9 specialized equipment, State mandated utility coordination  
10 on installation of infrastructure, changes to the mutual  
11 aid exemption to not have thresholds, and financial  
12 support that protects our residents.

13 We share CARB's long-term vision for clean and  
14 sustainable fleets. But without these adjustments, the  
15 regulation risks reducing not strengthening public  
16 services and emergency response in our community.

17 Thank you for your leadership and for the  
18 opportunity to provide these comments.

19 BOARD CLERK MOORE: Thank you.

20 Our next commenter is Gracyna Mohabir. I have  
21 activated your mic. Please unmute and you may begin.

22 GRACYNA MOHABIR: Thank you. Good afternoon,  
23 Chair and Board members. Thank you for the opportunity to  
24 comment today on the proposed amendments to the ACF  
25 Regulation. Gracyna Mohabir with California Environmental

1 Voters.

2           We understand that some of the key changes to  
3 provisions of ACF are brought before the Board today as  
4 prudent and necessary, somewhat difficult decisions, and  
5 this is because of federal attacks on our regulatory  
6 authority looking at what makes sense moving forward and  
7 what we can still reasonably achieve.

8           With this proposal, I just want to thank staff  
9 for their hard work on striking the right balance. I also  
10 want to echo the comments made earlier in the day by my  
11 colleagues from Coalition for Clean Air and by the -- from  
12 the Greenlining Institute that as we forge ahead, CARB's  
13 ongoing leadership in maintaining momentum with the ZEV  
14 transition is paramount. The continued action on State  
15 and local government-owned fleets will continue to display  
16 California's leadership on the zero-emission transition  
17 and will continue to send the right signals to the market.

18           And, as we move forward, I also want to urge the  
19 Board to look ahead at solutions that will help us stay  
20 the course in absence of emissions reductions that the  
21 original rule, as written, would have achieved. Continued  
22 focus on incentives and infrastructure buildout is key,  
23 but also we should be setting our sights on tools like a  
24 statewide Indirect Source Rule, as well as supporting  
25 these at the local level, which can help us address

1 emissions at a significant scale. Thank you for your time  
2 and thank you, Chair Randolph, for your years of  
3 leadership.

4 BOARD CLERK MOORE: Thank you.

5 Ryan Kenny. I have activated your mic. Please  
6 unmute and you may begin.

7 RYAN KENNY: Thank you. I'm Ryan Kenny with  
8 Clean Energy. Our company and our industry wants to  
9 continue to work with CARB to deploy the cleanest  
10 combustion engines on the roads that are -- that cut  
11 criteria and climate emissions now. We also respectfully  
12 disagree that diesels are at least as clean as CNG trucks.

13 The UC Riverside in-use study demonstrates a  
14 substantial difference in emissions -- emission outcomes.  
15 And while that study looked at engines prior to Omnibus,  
16 the industry continues to deliver the cleanest engines  
17 ahead of our diesel counterparts. We remain committed to  
18 lead on clean congestion technologies to help CARB and  
19 other -- and the State meet its clean air and climate  
20 goals, but we need CARB to send a signal necessary to  
21 deliver certainty to fleets. And I'll repeat that again,  
22 we need CARB to send a signal to send certainty to fleets.

23 Inclusion under the NZEV definition would help  
24 achieve this confidence at no cost. It also would have  
25 helped the rule, as there are no hybrid electric trucks on



1 the market that can meet and deliver a 40-mile  
2 all-electric requirement. Hence, the inclusion of the  
3 cleanest engines would tell all fleets to buy clean --  
4 cleaner trucks, not the dirtiest diesels to meet their  
5 fleet needs.

6 Thank you for your time and consideration.

7 BOARD CLERK MOORE: Thank you.

8 Jason Maruca, I have activated your mic. Please  
9 unmute and you may begin.

10 JASON MARUCA: Good afternoon, Chair and Board  
11 members. My name is Jason Maruca and I'm representing  
12 Burbank Water and Power, which is a publicly owned utility  
13 in the City of Burbank.

14 Burbank Water and Power is committed to  
15 transitioning our fleet to ZEV vehicles. We installed our  
16 first public charger in 2011 and our council has set local  
17 goals for ZEV purchases. I would like to thank CARB staff  
18 for the outreach they have done on the Advanced Clean  
19 Fleet Rule. We were able to meet with CARB staff and  
20 describe our challenges with implementing the rules on our  
21 medium- to heavy-duty specialty vehicles. While we  
22 appreciate the work that has been done to adjust the rule,  
23 the 45-day regulation package still needs work. We need a  
24 regulation that allows utilities to respond to  
25 emergencies, maintain reliability, and respond to mutual

1 aid requests.

2 We appreciate the proposed delay of the 100  
3 percent ZEV purchase requirement. However, we need rules  
4 that are straightforward and easy to apply. We would like  
5 to see improvements in the ZEV purchase exemption, mutual  
6 aid exemption, and daily use exemption.

7 We appreciate CARB staff and leadership meeting  
8 with us and the broader utility industry. We strongly  
9 encourage the Board to continue working with the utilities  
10 to ensure that we have a rule that allows us to respond to  
11 emergencies and maintain reliability.

12 Thank you.

13 BOARD CLERK MOORE: Thank you.

14 I'll try Harmony Gates again. Harmony, I've  
15 activated your mic. Please unmute and you may begin.

16 HARMONY GATES: Hello. Hopefully, you can hear  
17 me.

18 BOARD CLERK MOORE: Yes.

19 HARMONY GATES: Okay. Thank you. I am Harmony  
20 Gates with TRC Clean Transportation Solutions. I just had  
21 a couple questions that I understand you might not be able  
22 to answer, but I wanted to call out.

23 I see that the goal is to delay the 20 -- the  
24 hundred percent purchase to 2030. I want to make sure  
25 that's for all public fleets, even though the emphasis

1 said it was for small and low population counties. And  
2 then moving the zero-emission milestone schedule into the  
3 public fleet State and local government section. I'm  
4 wondering if there will be any consideration for delaying  
5 the schedule since the purchase schedule will be delayed  
6 and whether or not the switch to zero-emission milestone  
7 will have any additional time compared to the 2030  
8 original deadline to make that switch. So those are just  
9 questions I wanted to pose to CARB for the upcoming  
10 process of finalizing the amendments.

11 BOARD CLERK MOORE: Okay. Thank you.

12 That concludes our Zoom commenters. I'll pass  
13 the microphone back to Chair Randolph.

14 CHAIR RANDOLPH: All right. Thank you. Staff,  
15 are there any issues raise in the comments you want to  
16 address before I close the record?

17 EXECUTIVE OFFICER CLIFF: Yes, Chair. I just  
18 wanted to say a couple of things. One, with regard to the  
19 mutual aid provisions, I know we've heard a lot of  
20 discussion about that issue and the amount of  
21 zero-emission vehicles that would need to be in an -- in a  
22 regulated entity's fleet before they could take advantage  
23 of those provisions. That's, as proposed, 25 percent.  
24 But we have been working to lower that number. So while  
25 we haven't fully landed that yet, there's some more work

1 that we have to do. I just wanted to make clear that it  
2 would not be at that higher level, and, you know, we're  
3 looking at something lower.

4 And then also, we understand for small fleets  
5 that there's the potential that that becomes even more  
6 difficult. So a small fleet would be 10 or fewer that,  
7 you know, it might be difficult to meet a certain  
8 percentage with such a small fleet. So we're also looking  
9 at that issue and how to resolve that as well.

10 And I can also address the question about the  
11 natural gas trucks, if that's useful. Okay. So with  
12 regard to this issue over is natural gas cleaner than  
13 diesel? So the study that has been discussed quite a bit,  
14 this is a study that we worked with many others on  
15 funding, was intended to look at both diesel and natural  
16 gas in the -- using the old standards. So those are the  
17 old 200 milligram standards.

18 At the time that those 200 milligram standards  
19 were in place, we had an optional low-NOx standard, which  
20 is a 20 milligram standard. Today, under the Omnibus  
21 Regulation, the requirements are 50 milligrams NOx, but  
22 it's on completely different test -- like a completely  
23 different test cycle. So we have a low load cycle. We  
24 have these kind of different tests that we do for the --  
25 for the vehicles. So you can't directly compare the 50

1 milligram and the 20 milligram, because they're just kind  
2 of apples and oranges.

3           So this isn't a case where we're trying to say  
4 that natural as isn't clean or that those trucks that were  
5 certified to that optional low-NOx standard at 20  
6 milligrams wasn't, you know, a big lift. We understand  
7 that it was. But the new requirements with different duty  
8 cycles and durability requirements really mean that that  
9 test isn't fully applicable to the certification standards  
10 that are in place today under Omnibus Regulation.

11           So I can see where this is a situation where  
12 stakeholders and staff are kind of talking past one  
13 another, because we say, well, they're both the same,  
14 because they're both meeting the Omnibus standard for 50  
15 milligram. Now, there is an optional low-NOx standard in  
16 the Omnibus Regulation, but nobody has certified to that  
17 yet. So that isn't applicable. As it stands today, they  
18 would both be meeting the letter of the law, which is  
19 that, you know, 50 milligram standard.

20           Obviously, the illegal resolutions that we've  
21 talked about kind of make all of this a little more  
22 difficult to talk through, but I'm not going to get into  
23 all of those nuances. I just wanted to explain why  
24 that -- the study that folks talk about isn't exactly the  
25 same as those certification standards today.

1           It's also true that in the initial phase of the  
2 study, there were some issues that arose, where in-use  
3 emissions were actually much higher than the certification  
4 standards. That's something that we tried to resolve with  
5 the Omnibus Standards when we brought those to the Board a  
6 few years ago, by making those standards more applicable  
7 to how engines were certified, so that the in-use weren't  
8 wildly different. Both diesel and natural gas had higher  
9 in-use emissions, so that was also true.

10           And the kind of more recent part of that that has  
11 been cited, it is the case that the results are much  
12 better than were originally part of that study back when  
13 we took the Omnibus Regulation to the Board.  
14 Nevertheless, it is still the case that they're both  
15 certifying to the same emission standards. So when we're  
16 talking about low NOx today, in fact, low NOx is just the  
17 omnibus 50 milligram requirement, which both diesel and  
18 natural gas would need to meet to be certified to those  
19 requirements. So hopefully that helps kind of explain why  
20 there's a little difference in how we talk about those  
21 issues.

22           CHAIR RANDOLPH: Okay. All right. I'm going to  
23 do the official record closing process and then we'll get  
24 into Board discussion.

25           Okay. I will now close the record on this agenda

1 item. However, if it is determined that additional  
2 conforming modifications are appropriate, the record will  
3 be reopened and a 15-day Notice of Public Availability  
4 will be issued. If the record is reopened for a 15-day  
5 comment period, the public may submit written comments on  
6 the proposed changes, which will be considered and  
7 responded to in the final statement of reasons for the  
8 regulation. Written or oral comments received after this  
9 hearing date but before a 15-day notice is issued will not  
10 be accepted as a part of the official record on this  
11 agenda item.

12 The Executive Officer may present the regulation  
13 to the Board for further consideration, if warranted, and  
14 if not, the Executive Officer shall take final action to  
15 adopt the regulation after addressing all appropriate  
16 conforming modifications.

17 Okay. I just wanted to ask a few quick  
18 questions, before I turn it over to my colleagues. So, it  
19 sounds like you -- there is still some conversation about  
20 the question of the mutual aid exemption and sort of, you  
21 know, what the options are there.

22 Well, actually, I'm going to back up for a  
23 second. So just to be clear, the resolution we have in  
24 front of us adopts the 45-day changes that were presented  
25 in the staff presentation and additionally direct the

1 Executive Officer to extend the 50 percent ZEV purchase  
2 schedule until 2030, and that there was a question about  
3 does that apply to all fleets?

4 EXECUTIVE OFFICER CLIFF: Yes.

5 CHAIR RANDOLPH: Okay. That applies to all  
6 fleets. Allow small fleets and those located in  
7 designated counties, the low population counties that were  
8 on the map in the presentation, to continue to wait until  
9 2030 before they need to purchase ZEVs at all, and  
10 extending the AB 1594 flexibilities to all State and local  
11 government fleets.

12 Okay. So that's what's in the resolution  
13 currently.

14 In addition, the -- there's been a lot of  
15 requests for staff to engage further with the regulated  
16 community to look at other potential flexibilities or  
17 opportunities for clarification. And so the mutual aid is  
18 an example of that. I did hear some comments -- and this  
19 is consistent with what I heard in Fresno when we did our  
20 Executive Order public meeting. I still hear a lot of  
21 concern sort of about kind of the paperwork for the  
22 exemptions. And, you know, are there -- we're addressing  
23 I think some of that in the 1594 changes, but I guess  
24 I'm -- are there some opportunities for a little increased  
25 flexibility just in terms of how often you have to file



1 paperwork for the infrastructure exemption or other  
2 exemption. So can you just talk about that a little bit?

3 EXECUTIVE OFFICER CLIFF: Yeah. We're -- we are  
4 trying to streamline that. I think it's important to  
5 recognize that in the cases where exemptions have been  
6 provided already, it was -- it was important to give those  
7 exemptions, because they needed it at the time. We have  
8 also seen cases where we've denied exemptions, because it  
9 wasn't actually right. There wasn't a requirement quite  
10 yet. But I understand that fleets want to -- want to  
11 know, well, do I really have to do this, you know, a few  
12 years from now?

13 Part of the challenge, especially with regard to  
14 are there vehicles that are available is -- is that, you  
15 know, things might come on the market and then all of a  
16 sudden, boom, it's available. So we're also looking at  
17 that particular issue, so that availability has some  
18 consideration for whether or not it's actually available.  
19 Has it -- has it -- is it on the market, is it, you know,  
20 fully publicly accessible, has it been around for some  
21 period of time?

22 So trying to also make that so it's a little bit  
23 less like a, nope, we found one over here. There's a  
24 picture of it on a website. That sort of issue wouldn't  
25 apply anymore to that availability. So those are the

1 types of areas where we're trying to streamline exemptions  
2 and make it a little easier to access.

3 CHAIR RANDOLPH: Okay. Thank you.

4 So, the -- basically, there is -- you know,  
5 there's an opportunity for some further discussion, but  
6 recognizing that, for instance, having a different sort of  
7 NZEV definition is a little more challenging, given that  
8 that is a definition that exists in a completely different  
9 regulation, which is the Advanced Clean Trucks Regulation,  
10 and is sort of incorporated here.

11 So, I think that's a -- that's, you know, not  
12 something that could be redefined in the 15-day, is that  
13 correct?

14 EXECUTIVE OFFICER CLIFF: Yeah, that's correct.  
15 The NZEV definition is also included in ACT and it does  
16 point back I think as far back as the phase one GHG  
17 standard.

18 CHAIR RANDOLPH: Okay. And then lastly, before I  
19 turn it over to my colleagues, there was some discussion  
20 and modification we made when we originally adopted ACF  
21 for vehicles that were owned by agencies that were  
22 producing their RNG and using the RNG to fuel vehicles,  
23 and we had some -- an extension of time that for vehicles  
24 that were in their fleet at -- I think at the time the  
25 regulation went into effect or shortly thereafter. Given

1 sort of the fact that we're adjusting timelines in other  
2 ways, do you think it would be a useful conversation in  
3 the 15-day conversation about whether or not those  
4 timelines should be tweaked?

5 EXECUTIVE OFFICER CLIFF: Yeah. That's certainly  
6 an issue we can look at. And I think, you know, we  
7 understand especially, you know, when we met with CASA,  
8 you know, that they're trying to figure out ways to use  
9 their fuel in productive ways. And so I think we can  
10 continue to look at that issue and see whether some  
11 additional flexibilities make sense there.

12 I want to note that there are other opportunities  
13 for that natural gas. So it isn't just the case that it  
14 has to go into combustion trucks. We just proposed this  
15 week, and, in fact, I believe today started the comment  
16 period on amendments that the Board will hear in November,  
17 which would allow book and claim for linear generators.  
18 Book and claim under the Low Carbon Fuel Standard. Book  
19 and claim is already eligible for fuel cells. So there is  
20 an opportunity to use that natural gas in other ways to  
21 fuel zero-emission trucks, so it doesn't only have to go  
22 to combustion.

23 Nevertheless, it's also true that there aren't  
24 vehicles that meet the needs of many of these fleets. So,  
25 those vehicles would already be exempt. So to provide a

1 little more clarity there and not have, you know, the kind  
2 of fits and starts, if there's a way to address that  
3 issue, where maybe there's a little more lead time, for  
4 example, for those captive fleets if they're using the  
5 cleanest available technology. So I don't think that can  
6 be the 50-milligram standard. That would need to be like  
7 an optional low-NOx standard.

8 Then it would truly be cleaner than anything else  
9 and it would be using the renewable natural gas that's  
10 produced at the facility itself for its own active fleet.

11 CHAIR RANDOLPH: Okay. All right. My  
12 colleagues, who would like to -- Mr. Eisenhut.

13 BOARD MEMBER EISENHUT: Okay. There's a danger  
14 here. First, I'd like some clarity -- and this is -- I  
15 think -- I heard a couple of our speakers refer to a UCR  
16 study that equated emissions from diesel fleets and  
17 natural gas fleets. And I didn't hear any more texture to  
18 that, but it didn't exactly resonate. And I'd like to the  
19 event -- to the staff's ability to add some clarity for  
20 me, if you're aware of that -- of that study.

21 But, in response to the overarching conversation,  
22 first of all, I support the action. To me, this is --  
23 there is a -- or the proposed action. There is -- almost  
24 always, we have a consistency when we deal separately with  
25 climate and with criterion pollutants and air quality.

1 And it's not clear to me that that's the case in this  
2 conversation. And as we -- as we address some possible  
3 items that are worthy of discussion as a carve-out for  
4 returned conversation with the Board, and I would -- I  
5 would respectfully ask that as we have this discussion, my  
6 interest would be in reaching agreement with the Executive  
7 Officer that we return for discussion, but not necessarily  
8 to amend the action.

9 I'd like us to acknowledge that we're sending a  
10 signal for future adoption. And if we do make adjustments  
11 toward the use of natural gas in fleets, that we send a  
12 clear signal that we're not recommending to fleet owners  
13 and operators that they make an investment that's going to  
14 carry into future years where that action -- where we're  
15 going to hear about 10 years from now, well, you said we  
16 should do this. I don't want our -- any possible mixed  
17 signal that -- I don't want a possible mixed signal to be  
18 sent as a result of options that we create.

19 I hope that's clear enough. Anyway. I'm getting  
20 a nod, so I'm okay. Those are my comments. Thank you.

21 EXECUTIVE OFFICER CLIFF: Thanks. Would you like  
22 us to address the study a little more?

23 BOARD MEMBER EISENHUT: Yes.

24 EXECUTIVE OFFICER CLIFF: Yeah. So -- and I  
25 appreciate that question. And one of the ways that it

1 sounded like you were framing this is that sometimes  
2 there's a conflating between climate and air quality in  
3 terms of what's considered clean. And here, I just wanted  
4 to note that under the Low Carbon Fuel Standard there is  
5 crediting that is provided and the benefits from a climate  
6 perspective are essentially accounted for in the Low  
7 Carbon Fuel Standard.

8           So that's, in part, our concern about trying to  
9 call natural gas combustion NZEV, because it's not truly  
10 getting any climate benefit, and because, you know, we're  
11 already accounting for that benefit somewhere else. It's  
12 getting those credits. So I thought that was an important  
13 distinction.

14           With regard to the air quality implications, I'm  
15 hoping that Paul can maybe address the -- a little more  
16 what that Riverside study looked at and a bit about the  
17 outcomes.

18           MSCD AIR RESOURCES SUPERVISOR ARNEJA: Sure. So  
19 this -- there are a number of UC Riverside studies. I  
20 think we're familiar with this one. But I think in  
21 general that this has been looking at both emissions of a  
22 number of trucks tested recently, both natural gas and  
23 diesel, built to the old pre-2024 standard. So, most of  
24 the 0.2 standard and a few at the -- at the time, optional  
25 low-NOx standard of 0.02. So these are older trucks. The

1 newer trucks are, as Steve mentioned, certified to a lot  
2 cleaner standard, more robust testing methods. And I  
3 think it shows that the emissions are more, but there's a  
4 lot of variation that some vehicles do end up going above  
5 the standard in certain use cases.

6 So, I think we recognize that there are --  
7 vehicles are going to be cleaner with the newer standards  
8 and cleaner technology is a part of that. So I think  
9 there's a place for the combustion and -- yeah. Thank  
10 you.

11 CHAIR RANDOLPH: Okay. Thank you.

12 Dr. Pacheco-Werner.

13 BOARD MEMBER PACHECO-WERNER: Thank you, Chair.  
14 Thank you to staff and thank you to everyone that's  
15 engaged in this process so far. I really see all of your  
16 comments, whether -- you know, the RNG comments, the  
17 near-ZEV comments as not the end of this conversation, but  
18 really the beginning, because I do think that there are  
19 more spaces where we can be discussing this, and certainly  
20 the ongoing partnerships around 1383, and, you know, how  
21 we can be more robust in those partnerships, and continue  
22 to have those conversations, along with other things that  
23 are happening at the State level around other things, like  
24 hydrogen.

25 So, I do see that this is -- this is just the

1 beginning of this conversation. I do really want to  
2 continue to discuss how we ensure that we continue to use  
3 that natural gas in a smart way. And I think that for now  
4 the amendments, as I see them, are appropriate for what  
5 we're trying to do today, and definitely committing to  
6 continuing the conversation.

7 Thank you.

8 CHAIR RANDOLPH: Thank you.

9 Board Member Guerra.

10 BOARD MEMBER GUERRA: Thank you, Chair. First, I  
11 will say that as part of the resolutions, I think the --  
12 that we should move forward on obviously repealing the ACF  
13 drayage, repealing the ACF high priority and federal fleet  
14 requirement, and then amending the LCFS regulations as  
15 proposed there.

16 However, when it comes to the ACF State and local  
17 government requirements, I feel that it's important that  
18 after our discussion depending if the majority of the  
19 Board sees fit, that those issues come back to the Board  
20 and not given authority for the Executive Officer to have  
21 the final say. I do think that it's important that we  
22 provide a lot of clarity. And for those of my colleagues  
23 who do not sit on a local governing authority, I will say  
24 that one of the most important things that municipalities  
25 need is clear clarity, especially, you know, when it comes



1 to -- I'm very proud of our Legal Division here, and  
2 particularly the enforcement arm. None of us want to be  
3 on the other side of the enforcement arm either as well,  
4 but we want to be in a point where we know where there  
5 is no -- where we can reduce that ambiguity.

6 So I feel that there were too many unanswered  
7 questions and differences between what I heard from our  
8 local government partners and staff at the local  
9 government level and what I hear from our State staff at  
10 that level.

11 But I do appreciate -- I do want to first  
12 acknowledge that I appreciate the response that I have  
13 heard through this entire process is that the CARB staff  
14 has done meaningful outreach and work to engage folks, and  
15 that it could be characterized as a positive engagement  
16 and step forward. Even the 11th hour amendments were  
17 recognized but also characterized as still unworkable and  
18 unclear.

19 And to that point, I want to bring up the point  
20 that many of our municipalities -- and I'll bring up SMUD  
21 for example. I mean SMUD is a -- has a reputation for  
22 being a leader on the environment when it comes to energy,  
23 when it comes to helping us in charging out -- charging  
24 infrastructure. They're also our primary sponsor also for  
25 the Museum of Science and Curiosity, so they also want to

1 get more engineers. There's a -- there's a piece of that  
2 too, but they're true believers, both the Board and the  
3 staff.

4           And when I meet -- met with them -- and this is  
5 to our CARB staff here that I want to say that they felt  
6 that what was proposed in the resolution was completely  
7 unworkable. I've never heard that from our SMUD staff  
8 before. I've -- they've told me that's a challenge. We  
9 might have to try something different, Councilmember, but  
10 I've never heard actually the terms like this is  
11 completely unworkable.

12           So, to me, that brings a lot of concern. So I  
13 think a couple things here on the ACF piece. One,  
14 increased flexibility on the mutual aid and emergency  
15 response exemptions I think must be clarified before we  
16 take action. And I don't want to sit here on the dais and  
17 go through and that -- and I've -- you know, whether we  
18 need a valve truck, or a CCTV truck, or traffic control  
19 truck, or go through those level of exemptions and discuss  
20 that. I think, you know, we don't want to make that level  
21 of sausage at the dais. But I do think that that issue  
22 needs to be resolved at a finer point with the staff  
23 folks.

24           And I even bring that to think there was a  
25 component -- a comment here made about do we -- we don't

1 want to pit also air quality with water quality. And I'll  
2 bring Sac Sewer for example, who has taken the bold move  
3 of saying we're going to start moving away from just  
4 biomethane capture to burn for electricity and we're going  
5 to hydrogen. And they are going to be producing hydrogen  
6 with their biomethane to avoid and try to transition away  
7 from that. And they're looking at their fleets and  
8 then -- and using their light-duty fleets to go electrify.

9 But even they have said that this -- that this  
10 language in the resolution as proposed is unworkable.  
11 Because of the complexity and that, you know, they have to  
12 make planning decisions based on clarity of what they have  
13 to purchase on their -- through their fleets and capital  
14 improvement plan.

15 So to that point, I think -- I think whatever we  
16 can do, Chair, to approve what we need to on those first  
17 three components of the resolution or if the less -- the  
18 resolution is drafted to come back and have final action  
19 on what the ACF requirements on for State and local  
20 governments. But I think this Board needs to be able to  
21 be at that level to where we feel comfortable that the  
22 folks who are maintaining the public health when the --  
23 when we can't deliver reliable power, those who need that  
24 power for help, it's a problem. In Sacramento, when we  
25 have major floods, we need to have those sewer trucks

1 ready to make sure that the sewage doesn't come out and is  
2 impacting the community. And so, accessibility to  
3 vehicles and making sure that that's important, I think is  
4 critical.

5 Now, let's move on, I think, to the question  
6 about updating the near-zero emission vehicle definition.  
7 Thank you, Dr. Cliff, for at least discussion --  
8 discussing what the conflict is that could be with where  
9 the definition lies. I do think that we should revisit  
10 that, whether it's through the ACT, or in this Rule by  
11 creating a new category, or a new NZV 2. -- near-zero  
12 emission vehicle 2.0 or another classification to be able  
13 to look at that, because one of the examples that SMUD  
14 pointed out is they have vehicles that have electric  
15 takeoff, but are also ICE engines.

16 And by the use of them, they reduce their  
17 emissions, because they're not using a diesel generator to  
18 man most of their -- the time that that vehicle is in  
19 usage, but it wouldn't qualify under this exemption. So  
20 I'm con -- again, those are areas where it's a near-zero  
21 emission vehicle that wouldn't qualify, at least under  
22 their current review, but it delivers significant air  
23 quality benefits.

24 The last piece I'll go to on the question of zero  
25 -- near -- NZEV and natural gas. You know, many

1 localities have moved -- began to move away from diesel  
2 trucks, and I think that's great. And, in fact, you know,  
3 the alternative has been natural gas vehicles for those  
4 particular purposes. And so, whether the staff is talking  
5 past each other or not with the advocates, I think I  
6 appreciate that comment. The reality is local governments  
7 have made this investment. And I do see natural gas --  
8 renewable natural gas as a transitional fuel to hydrogen  
9 and looking at hydrogen as a -- as a -- and solution.

10           So, what I would hate to do is create a scenario  
11 where the investments that local governments have made on  
12 RNG for the purposes of improving our air quality,  
13 particularly in Sacramento where we met recently, are  
14 ground level ozone requirements. And those become say  
15 quote/unquote stranded assets that have a 30-year, you  
16 know, lifespan, and -- but could be retrofitted in the  
17 future for something that's -- that could improve our air  
18 quality.

19           So I do see that there is a role for that and I  
20 think that we -- as we collect natural gas from our sewer  
21 districts and biomethane from those areas, that we'll look  
22 at how we -- how we take advantage of that in the best and  
23 maximum way. Roseville is a good example here that I  
24 think that they've been using a way to capture their  
25 biomethane and not burn immediately, and actually use it

1 in their fleets to be able to do something productive.

2 So I think that warrants more discussion on how  
3 we actually look at RNG. And I think it was four hearings  
4 ago, I asked the question where were we on Resolution  
5 23-13 on the issue of biomethane. And we haven't -- we  
6 haven't come back to that. And it's an important factor,  
7 because when we look at biomethane, it's an important tool  
8 for us to consider when we look at biomass utilization on  
9 other aspects.

10 So all of this is interconnected. So I would --  
11 I would -- I'd feel very uncomfortable if the Board today  
12 moved forward with the resolution as is without this level  
13 of clarity that local governments make. And I'll make the  
14 finer point, because most cities and counties that manage  
15 these -- the -- either the JPAs or our in-house services  
16 are going through a unique time of structural deficits. I  
17 mean, I hear things like Santa Monica looking at  
18 insolvency and other cities. And so there is no general  
19 fund dollars that are available to cover the cost of new  
20 regulation. So the only option will be a Prop 218 or Prop  
21 26 rate restructuring to cover the costs of this  
22 regulation, and that means increases to ratepayers. And  
23 most of the times when we look at increases to ratepayers,  
24 it is a regressive fee that affects those -- the most  
25 among us.

1           So I would -- I would -- I'll stop there, Madam  
2 Chair, and say that I do feel that we should move forward  
3 with the -- those three components of the drayage, the  
4 priority and federal fleet requirements, and the LCFS, but  
5 we need to either, you know, pump the brakes a little bit  
6 and come back with certainty and clarity for local  
7 governments on the ACF State requirements and regulations.

8           CHAIR RANDOLPH: Okay. So I have a process  
9 questions, which is, you know, we have the 40 --  
10 typically, you have the 45-day notice. You have  
11 discussion, and if there's amendments to that, then you  
12 have the option for the 15-day comment period. That  
13 assumes that the whole package goes together, right? Like  
14 you do the 45-day and you do the 15-day, and it all goes  
15 to OAL, and it moves forward.

16           I think what staff was trying to do was to give  
17 State and local fleets more flexibility and more clarity,  
18 and -- you know, and doing it all in this rulemaking. I  
19 don't believe it's an option to have sort of two separate  
20 things, but maybe I'll have our attorneys answer that  
21 question.

22           CHIEF COUNSEL DILLEY: Yeah. So what complicates  
23 things here is that there's two aspects. There's the  
24 stuff you were just talking about and then there's also  
25 the repeal portion, which is also one of our -- you know,

1 the requirements that we had agreed to in a settlement.  
2 And so, they would have to go together. We wouldn't be  
3 able to submit this to the Office of Administrative Law  
4 piecemeal, and so you would have to wait to that future  
5 Board meeting.

6 CHAIR RANDOLPH: So the two choices would be to  
7 move forward with the 45-day and the 15-day with some  
8 direction, recognizing that we can't resolve all the  
9 detailed issues, or, you know, a tweak to that might be  
10 move forward with the 45-day and the 15-day, get as far as  
11 we can in terms of discussions with local fleets about  
12 what would be helpful, and the goal is to have those  
13 provisions in place by January 1st, 2027.

14 At that point after that, there could be  
15 additional discussions. We might have more clarity on  
16 sort of where the landscape of all of our regulations are  
17 at that time. But, of course, that would mean that we  
18 would really only resolve the issues that we've identified  
19 as part of this conversation and it wouldn't be as broad  
20 as you are requesting.

21 EXECUTIVE OFFICER CLIFF: Chair Randolph.

22 CHAIR RANDOLPH: So, I think maybe -- oh, sorry.

23 EXECUTIVE OFFICER CLIFF: Sorry, Chair.

24 CHAIR RANDOLPH: Yes, Dr. Cliff.

25 EXECUTIVE OFFICER CLIFF: If I may, one of the --



1 and this is a little bit us burdened with all of this, you  
2 know, historical knowledge, but the Board did direct us to  
3 come back in 2028 with a Clean Truck Regulation. Clean --  
4 I think that's what it's called -- I don't know. Lot's of  
5 different acronyms, which was essentially phase two of the  
6 Advanced Clean Fleets Rule. So that is already in the  
7 works and we need to bring that back to be consistent with  
8 our State SIP strategy.

9           So that -- what I'm -- what I'm suggesting here  
10 is that if we were able to move forward with this  
11 regulation, which would include the repeal, clean up and  
12 give us many of those flexibilities as we can, it would  
13 actually give more benefit than if we were to wait,  
14 because if we wait, they're regulated without all these  
15 flexibilities that we're proposing to do, and -- and then  
16 in 2028, we could continue to look at the market and  
17 address additional issues prior to that 2030 100 percent  
18 requirement kicking in.

19           So there's still an opportunity. It isn't as  
20 much certainty in time of course, but it does allow us  
21 more time to continue to work with stakeholders, while  
22 finalizing those things that are already on our plate for  
23 the, you know, 15-day that are included in the proposed  
24 resolution.

25           CHAIR RANDOLPH: Can I ask one more historical

1 question. I don't have the ACF Resolution in front of me.  
2 Didn't we also do sort of a check-in conversation in '27,  
3 I want to say? Was it '28?

4 EXECUTIVE OFFICER CLIFF: I believe '28.

5 CHAIR RANDOLPH: It was '28. Okay. So this  
6 would be consistent, because we talked about what a new,  
7 you know, looking at existing fleets and things like that  
8 might be, but I think what I'm asking about is more of we  
9 also discussed like a basic check-in. Like, how is the  
10 market doing? Okay. Michelle is nodding, so I'm going  
11 to -- yeah. Okay. Good. Good. Good. Good.

12 So why don't we sort of put a pin in that. Let's  
13 hear from some other Board members, but I just want to  
14 make sure folks understand kind of we don't have unlimited  
15 flexibility in how we address these concerns that we're  
16 going to be talking about.

17 Okay. So I am going to go to Board Member  
18 Ortiz-Legg.

19 BOARD MEMBER ORTIZ-LEGG: Thank you, Madam Chair.

20 So, one of the things that -- first off, I just  
21 want to say thank you to everybody that came out today. I  
22 mean, I think that over -- time and time again, we've  
23 heard that people want to do the best they possibly can  
24 with what we have to work with. And particularly, this  
25 category, when you're talking public agencies, if we have,

1 as it was well stated, a certain amount of constraints on  
2 us, mostly money being one of them, but two, is what's  
3 available as far as product? And the fact is that every  
4 day, 24/7, we heard it, power and water has to be  
5 delivered. That's all there is to it.

6 And this is critical essential infrastructure.  
7 And I just want to recognize people's input and also  
8 staff. I really see that you really worked close with  
9 stakeholders to try to get a better understanding of their  
10 needs. I think that the one thing I'm not -- I don't  
11 understand exactly is that why we had to lump this  
12 together, but I know that's another answer, and more  
13 importantly is here we are right now.

14 And I just want to note that I had a chance to  
15 have a conversation with Assemblyman Garcia regarding 1594  
16 and the intention there. And the intention has always  
17 been and still exists that to provide public agencies the  
18 flexibility beyond what the private sector was given  
19 initially, but that public agencies in particular have  
20 this really critical mission that they have to do. And  
21 his concern was that when people are delivering services  
22 in 125 degree heat, that their lives are at stake, and  
23 that they could not have it. And we had so many examples  
24 come in in our emails regarding whether it's -- whether  
25 it's floods, whether it's the rains that came with the

1 floods, whether it's the cold weather, whether it's the  
2 hot weather. All -- time and time again, what's required  
3 is that vector trucks, dump trucks, service trucks, pickup  
4 trucks, tanker trucks, construction equipment that's  
5 necessary in order to help people survive is just too much  
6 part of this package that is not really clearly  
7 identified.

8           And I think that it's going to be really  
9 important for us to get -- it's going to be important for  
10 me particularly, again as an elected official, to make  
11 sure that we're looking for that public safety. So, I'm  
12 really, you know, hoping that we can come to some  
13 agreement, because the second option is not a proposal  
14 that I could support at this time. I think that it's  
15 really important for us to understand what we're talking  
16 about here.

17           And I believe that Commissioner Garcia really put  
18 it out very well. Member Garcia put it out very well in  
19 the -- in the statements here, but -- and I also -- as far  
20 as Councilmember Guerra talking about this is really  
21 important.

22           One of the things that I also think is critical  
23 is that when we talk about the definitions, we really  
24 can't wait till '28 to have a conversation more. We kind  
25 of got to work through this. And I think that it's going

1 to be really important for us to talk about the fact that  
2 this composition of the market is only seven percent. And  
3 so we're not talking about, you know, millions and  
4 millions of cars. We're talking about a finite amount of  
5 agencies that are faced with this conundrum of trying to  
6 do what's best, but most importantly deliver these  
7 essential services.

8           So when it comes back to the RNG conversation,  
9 you know, referring to the Riverside study, there's a  
10 couple of Riverside studies. And for those of us that are  
11 new, I think it's really important to have better  
12 clarification on that and try to understand where that  
13 would fit in, because I do think that there's a really --  
14 the real need to continue to reduce NOx, and emissions,  
15 and all of that, but yet doing it in a way that again we  
16 talked about bridge technologies. And -- you know, and I  
17 understand as far as staff's looking at the Governor's  
18 statements in June about we're going full speed ahead, but  
19 I also notice that he noted where feasible, where  
20 feasible. And with affordability being the issue of the  
21 day, that that's really where this comes back to us  
22 looking at how to be more creative and how working harder  
23 at trying to find solutions.

24           So, I think that the Cummins people are in the  
25 audience, and if they would be able to address some of the

1 NOx and difference of the studies, that would be  
2 interesting to me. I don't know if other Board members  
3 would like to hear that, but I think that there's some  
4 clarifications on that. You know, I don't -- there's not  
5 a hybrid NZEV at this point, so I don't know what would be  
6 cleaner. And so those are the kinds of things that are  
7 kind of going back and forth in my head in regards to how  
8 to really help these agencies, which I'm part of, and I  
9 have to make decisions and go home and face constituents  
10 about, about what it's going to take. And, you know, the  
11 dollars that we take and put into these things take away  
12 from the roads, take away from the infrastructure, take  
13 away from other things that are being required of us. And  
14 as was well said, mandates are not covered in general  
15 fund. And so this is -- this is very serious business for  
16 us. And so I'm going to stop there, but you kind of hear  
17 where I'm at.

18 Thank you.

19 CHAIR RANDOLPH: Thank you. Okay. Board member  
20 Rechtschaffen.

21 BOARD MEMBER RECHTSCHAFFEN: Steve, I just want  
22 to - maybe it's the lawyer in me - to asking you leading  
23 questions, but I just want to clarify a couple things  
24 that -- in your dialogue with the Chair.

25 So, I agree with you we should go forward now, so

1 that the exemptions can benefit local and State  
2 governments now rather than waiting. What I heard in our  
3 discussion is you're continuing to talk to agencies about  
4 the mutual aid exemption. You also said that you're  
5 talking to sanitation districts and others about the  
6 exemption being applicable to them, if they use RNG  
7 produced in their own facility in their fleet, even if  
8 they didn't have that in place when the rule was adopted.

9 Are there other flexibilities that you're working  
10 on that could be captured within the 15-day period before  
11 the amendments go into place. And then I have a related  
12 question, which is in the resolution, there's a resolved  
13 that says, directs you to utilize the exemption criteria  
14 to ensure that the regulation has no adverse effect on  
15 essential public services and to consult with local  
16 government agencies to resolve their concerns. Does  
17 that -- are you interpreting that to give you the  
18 authority to -- once the amendments are adopted, to  
19 continue working on tweaking the exemption process to make  
20 it more useful and helpful.

21 EXECUTIVE OFFICER CLIFF: Yes. Lots of  
22 questions. So, the last one absolutely want to continue  
23 to work with the State and local government fleets on the  
24 exemption process. Staff is -- you know, we're -- we  
25 don't -- we don't run fleets, so we need to work with

1 these entities to really understand the issues that  
2 they're facing. And I think that real collaborative  
3 approach helps us do so. So that would continued.

4 With regard to the various pieces of this, the  
5 big flexibility that wasn't in your list there is our  
6 proposal to delay the 100 percent until 2030. As law is  
7 today, this regulation -- so if we were to wait, this  
8 regulation would require -- it already requires 50 percent  
9 purchases today. It would require 100 percent ZEV  
10 purchases in 2027. So, we're proposing to delay that  
11 until 2030 for all of the fleets that are regulated by  
12 this. So that gives sufficient time to continue to work  
13 on it, do our updates, look at issues going forward, while  
14 still immediately providing that relief, which is the  
15 certainty that you won't have to be at a hundred percent  
16 purchases in 2027.

17 I also want to add that the kind of bigger  
18 picture piece here is the requirement is for purchases not  
19 for your fleet composition. The fleet composition  
20 requirement is a piece of that mutual aid exemption, and  
21 that's one that we're discussing separately. But in terms  
22 of the vehicles that you already have in your fleet, you  
23 can keep those in your fleet. They don't have to leave.  
24 So, for the situations where there isn't a vehicle  
25 available, that would be exempt. For situations where



1 there isn't availability of infrastructure to power the  
2 vehicles, then there's some flexibilities and extensions  
3 there.

4 And for situations where you need a vehicle  
5 that's in your fleet that just meets a very specific duty  
6 cycle that isn't very normal, but might be in an emergent  
7 situation, that vehicle can still be in your fleet. And,  
8 in fact, for any of the new vehicles that you can buy that  
9 would be exempt, you could also buy natural gas trucks.  
10 Those would not be excluded.

11 So, the application of this rule only is for  
12 those vehicles that are covered in your fleet 50 percent  
13 today and then a hundred percent as the current rule  
14 states it in 2027 would have to be zero emissions, and  
15 we're proposing to then push that out. A couple of other  
16 things that I think are also helpful the note. With  
17 regard to the question about affordability, this Board has  
18 also directed us in adopting the Low Carbon Fuel Standard  
19 to provide a clean fuel reward for medium- and heavy-duty  
20 vehicles only, excluding the light-duty with a little  
21 carve-out for zero-emission motorcycles.

22 So, that particular provision in the Low Carbon  
23 Fuel Standard, we're planning -- we're working through  
24 that now. That should be set up very soon. That's going  
25 to be available to these fleets as well. We also have the

1 HVIP Program and they would be eligible for incentives  
2 under HVIP as I understand it. There's also a lot of  
3 allowance value that's provided under the Cap-and-Invest  
4 Program. It's close to \$2 billion when you look at the  
5 2023 amounts that go to the utilities. So, there's a  
6 significant amount of value that the State is providing as  
7 part of its package of regulations, and frankly from this  
8 Board, that can also help with some of the zero-emission  
9 vehicle purchases.

10 BOARD MEMBER RECHTSCHAFFEN: Okay. Thank you.  
11 Just to step back, I'm -- I was glad to hear so many  
12 public agencies here today come and express support for  
13 our goals and our transition to ZEVs, also hear there --  
14 you know, their concerns and stress points. The point was  
15 made that we're only dealing with seven or eight percent  
16 of fleets, but that's a hundred thousand or so vehicles.  
17 That's a very big deal, because we are such a big player  
18 in the market. We have so many local and State government  
19 fleets. And I think it's very important in this current  
20 market that we move forward to advance our ZEV goals,  
21 which remain unchanged. We need to continue to provide a  
22 push strategy to help the ZEV market grow in the medium-  
23 and heavy-duty sector, because we don't -- precisely  
24 because the rest of the ACF is being repealed. And as  
25 other folks said, it is important for us to show

1 government leadership. We should lead by example. That's  
2 a very important element of our -- of our strategy.

3 I'm heartened by how much progress has been made  
4 talking to public utility agencies and other public  
5 entities over the course of this year. I spoke at the  
6 Northern California Power Association[SIC] in early  
7 January. And I became involved in some of the discussions  
8 with the agencies over concerns about this rule. And you  
9 heard today there's been a lot of progress, a lot of  
10 movement by staff, a lot of flexibilities. And there's  
11 a -- you heard a commitment from Steve that there's going  
12 to be continued attention to the real world,  
13 affordability, and market trends.

14 And so I think we have made a lot of progress.  
15 I'm not going to comment too much on the question of a  
16 definition of NZEVs, because it's not before us right now.  
17 I do want to say one or two things though. I can't help  
18 myself. I think it's important -- or maybe I'm thinking  
19 about it this way, that there's sort of two separate  
20 problems. One concern is just the ability of public  
21 agencies to meet the goals of ACF. And that's critical,  
22 and we can't ignore the vital needs that they play. But  
23 we can approach that through flexibility, through  
24 exemptions, through delays in the rules being implemented,  
25 and for adjustments, depending on where the market is and

1 what vehicles are available, and if there are vehicles  
2 that meet the duty cycles of these critically important  
3 fleets.

4           Separately, we have the question of how do we  
5 deal our short-lived climate pollutants and what are our  
6 strategies for capturing methane under 1383 and other  
7 programs. And it may be that there's some tweaking needed  
8 to some of our rules to help in that area, but it also may  
9 be that there are many -- there are other strategies that  
10 are better suited to promoting biomethane capture and  
11 utilization in the state. So I think it's important that  
12 we think of those separately.

13           And I really want to underscore what Board Member  
14 Eisenhut said, which is that we should not be sending  
15 signals for investment that will result in stranded assets  
16 in 10 or 20 years, because we need to continue on the road  
17 to electrification, and we don't want to hard --  
18 financially strapped entities spending money on  
19 infrastructure that won't be useful down the road. So I'm  
20 sure we'll have more discussion about these issues down  
21 the road, but I -- those are some preliminary thoughts.

22           Otherwise, I'm strongly supportive of the  
23 proposal.

24           CHAIR RANDOLPH: Okay. I think those are --  
25 those are some great points.

1 Dr. Balmes.

2 BOARD MEMBER BALMES: Thank you, Chair Randolph.  
3 And I would also like to thank all the folks that  
4 testified today, and the staff who's worked hard with  
5 those stakeholders. You know, this is a tremendous amount  
6 of work here. So I'm not, in any way, trying to denigrate  
7 that work.

8 I will agree with something that Dr. -- Dr. --  
9 that Mr. Eisenhut said early on, that overall I'm  
10 supportive of what we're trying to do here. And I  
11 actually only have two things that I want to bring up.  
12 The first one is easy, and it's maybe because my son's  
13 partner works at an animal control agency. I thought that  
14 was compelling little testimony, if we could add animal  
15 control agencies that aren't covered under the law  
16 enforcement provision. I just -- I throw that out  
17 there -- you know, throwing something out from the dais,  
18 you know, I may be missing something, but I would like  
19 staff to consider that.

20 And then, the Chair brought up the RNG pathway  
21 that we talked about. I forget which year it was. Mr.  
22 Kracov I think was the one who created that paragraph.  
23 And I still like the concept of the wastewater agencies  
24 being able to use their RNG that they generate for their  
25 own trucks. It just seems like a relatively efficient use

1 of that RNG.

2 And I liked Dr. Cliff's comment, if we go that  
3 route, that they'd really have to meet the low NOx -- the  
4 ultra low NOx standard. So those are the two things that  
5 I wanted to bring up. Overall, I'm supportive of what  
6 we're trying to do, and especially supportive of more  
7 conversation, which seems like everybody wants. But I  
8 understand how we can't separate the amendment. I don't  
9 know if that's --

10 CHAIR RANDOLPH: The 45-day and the 15-day.

11 BOARD MEMBER BALMES: Yeah.

12 CHAIR RANDOLPH: Yeah.

13 (Laughter).

14 BOARD MEMBER BALMES: Thank you.

15 CHAIR RANDOLPH: Yeah. And, you know, I mean --  
16 and I think to the Executive Officer's point, you know, I  
17 think if the stakeholders that had commented, you know,  
18 about the 15-day proceedings separately had known that  
19 that would have meant they would have been giving up the  
20 certainty of the 2030 and all the other things, you know,  
21 they might have -- you know, might not -- they might not  
22 agree that splitting it makes sense.

23 So, I just -- I kind -- I agree with Dr. Cliff's  
24 point that there's some really important things that would  
25 be done as part of the 15-day and there's an opportunity

1 to do more along the lines of what we discussed. So I do  
2 think that this would be a lot of movement. And I'm not  
3 sure its -- it would be a good idea to table the whole  
4 thing in -- you know, in a desire to get to full and  
5 complete certainty.

6 I'm going to push back a little bit on the animal  
7 control thing. I feel like I -- you know, law  
8 enforcement -- the law enforcement exemption is pretty  
9 broad. So, I don't know if there's something that, you  
10 know, staff could spend some time talking with those  
11 fleets and those folks and understanding exactly sort of  
12 what their needs are, but I feel like that's a  
13 conversation that would be useful to have in the 15-day  
14 thing. I don't want to necessarily throw out a complete  
15 exemption at this point.

16 Okay. So, I have Supervisor Hopkins and then Dr.  
17 Shaheen.

18 BOARD MEMBER HOPKINS: All right. I'm going to  
19 start out a bit in the weeds and understand if you don't  
20 have precise numbers on some of these questions. But I  
21 was really trying to dive into the cost on local  
22 governments, partly because as a result of HR 1 many of us  
23 are facing, in some cases, hundreds of millions of dollars  
24 of federal funding at risk. And so it's definitely a  
25 precarious time for local governments. And so, I was

1 looking at the Statement of Reasons on page 129, Figure 14  
2 and Table 24, and page 140, Table 31. And from there, I  
3 was able to glean kind of aggregate costs that was on page  
4 140, and then the cost per infrastructure cost per  
5 vehicle, and the cost per port or charger around 129.

6 And so what I was wondering is like do we  
7 actually have the total world of how many SLG vehicles by  
8 class currently operate in the state of California and how  
9 many charging stations and mobile fueling stations would  
10 be needed to attain the goals that we have and fulfill the  
11 regulation that we have before us today?

12 EXECUTIVE OFFICER CLIFF: We --

13 BOARD MEMBER HOPKINS: I heard you say a hundred  
14 thousand roughly that you mentioned -- that you -- no,  
15 that you mentioned as a -- as just the numb -- for the  
16 number of sort of the world. And I don't know if that's  
17 like --

18 BOARD MEMBER RECHTSCHAFFEN: That's what staff  
19 has told me.

20 BOARD MEMBER HOPKINS: -- the sort of --

21 BOARD MEMBER RECHTSCHAFFEN: They can confirm  
22 that.

23 EXECUTIVE OFFICER CLIFF: Board Member  
24 Rechtschaffen, do you have these numbers?

25 No.



1 (Laughter).

2 EXECUTIVE OFFICER CLIFF: So, yes, the total  
3 fleet is about 100,000. We certainly have information  
4 about what vehicles and what class. To the point about  
5 the fueling infrastructure, I don't think we're going to  
6 have complete information on that. We will have some and,  
7 you know, we won't necessarily have plans. Typically, if  
8 we're getting that information from the State and local  
9 government fleet, then we'll have some more information  
10 about it.

11 The publicly available chargers we do know about.  
12 That, you know was announced yesterday by the Governor at  
13 a little over 201,000 charging ports that are publicly  
14 available. That's for, you know, light-, medium-, and  
15 heavy-duty vehicles. But if they're held in private  
16 fleets, it's difficult to know -- not that it's private,  
17 but that it's behind a fence so to speak and not available  
18 to the public, we won't necessarily have eyes on that.

19 BOARD MEMBER HOPKINS: And then may -- my  
20 follow-up question, which actually exactly gets at the  
21 point of the 200,000, you know, chargers, is that  
22 distribution is not always equitable and it certainly  
23 tends to be concentrated honestly in wealthier  
24 municipalities with higher density populations.

25 And so I was kind of curious if there was any

1 analysis about possible outlier agencies who might sort of  
2 experience a disproportionate cost burden compared to  
3 others. And I do know that we sort of, you know, blocked  
4 out the smaller counties. But, for instance, we're a very  
5 rural county. We're not in that classification, because  
6 we do have, you know, some metro urban centers, even  
7 though we also have, you know, towns of 20 people in  
8 our -- in our mix.

9 EXECUTIVE OFFICER CLIFF: Yeah, that's right.  
10 When you look at the map, Sonoma County is not on -- is  
11 not listed, or -- you know, on the slides was not one of  
12 the red counties. There are many counties that do meet  
13 that classification. But I don't know, maybe staff can  
14 address this issue a little more, you know, in terms of  
15 how that analysis was done to determine which counties,  
16 you know, would be considered in that kind of rural or  
17 small county.

18 BOARD MEMBER HOPKINS: Also, just small -- you  
19 know, next time -- I did mention this to staff during the  
20 briefing. Maybe don't put them in red. You know, purple,  
21 green, orange, pretty much any other color maybe to shade  
22 the map at this point in time.

23 MSCD AIR RESOURCES SUPERVISOR ARNEJA: Yeah,  
24 we'll take the color comment back. As far as which  
25 counties were selected, we -- it was based on older

1 regulations the public agency utility rollback in 2004, I  
2 think. And that was based on essentially which  
3 populations had lower -- just low population, also trying  
4 to avoid just counties standing by themselves or counties  
5 surrounded by other counties, just make it contiguous. So  
6 we're really focused on the areas of the state with the  
7 lowest population, which is where that -- the boundaries  
8 for that were set.

9 BOARD MEMBER HOPKINS: And then the other  
10 question is the number of exemptions applied for and  
11 issued since the rule first went into effect in January of  
12 2024.

13 MSCD TRANSPORTATION AND CLEAN TECHNOLOGY BRANCH  
14 CHIEF BRASIL: This is Tony Brasil. I mean, I'd have to  
15 look up the number. When we do the meetings with  
16 industry, we typically publish those. I'd have to go back  
17 and look, but we've gotten on the order of exemption  
18 requests for roughly about a hundred vehicles. About a  
19 quarter of those were generally approved. Most -- or more  
20 than half, we found that the fleets were actually  
21 complying or ahead of the rule and didn't actually need  
22 the exemptions. Some was a paperwork issue. And I think  
23 to speak to some of the comments about simplifying the  
24 process.

25 As we've learned, some of the paperwork

1 discrepancies or issues that have -- we've encountered,  
2 we're looking to eliminate those with some of the  
3 amendments that we're looking to do to simplify the  
4 process as well.

5 BOARD MEMBER HOPKINS: Great. And then my last  
6 major question is it's sort of more of a situation, right?  
7 So, my experience is that in 2019 during the Kincade fire,  
8 we evacuated a couple hundred thousand people and it was  
9 probably, I don't know, half a million acres. It was like  
10 half of our county's land mass. It was huge. And I think  
11 that one of the challenges that we see in local  
12 governments is that we are not first responders, so we  
13 don't get that kind of, you know, classification, that  
14 emergency exemption for those types of vehicles, but we  
15 are the second responders. And actually, you can't  
16 repopulate mandatory evacuation zones until all of our  
17 second responders go in and do their work. And these are  
18 in very rural, far flung areas with no charging  
19 infrastructure, and also no power typically during a  
20 wildfire event.

21 And so, like all of the departments that we have  
22 just in Sonoma County that have to go in and sort of  
23 approve everything in order for folks to move back into  
24 their homes after a mandatory evacuation, yes, it's animal  
25 services, it's public infrastructure, regional parks, our

1 permitting and resource management department, public  
2 health and ag commissioner, and they typically use, you  
3 know, pickup trucks and vans for that work. And so, I saw  
4 that exclusion of pickup trucks and vans from two of the  
5 exemptions. And I'm just curious, like for that scenario  
6 what would be the exemption pathway for those second  
7 responder vehicles? How could we access an exemption  
8 pathway?

9 MSCD TRANSPORTATION AND CLEAN TECHNOLOGY BRANCH

10 CHIEF BRASIL: I mean, so the -- okay. So whether the  
11 vehicle is -- wouldn't be available, but wouldn't likely  
12 apply because vans and pickups are widely available in  
13 zero-emission, there is a -- the daily usage provision  
14 that if they're -- the way that they operate the vehicles  
15 goes beyond what can be done in a single charge, then they  
16 would get the exemption, even if they can find other  
17 solutions to continue -- sorry. And then I think in the  
18 one you're -- the list you're referring to is in the  
19 mutual aid provision, it's pretty widespread that the  
20 fleet can in essence use a provision for any vehicle they  
21 wanted to improve their resiliency ability and minimum  
22 guarantee a quarter of their trucks would be effectively  
23 exempt from going to the ZEV requirement, which matters  
24 more once you're getting closer to that hundred percent  
25 time frame. In that particular case, there was a -- it

1 would apply to everything except for pickups and vans.  
2 And I think semi-truck was the -- is the language that's  
3 in their currently, so that one wouldn't necessarily be  
4 available.

5 BOARD MEMBER HOPKINS: And that was the challenge  
6 that I was seeing was that the two exemption pathways that  
7 seemed feasible exempted the pickups and the vans, and  
8 so --

9 MSCD TRANSPORTATION AND CLEAN TECHNOLOGY BRANCH  
10 CHIEF BRASIL: Yeah. And just to make sure we are talking  
11 the same language, because a lot of people will confuse it  
12 is, if it doesn't have a pickup bed on the back, it's not  
13 a pickup, even though the front looks the same. So if  
14 it's a service body vehicle, and those other kinds of  
15 vehicles, those would not be excluded from that particular  
16 option, just the standard pickup beds kind of truck.

17 BOARD MEMBER HOPKINS: So what would our  
18 exemption pathway be to make sure that our employees can  
19 kind of reach those far-flung areas.

20 MSCD TRANSPORTATION AND CLEAN TECHNOLOGY BRANCH  
21 CHIEF BRASIL: Well, the daily usage sounds like it would  
22 probably be the most applicable one.

23 BOARD MEMBER HOPKINS: What -- so it -- but even  
24 if though the sort of standard daily usage --

25 MSCD TRANSPORTATION AND CLEAN TECHNOLOGY BRANCH

1 CHIEF BRASIL: The daily --

2 BOARD MEMBER HOPKINS: -- the average daily. So  
3 that's my question, I guess, around the daily usage is it  
4 like --

5 MSCD TRANSPORTATION AND CLEAN TECHNOLOGY BRANCH

6 CHIEF BRASIL: The daily use --

7 BOARD MEMBER HOPKINS: It would be extreme for an  
8 emergency event, right? But they might not actually drive  
9 it that much on a regular basis.

10 MSCD AR RESOURCES SUPERVISOR ARNEJA: The one  
11 thing we can --

12 MSCD TRANSPORTATION AND CLEAN TECHNOLOGY BRANCH

13 CHIEF BRASIL: Let me -- let me share. So that daily  
14 usage exemption allows a public agency to look back five  
15 years of history to find when they had the highest use.  
16 And so they can --

17 BOARD MEMBER HOPKINS: But our fire was in 2019.  
18 We had one in 2020 also, but it -- I don't know if --  
19 yeah.

20 MSCD TRANSPORTATION AND CLEAN TECHNOLOGY BRANCH

21 CHIEF BRASIL: And I think one of the improvements we're  
22 looking to make there is again a number of fleets, like,  
23 well, we don't have daily information, but we do have  
24 periodic, weekly, every few days kind of information. So  
25 we're looking to make the modifications to that section,

1 so that they can use the records that they already have  
2 from maintenance or fueling records.

3 BOARD MEMBER HOPKINS: Oh, our county actually  
4 tracks us and the speed at which we drive, so ask me how I  
5 know that.

6 (Laughter).

7 BOARD MEMBER HOPKINS: So I'm sure we have that  
8 data. You know, finally just from a big picture, I want  
9 to say that I really applaud staff and the work that you  
10 are doing, I think, to try to make these exemptions more  
11 accessible and address the concerns that we have heard  
12 from stakeholders. I also want to say thank you so much  
13 to the stakeholders for coming out and being really, I  
14 think, articulate, and thoughtful, and pointed, and data  
15 driven in all of the comments that I heard.

16 You know, I support moving forward with all of  
17 this. And I also have apprehension over it not coming  
18 back to the Board. And so I had a couple of process  
19 questions kind of following up on the Chair's, you know,  
20 questions and exchange with Dr. Cliff, which is, you know,  
21 I was wondering, because there's this language here in the  
22 resolution and it talks about, you know, the Executive  
23 Officer may present, you know, modifications to the Board.  
24 And I'm wondering if we could change that to like "shall"  
25 at a future meeting, so that there is an actual sort of



1 report out of what happened, and any -- if further  
2 direction is needed, it could be given at that point in  
3 time or alternatively might there be an opportunity to  
4 like have a few different Board members who are lia -- you  
5 know, liaisons for this process following it more closely.

6 And I'm guessing that some of us who are in the  
7 local government world might raise our hands to be part of  
8 the process, because I don't want to -- I don't want to  
9 break this thing. I think that there's so much good in  
10 this regulation. And yet, I also don't want it to kind of  
11 go into black box and then, you know, a couple months from  
12 now, I'm still getting phone calls from local governments  
13 who are panicking about how to keep their communities safe  
14 in the future or dealing with the ramifications of HR 1.

15 So just a couple of thoughts on process, if there  
16 is a way to increase that kind of Board oversight.

17 CHAIR RANDOLPH: I think the idea of coming back  
18 with a presentation after the 15-day changes, walk through  
19 what was finally resolved, and then have a timeline for  
20 next steps, right, because there's a few next steps that  
21 need to happen, right? One is the -- I was very  
22 sympathetic to the stakeholders who have been frustrated  
23 that the 1383 larger conversation has not moved forward.

24 So, some next steps on that and then next steps  
25 on this question of, you know, what is our post-2026 kind

1 of heavy-duty -- medium- and heavy-duty rulemaking going  
2 to look like, right? Because we're already thinking about  
3 the light-duty and what the next step is going to be. We  
4 had a thing in the resolution about a 2028 check-in.  
5 Maybe we bump that up a little bit to 2027. But, if  
6 there's a presentation to the Board after the larger  
7 issues are resolved, then Board can provide feedback at  
8 that time on what things that they think staff should  
9 pursue. Does that make sense?

10 BOARD MEMBER BALMES: Yes.

11 CHAIR RANDOLPH: Okay. I think that's a great  
12 idea.

13 Okay.

14 EXECUTIVE OFFICER CLIFF: Can I -- can I just  
15 clarify on that?

16 CHAIR RANDOLPH: Yeah.

17 EXECUTIVE OFFICER CLIFF: With regard to the  
18 direction to finalize this regulation as it's presented in  
19 the proposed resolution, that would not necessarily mean  
20 coming back for the Board to vote again on these  
21 amendments the way it's proposed and I just want to make  
22 sure I understand. Are you suggesting this is  
23 informational to get --

24 CHAIR RANDOLPH: Right.

25 EXECUTIVE OFFICER CLIFF: -- feedback or is it,

1 you know, another vote on these amendments, because --

2 CHAIR RANDOLPH: No, it would not be another  
3 vote, because I think we understand the procedural  
4 challenges. It would be a this is -- this is the work we  
5 did with the local governments. These are the changes  
6 that ended up landing, and -- but with an opportunity for  
7 the Board to provide direction on next steps, because we  
8 don't want a situation where the presentation is done and  
9 then there's no sort of space for, "And these are some  
10 things we want staff to consider." So I want to make sure  
11 that that is a piece of it. But my understanding, and  
12 Supervisor Hopkins can correct me if I'm wrong is like we  
13 understand that there would not be a vote on the 15-day  
14 changes. You got that?

15 Okay. Dr. Shaheen.

16 BOARD MEMBER SHAHEEN: All right. Okay.  
17 There -- yeah. I totally am on.

18 I know it's the end of a long day, and I have  
19 really enjoyed this conversation. And I echo my  
20 colleagues on the Board and Dr. -- not doctor, but Board  
21 Member Hopkins on just applauding everyone for how much  
22 everyone has leaned into this, because this is -- this is  
23 complicated, right? We're facing a lot of headwinds.  
24 We're really aware of that. The Board has been talking  
25 about this for a long time, cost, feasibility,

1 affordability, and that was before the election change in  
2 November. So, I really appreciate how hard everybody is  
3 working, and all of the stakeholder comments, the meetings  
4 that I had. And I heard wonderful things about the CARB  
5 staff and how CARB went into the field and really got a  
6 handle on what use cases were like, what the duty cycles  
7 were. And I think that just shows a lot of tenacity and a  
8 desire to really understand how to move this forward in a  
9 way that does balance fairness with our environmental  
10 goals, which we really do need to keep moving forward, but  
11 we also cannot burden people with infeasible purchases.

12 So, one of the things that I just wanted to bring  
13 us back to, Dr. Cliff, you mentioned this to me when you  
14 and I were chatting about this, and you also mentioned it,  
15 is just the creative use of RNG, right? Like, can we look  
16 at linear generators? And can we use that to create  
17 electricity that could be used in these trucks, right?

18 I think that's the kind of thinking science  
19 brings, right? And so, I just want to applaud that. And  
20 I also want to be recognizing that, you know, we had LCFS  
21 in November of 2024 and we were talking about the need to  
22 start phasing out of RNG for transportation, and thinking  
23 about displacing fossil gas in stationary sources, where  
24 that may also be part of the conversation that we have to  
25 face. It is 2025 and 2040 is only 15 years away. So I

1 like the idea of the innovation and the creativity. So  
2 those are some high level remarks.

3 Tony, you and I did talk about the 2028 check-in.  
4 That's why I was like, yes, I know there's a 2028  
5 check-in, because, as your automotive member, I'm  
6 constantly reading, watching, everything about the markets  
7 in China, in Europe here in the U.S. I've got a lot of  
8 concerns about the tariff costs, supply costs,  
9 infrastructure, all of that. And you might want to kill  
10 me, but I've just been thinking like could we set up some  
11 kind of a metric-based trigger where, instead of waiting  
12 till 2028, we had something where you could trigger -- you  
13 know, it just sets off a model that says so many variables  
14 are going in the wrong direction or a lot of variables are  
15 going in the right direction.

16 So, I have a couple more questions, but Tony, I  
17 don't know, would you entertain that question?

18 CHAIR RANDOLPH: Okay. I'm going to interrupt  
19 here and I'm going to say that sounds really complicated.

20 (Laughter).

21 CHAIR RANDOLPH: And I also -- you know, we're  
22 not wedded to 2028.

23 BOARD MEMBER SHAHEEN: We're not. Okay.

24 CHAIR RANDOLPH: Like, if we want to say, you  
25 know, can you just come back a little sooner, you know, we

1 can certainly do that. We could come back in 2027,  
2 because we know we're going to have another conversation  
3 about this with more specificity after the 15-day process.  
4 And so that might be a time to say, okay, based on that  
5 conversation, here's a good timeline to come back.

6 BOARD MEMBER SHAHEEN: Okay.

7 CHAIR RANDOLPH: So that's what I -- I think  
8 trying to set up a complicated trigger might be really  
9 hard.

10 BOARD MEMBER SHAHEEN: Okay. As long as we can  
11 hear --

12 CHAIR RANDOLPH: Sorry.

13 BOARD MEMBER SHAHEEN: It's okay. It's okay,  
14 Chair. I just -- I'm very sensitive to what's going on in  
15 the market and I just want to signal that I think -- I  
16 think we're in some really charty waters here. And so,  
17 keeping an eye on things and hearing back before 2028 I  
18 think would satisfy my desire. Okay. So I'm getting some  
19 nods here.

20 Okay. So I did recall a comment that was made by  
21 Noelle from the City of Roseville. I think she may still  
22 be there. And she was asking about the Interagency  
23 Workgroup. And I'm not sure I heard any additional  
24 comments on the feasibility of that, that she was thinking  
25 that would be a really helpful tool.

1 CHAIR RANDOLPH: Was it the 1383 interagency  
2 working group. Yeah, I think it --

3 BOARD MEMBER SHAHEEN: But in the context of this  
4 proposed regulation, correct?

5 EXECUTIVE OFFICER CLIFF: Yeah. So that's  
6 complicated.

7 BOARD MEMBER SHAHEEN: Okay.

8 EXECUTIVE OFFICER CLIFF: The Interagency  
9 Workgroup was intended as part of the broad ACF, which is  
10 now much smaller. And we've been --

11 BOARD MEMBER SHAHEEN: Okay.

12 EXECUTIVE OFFICER CLIFF: -- redirected to do a  
13 lot of additional work on the next set of rulemakings. So  
14 I think this folds into that next set of work and next set  
15 of standards really is kind of the better way to think  
16 about how --

17 BOARD MEMBER SHAHEEN: Okay.

18 EXECUTIVE OFFICER CLIFF: -- how this -- because,  
19 you know, given everything that's happened at the national  
20 level, I think we're focused on where we need to go and  
21 that will be part of those considerations.

22 BOARD MEMBER SHAHEEN: Okay.

23 EXECUTIVE OFFICER CLIFF: Yeah.

24 BOARD MEMBER SHAHEEN: Well, thank you, Dr.  
25 Cliff. This came up in a couple stakeholder meetings that

1 I had and so I just didn't hear any follow on to that.

2 Okay. Moving over to Dillon on hydrogen. With  
3 the changes that are being proposed here in the context of  
4 LCFS, again I'm kind of the data tracking person here  
5 really interested. Will we be tracking to see if these  
6 changes are resulting in, you know, more acceleration in  
7 hydrogen deployment for both medium- and heavy-duty  
8 vehicles? Is that part of the plan? What are your  
9 thoughts on that?

10 ISD STAFF AIR POLLUTION SPECIALIST MINER: Do  
11 quarterly reporting and checking on the status of the  
12 infrastructure crediting. It will be delayed, because  
13 they don't get credited until two quarters after they've  
14 applied, so it will -- there will be a time lag, but we  
15 will be able to circle back with more information about  
16 the impact that the changes had on the market.

17 BOARD MEMBER SHAHEEN: Okay. Wonderful.

18 And they just a final one, we also had a  
19 stakeholder -- I think it was our very first stakeholder,  
20 Dr. Miyasato was talking about potentially being penalized  
21 for being a first mover with the first element fuel. And  
22 I wanted to just check in on that. He had talked about  
23 the -- a request to remove the one percent, I think, cap.

24 ISD STAFF AIR POLLUTION SPECIALIST MINER: Yeah.  
25 We have the one percent cap, because there's only 2.5



1 percent available to the entire marketplace, and we want  
2 to ensure that there's competition --

3 BOARD MEMBER SHAHEEN: Okay. All right.

4 ISD STAFF AIR POLLUTION SPECIALIST MINER: -- and  
5 equal opportunity.

6 BOARD MEMBER SHAHEEN: Understood. Okay. That  
7 makes perfect sense. Okay. Thank you.

8 CHAIR RANDOLPH: Board Member Takvorian.

9 BOARD MEMBER TAKVORIAN: Yes. In the spirit of  
10 being brief.

11 (Laughter).

12 BOARD MEMBER TAKVORIAN: Because she can reach my  
13 mic button here. No. I just want to say I appreciate the  
14 discussion on the public fleets. And I really appreciate  
15 the unique needs of the agencies that serve the public in  
16 so many critical ways, and here is what I'm worried about.

17 I'm worried about the slippery slope. I'm  
18 worried that we're stranding assets, that we're sending  
19 mixed messages in certain ways, even though I know that  
20 there are many critical needs that really do qualify for  
21 these exemptions. However, I'm worried about  
22 municipalities having to develop multiple  
23 infrastructure -- infrastructures for charging and for  
24 fleets, because, in part, they're trying to move forward  
25 with zero-emission electric and in other cases they're

1 not, or can't, or it's not practical.

2           So I -- if we had more time, I'd ask questions  
3 about how we've actually looked at that, because I worry  
4 that when we start to exempt some of the municipal  
5 vehicles, we're also -- we're going to get others in that  
6 mix that perhaps don't belong, but now we've got  
7 infrastructure for RNG perhaps that we might use for  
8 things that we could have use -- we could have  
9 electrified.

10           So I just want to -- when we come back, which was  
11 a great idea, I think that I'd like to see us talk about  
12 that, to make sure that folks are staying in the lanes  
13 that are most appropriate and that serve our climate and  
14 air quality goals, as much as they can. And I want to  
15 hear more about what's possible. I mean, I understand  
16 that this has been about challenges today. And I really  
17 have to commend staff and stakeholders for being great  
18 problem solvers in this space, but we're not hearing about  
19 what's possible for a lot of these vehicles and how we can  
20 serve the public's needs without these -- without an  
21 exemption, not all the exemptions, but -- and I also think  
22 that municipalities can be foundational in the  
23 zero-emission transition.

24           So I want to lift them up in whatever ways we can  
25 continue to do and give them the support that they need to

1 make that happen. And we haven't talked about our repeal  
2 now of the ACF drayage and high priority fleets. And, in  
3 particular, with drayage -- well, first, I want to say I  
4 want to give a huge shout-out to the staff that worked for  
5 years to get ACF in front of us, and the stakeholders that  
6 advise the staff, and the Board that went through multiple  
7 hearings and workshops. And so, just a moment to say  
8 thank you so much for having done that and for having  
9 worked on an issue that matters to impacted communities.  
10 Diesel emissions from drayage trucks are huge in portside  
11 communities and in communities near the border, where I  
12 come from.

13           And so, we've lost a lot. And while we're not  
14 talking about that today, I looked back at the ISOR for  
15 ACF, we're talking 2,500 cardiovascular deaths that would  
16 have been avoided. And I'm not sure if the math - I'm  
17 looking at Dr. Balmes - goes straight across, but some  
18 percentage of that, a high percentage of those are not  
19 going to be avoided, because we're repealing this rule.  
20 And there's some \$26 million in costs that are not going  
21 to be avoided.

22           So, I know we're not talking about that today,  
23 but I can't not talk about what we're losing in the  
24 process of all of this. So, I just want to thank folks  
25 who got us to where we are. I know we'll get back and

1 we'll find new ways to accomplish these goals, but for  
2 today, I think we need to mourn that loss just a little  
3 bit, so thank you.

4 CHAIR RANDOLPH: I appreciate that.

5 Supervisor Ortiz-Legg.

6 BOARD MEMBER ORTIZ-LEGG: Yeah, I'll be quick. I  
7 really appreciate it. I would be remiss if I did not  
8 mention that on the veterinarian's association, it's Class  
9 2B and Class 3. That's the vehicle that they use. And  
10 our Doctor, Eric -- I can't think of this last name right  
11 now. He is the head veterinarian in SLO County and he's  
12 leading this charge. They cannot find vehicles in that  
13 category for the animals. And so those are -- those are  
14 required to be zero emission. And in order to capture  
15 animals all over, like our county, 3,000 square miles, you  
16 know, in other places we -- that you heard about, this is  
17 really a problem. So, you know, that's what they're  
18 asking for. That's why they thought it would be best to  
19 become some sort of public safety category, because  
20 they're not able to do it otherwise.

21 So I think -- people get really upset when it  
22 comes to animals and pets. So I want to make that  
23 clarification. And then, I appreciate everybody trying to  
24 work through this, you know. And I know I -- as a new  
25 member, I tend to get a little bit zealous in my concerns,

1 but being on the ground, it has to make sense in a  
2 practical way and that feasibility part. And then I  
3 want -- so I want to go back to 1383. For me to be able  
4 to support and I know that there's a lot of good things  
5 here, and I'm glad that we're talking about a quicker  
6 check-in, but there's some really important pieces on the  
7 circular economy. So where do we get back to 1383 and  
8 utilizing solid waste, et cetera, into a circular system?  
9 When does that happen again, sir?

10 EXECUTIVE OFFICER CLIFF: Well, as I mentioned, I  
11 think in addition to new regulatory work that we're going  
12 to be doing on medium- and heavy-duty vehicles for both  
13 combustion and zero emissions, that's the appropriate  
14 place for us to be considering the concerns that have been  
15 mentioned regarding cleaner combustion and how that can be  
16 better incorporated into these rules.

17 In addition, the Low Carbon Fuel Standard does  
18 provide some pretty significant benefits for renewable  
19 natural gas used in transportation. So there's already a  
20 lot of incentive under that program to use that fuel for  
21 transportation use. Now, it doesn't just have to be in  
22 trucks that are burning it, but it can also be in fuel  
23 cells, in linear generators, or to produce hydrogen. And  
24 long term, the goal is to move that towards hydrogen use.  
25 That's how the Low Carbon Fuel Standard was developed.

1 BOARD MEMBER ORTIZ-LEGG: Yeah.

2 CHIEF EXECUTIVE OFFICER CLIFF: So we do have  
3 kind of that overall sort of strategy that we've been  
4 developing. Bigger picture, when we are taking the  
5 Scoping Plan back to the Board, that, you know, every  
6 five-year look can also address these kind of are we doing  
7 that right? Do we need to think about other issues as  
8 part of that? And, you know, how do we kind of deal with  
9 the broader issue of fugitive methane?

10 We also just this week made a proposal to amend  
11 the Landfill Methane Regulation, which the Board had  
12 directed us to do last year. And so we -- we're now  
13 moving forward on that Landfill Methane Regulation. The  
14 Board will hear that in November. That is a strategy  
15 under -- it's a preexisting regulation that we're  
16 amending. So that's a strategy to also reduce fugitive  
17 emissions of methane.

18 So, there's diversion of organics from landfills.  
19 There's making sure that landfills are doing a better job  
20 at capturing those emissions. There's approaches for  
21 productive use of biomethane in all of these various  
22 applications, and there's provisions for ultimately  
23 transitioning that to a clean fuel like hydrogen.

24 CHAIR RANDOLPH: Can I add one more thing?

25 EXECUTIVE OFFICER CLIFF: Yes, please.

1 CHAIR RANDOLPH: The provisions we were talking  
2 about, which I have on my list of things to summarize,  
3 allowing captive fleets longer period of time, that was in  
4 direct response to this question of 1383. So to the  
5 extent that we extend that timeline as part of these  
6 15-day changes, that will also be a key piece to keep  
7 consistency with 1383.

8 BOARD MEMBER ORTIZ-LEGG: Thank you.

9 Any comment on the Class 2 and -- Class 2B and 3  
10 category for the vets in regards to some sort of help for  
11 the pets in the hot truck in the back?

12 MSCD CHIEF BUFFINGTON: Sure. This is Michelle  
13 Buffington --

14 BOARD MEMBER ORTIZ-LEGG: Thank you.

15 MSCD CHIEF BUFFINGTON: -- Division Chief of the  
16 Mobile Source Control Division. We have been having  
17 conversations with the animal rescue folks and we do  
18 have -- we think there are opportunities within the  
19 exemption process already, but we will continue to talk  
20 with them to make sure. I think particularly you had  
21 heard that there is an exemption related to zero -- like  
22 if the zero emission is not available in the configuration  
23 they need in these animal control vehicles, whether they  
24 are through an emergency respon -- like through the police  
25 department or others, they still have a very specific body

1 type that they use, right, to take care of the animals.  
2 So, we think that that's the path for them, but we will  
3 continue to talk with them.

4 BOARD MEMBER ORTIZ-LEGG: Appreciate that.

5 Thank you, Madam Chair.

6 CHAIR RANDOLPH: Thank you.

7 Okay. I am going to summarize the discussion and  
8 then I'm going to ask for a motion.

9 BOARD MEMBER GUERRA: Madam Chair.

10 CHAIR RANDOLPH: Oh, sorry.

11 BOARD MEMBER GUERRA: You still have a couple  
12 Board members.

13 CHAIR RANDOLPH: Sorry. I didn't hear what you  
14 said.

15 BOARD MEMBER GUERRA: Oh, yeah, I said there was  
16 still a couple Board members, so that left to comment.

17 CHAIR RANDOLPH: Who is left?

18 Oh, okay. Go ahead. Sorry.

19 BOARD MEMBER GUERRA: Well, thank you, Madam  
20 Chair. So one, thank you for clarifying at least where we  
21 can and cannot bifurcate the resolution. And it is my  
22 understanding, we cannot bifurcate the resolution. And I  
23 don't want to be in a position to vote no, because I --  
24 what's the term, throwing out the baby with the bath  
25 water. That's a terrible analogy by the way, you know. I



1 don't know whoever came up with that has a sick mind. But  
2 my point is here -- but I think back to Supervisor Hopkins  
3 concern about hesitancy of just leaving this to staff.

4 And, you know, I noticed that SMUD in the record  
5 sent some very detailed suggestions on changes to the  
6 language, so maybe if the Executive Officer could discuss  
7 the process that they would take to get to these  
8 resolutions, because I -- I'm still not that confident in  
9 that, yes, you know, we will meet with folks, right? And  
10 I'm not saying you capitulate to everyone -- every -- I  
11 don't know. I can't remember how many special districts  
12 there are in the state.

13 But to my concern, what is going to -- what  
14 process is going to take to address some of these  
15 overlying concerns so that we don't hear the term, "Oh,  
16 this is completely unworkable?"

17 EXECUTIVE OFFICER CLIFF: Yeah. The typically  
18 process and what we propose to continue to use here would  
19 be to draft language for exemptions and -- or, sorry, for  
20 changes and then share that out with the relevant  
21 stakeholders. So that's what we have been doing with some  
22 of the stakeholders. We would continue to do that.

23 As you say, this -- you know, the stakeholders  
24 have lots of ideas about changes that they think they  
25 need. And we tend to work through that, be data driven,

1 do what we can that we think is appropriate given the  
2 information that we're provided, and then, you know, make  
3 those amendments. That would then go out for what's  
4 called a 15-day change. So we would officially put it out  
5 with a new notice and they would be able to comment on  
6 those 15-day changes.

7           So our goal, of course, there is to ensure that  
8 stakeholders and the regulated community can comply with  
9 the regulation, that we have appropriate safeguards in  
10 there to ensure that while we're pushing forward toward  
11 zero-emissions, that there's an opportunity for them to --  
12 you know, in the regulation, they can see the place where  
13 they can address their concerns and ultimately finalize  
14 the reg.

15           So the process involves some back and forth and  
16 then an official part of the process, which is that 15  
17 day.

18           BOARD MEMBER GUERRA: And in the 15-day when you  
19 issue the 15-day reg, are you saying that you -- you're  
20 making an assumption that the issuance of that  
21 publication, you feel confident to move forward or where  
22 in that process do you -- do you as the final executor  
23 say, we need to go back out there and figure out how to do  
24 this? And again, I -- in no sense do I want to wait till  
25 2028 and be put -- put local agencies in a scenario where

1 they have to make capital improvement decisions by 2030  
2 deadline, when the ratepayer process takes at least a year  
3 and a half to do the Prop 218 analysis, if they're going  
4 to spend more money, because the fact of the matter is if  
5 they're -- if we're going to make these decisions, they're  
6 going to be expensive.

7 So, where do you -- in that 15-day process, how  
8 do you -- how are you going to make that assessment that,  
9 you know, we need to sit back down with the local  
10 governments again.

11 EXECUTIVE OFFICER CLIFF: Yeah. So the Executive  
12 Officer would need to make that determination based on  
13 Board direction, looking at those amendments, obviously in  
14 consultation with the Chair, and potentially in  
15 consultation with other Board members to understand if  
16 that's getting at the issue. So, I don't have a kind of  
17 bright line for exactly what that determination is, but it  
18 is done to be consistent with, you know, what Board  
19 direction is as part of this discussion, and the back and  
20 forth with stakeholders.

21 I should note that there's no limit on the number  
22 of 15-day changes that can be issued. There is a limit on  
23 the overall time frame for a regulation to be finalized.

24 BOARD MEMBER GUERRA: Um-hmm.

25 EXECUTIVE OFFICER CLIFF: So obviously, we're

1 trying to finalize the regulation and the repeal piece of  
2 that expeditiously. And we aim to issue one set of 15-day  
3 amendments. But if we get things wrong in those  
4 amendments, we can also, you know, work with stakeholders  
5 to refine, if necessary. And it's not atypical to have a  
6 regulation with more than one 15 -- one set of 15-day  
7 amendments. Obviously not the goal, but it isn't -- it  
8 isn't like it's a one and done.

9 BOARD MEMBER GUERRA: Thank you, Dr. Cliff.  
10 Well, Madam Chair with that comment, I think that -- I  
11 think Supervisor Hopkins recommendation of a subcommittee  
12 to work with the Executive Officer, obviously appointed by  
13 the Chair, I think would be a prudent thing, because I do  
14 think that that is an area of where -- I see there's a gap  
15 of meeting where the State staff is and where our local  
16 government staff in how they're getting to a point of  
17 comfort.

18 I didn't hear today a single local agency say we  
19 don't want to move forward in this direction. I think  
20 they said, you know -- you know, we want to figure out do  
21 we execute that? And, yes, local governments should  
22 provide leadership and I'm very proud of our -- at least  
23 in the Sacramento Basin, you know, how bold and  
24 forward-moving we are, but we also can't be reckless. So  
25 that's -- I think, that meeting at those points will help

1 us avoid that scenario. Thank you, Chair.

2 CHAIR RANDOLPH: Thank you.

3 Supervisor Hopkins.

4 BOARD MEMBER HOPKINS: Thank you so much. I just  
5 neglected in my early comments to add my moral support to  
6 a few of the comments around RNG. In particular, I really  
7 appreciated Mr. Eisenhut sort of sharing the mixed  
8 messages. And I felt like what I was hearing from Dr.  
9 Cliff, you know, that are we kind of dealing with it in  
10 different regulatory frameworks and maybe incentivizing it  
11 through LCFS, but then not giving it credit here. I do  
12 think there's a lot of lack of clarity that we should dive  
13 into at some point.

14 And then also, I wanted to agree with Dr. Balmes  
15 regarding the wastewater treatment. And just as a mom and  
16 a farmer say that poop is definitely a renewable resource  
17 and one that it feels like we should maximize in, you  
18 know, closed loop systems.

19 And then I just also wanted to mention that I  
20 actually am digging up the old ACF Resolution from April  
21 2023. It actually did direct staff to return to the Board  
22 by the end of 2025 to discuss bi -- alternative uses of  
23 biomethane, including identifying any appropriate  
24 regulatory actions.

25 So I hope that we can schedule that sooner than

1 2028, you know, and that we can sort of dive into how are  
2 we tackling this in different areas and what ultimately is  
3 our position? Thank you.

4 CHAIR RANDOLPH: Yeah. I think that's a great  
5 point. And, you know, in LCFS, we did set a glide path  
6 for RNG in transportation. And, you know, we set  
7 basically a phaseout date. So folks need to sort of have  
8 that phaseout date in mind, as they're thinking about  
9 their infrastructure needs and how they -- and I -- you  
10 know, we've had a lot of conversations with stakeholders  
11 who are going down that road, who are -- not stakeholders,  
12 you know, people who are actually producing the fuel.  
13 They are going down the road of exploring hydrogen options  
14 and other uses of the fuel.

15 And I do think this -- once again, you know, the  
16 1383 issue is very complex. CalRecycle has a big piece of  
17 it. Other agencies, it's relevant to their work. And so  
18 I do think we need to figure out, as we approach the next  
19 iteration of the Scoping Plan, like how are we going to  
20 pull this together and set a more clear path?

21 Okay.

22 CHIEF COUNSEL DILLEY: Chair Randolph?

23 CHAIR RANDOLPH: Yes.

24 CHIEF COUNSEL DILLEY: Shannon Dilley here. I  
25 just wanted to flag on the subcommittee issue, that if you

1 have at least three members, then it becomes Bagley-Keene  
2 body.

3 CHAIR RANDOLPH: Yeah. I was going to leave that  
4 to my successor.

5 (Laughter)

6 CHAIR RANDOLPH: I really -- you know, my  
7 recommendation to her is going to be you need to listen to  
8 this tape and then you need to sort of figure out sort of  
9 how to make sure and engage the Board members that are  
10 really -- really want to dig in on this issue, because I  
11 think it is really important. And so -- but I also don't  
12 want to prescribe that process, because, you know, if I  
13 were her, I would want to be part of those discussions.  
14 So it needs to be something that's going to be workable  
15 for my new Chair --

16 BOARD MEMBER ORTIZ-LEGG: Can I ask a point of  
17 clarification?

18 CHAIR RANDOLPH: -- for my new Chair.

19 BOARD MEMBER ORTIZ-LEGG: Just a point of  
20 clarification. But two is not, correct? Two or --

21 CHIEF COUNSEL DILLEY: Three is the number.

22 BOARD MEMBER ORTIZ-LEGG: Yeah, so you could just  
23 have two as a subcommittee and it would be okay and not  
24 hit Bagley.

25 CHIEF COUNSEL DILLEY: Yes. Just no inviting a

1 third.

2 BOARD MEMBER ORTIZ-LEGG: That's good.

3 CHAIR RANDOLPH: Okay. Here is where we are.

4 The -- I think the discussion is that we would approve the  
5 resolution as is. Direct staff to continue to engage with  
6 stakeholders on issues around mutual aid, issues around  
7 animal control vehicles -- perhaps not a full exemption,  
8 but something that provides -- ensures that they're able  
9 to continue doing their Essential work -- a discussion  
10 around captured fleets and whether or not that timeline  
11 should be modified -- the timeline that was originally  
12 adopted as part of ACF for those captive fleets, that if  
13 that timeline is adjusted, that it would -- there would  
14 need to be a discussion around the cleanest available  
15 engines.

16 And I think those are the substantive issues. Is  
17 there anything I forgot? You can't bring up something we  
18 haven't talked about.

19 BOARD MEMBER EISENHUT: The reliability of --

20 CHAIR RANDOLPH: Yeah, mic.

21 BOARD MEMBER EISENHUT: Oh, excuse me. The  
22 reliability of electrical charging, in -- particularly in  
23 mountain and foothill areas I would submit is probably  
24 less reliable, because of weather and needs to be  
25 considered.



1 CHAIR RANDOLPH: But I think isn't that sort of  
2 subsumed already in the infrastructure exemption?

3 BOARD MEMBER EISENHUT: I didn't hear it.

4 CHAIR RANDOLPH: Yeah. Well, yeah, because  
5 that's what we talked about when we first adopted ACF.  
6 But I think that's a good point, and, you know, we can  
7 just clarify that that is sort of one of the things that  
8 goes into the consideration around infrastructure  
9 exemption. I see staff nodding. So, okay.

10 BOARD MEMBER ORTIZ-LEGG: Sanitation.

11 CHAIR RANDOLPH: Did I get everything?

12 BOARD MEMBER ORTIZ-LEGG: Sanitation. Did you  
13 get the sanitation? Was that part of the circular economy  
14 sanitation? Didn't we have some -- I mean, we had quite a  
15 few comments on -- for sanitation districts having --

16 CHAIR RANDOLPH: That's subsumed in the captive  
17 fleets issue.

18 BOARD MEMBER ORTIZ-LEGG: Okay. All right.  
19 Thank you.

20 BOARD MEMBER SHAHEEN: And, Liane, did we catch,  
21 in your summary remarks, the sooner check-in, before --

22 CHAIR RANDOLPH: Oh, yes.

23 BOARD MEMBER SHAHEEN: Please.

24 CHAIR RANDOLPH: So you teed up the most  
25 important thing, which is after the 15-day changes are

1 completed and adopted, staff will bring back a  
2 presentation to the Board. That presentation will include  
3 a recommended timeline for a more complete check-in on the  
4 rule and will solicit direction from the Board about next  
5 steps.

6 Okay. Do I have a motion?

7 BOARD MEMBER RECHTSCHAFFEN: So moved.

8 BOARD MEMBER EISENHUT: Second.

9 CHAIR RANDOLPH: Okay. The Board has before them  
10 Resolution 25-9 with the additional comments that the  
11 Board just discussed. Do I have -- I'm sorry. I have a  
12 motion and a second. Board Clerk, will you please call  
13 the roll.

14 BOARD CLERK FRENCH: Dr. Balmes?

15 BOARD MEMBER BALMES. Yes.

16 BOARD CLERK FRENCH: Mr. De La Torre?

17 Mr. Eisenhut?

18 BOARD MEMBER EISENHUT: Yes

19 BOARD CLERK FRENCH: Senator Florez?

20 BOARD MEMBER FLOREZ: Florez yes.

21 BOARD CLERK FRENCH: Councilman Guerra?

22 BOARD MEMBER GUERRA: Aye.

23 BOARD CLERK FRENCH: Supervisor Hopkins?

24 BOARD MEMBER HOPKINS: Yes.

25 BOARD CLERK FRENCH: Mayor Lock Dawson?

1 Supervisor Ortiz-Legg?

2 BOARD MEMBER ORTIZ-LEGG: Yes.

3 BOARD CLERK FRENCH: Dr. Pacheco-Werner?

4 Dr. Pacheco-Werner?

5 BOARD MEMBER PACHECO-WERNER: Yes.

6 BOARD CLERK FRENCH: Thank you.

7 Mr. Rechtschaffen?

8 BOARD MEMBER RECHTSCHAFFEN: Yes.

9 BOARD CLERK FRENCH: Dr. Shaheen?

10 BOARD MEMBER SHAHEEN: Aye.

11 BOARD CLERK FRENCH: Ms. Takvorian?

12 BOARD MEMBER TAKVORIAN: Yes.

13 BOARD CLERK FRENCH: Chair Randolph?

14 CHAIR RANDOLPH: Yes.

15 BOARD CLERK FRENCH: Madam Chair, the motion  
16 passes.

17 CHAIR RANDOLPH: Okay. Now, it's time for open  
18 public comment. If there are any --

19 EXECUTIVE OFFICER CLIFF: Chair, actually, I  
20 think you're not reading your script there.

21 CHAIR RANDOLPH: Oh, oops. I'm not reading it.  
22 Good.

23 EXECUTIVE OFFICER CLIFF: You're turning it over  
24 to me.

25 CHAIR RANDOLPH: I'm sorry, what?

1 EXECUTIVE OFFICER CLIFF: You're turning it over  
2 to me.

3 CHAIR RANDOLPH: Oh, I'm turing it over to the  
4 Executive Officer --

5 EXECUTIVE OFFICER CLIFF: Yes, you are.

6 CHAIR RANDOLPH: -- because I didn't read my  
7 agenda order.

8 (Laughter)

9 EXECUTIVE OFFICER CLIFF: Thank you, and thank  
10 you very much, Chair Randolph. As a head's up, I think  
11 you're going to hear that quite a bit today. But before  
12 we hear open public moment, I wanted to take a moment to  
13 recognize your profound impact and celebrate your  
14 illustrious career. So for those of you who may not know,  
15 I'm sure you all do, next Tuesday will be Chair Randolph's  
16 last day at CARB before she retires from State service.

17 In her five years as our Chair, Liane has shown  
18 us exemplary leadership and has overseen the  
19 implementation of some of CARB's most ambitious and  
20 impactful climate and air quality policies. To name just  
21 a few of her groundbreaking contributions, Liane led the  
22 charge on CARB's 2022 Scoping Plan that laid out the path  
23 to carbon neutrality by 2045. She oversaw a plan to  
24 expand the Community Air Protection Program to more than  
25 60 communities in need. She was instrumental in CARB's

1 investment of nearly \$10 billion into projects funded by  
2 revenue from the Cap-andTrade, now Cap-and-Invest  
3 auctions. She worked closely and tirelessly with the  
4 Legislature on the extension of the Cap-and-Invest Program  
5 to 2045. She pioneered the launching of a  
6 first-in-the-nation satellite project to reduce methane  
7 leaks. And her sharp wit and keen legal eye will be  
8 missed.

9           Liane, your indelible mark at CARB has shaped  
10 environmental policies for generations to come. And even  
11 before, she was Chair here at CARB, she was a trailblazer  
12 in public service and environmental protection. She has  
13 more than 20 years of State leadership roles under her  
14 belt from her time as a Commissioner at the Public  
15 Utilities Commission for about six years to her work as  
16 the Deputy Secretary and General Counsel at the Natural  
17 Resources Agency, and even to her very first State role as  
18 the Chair of the Fair Political Practices Commission, a --  
19 something we're all very familiar with here.

20           Liane's impact really can't be overstated. At  
21 the PUC, she oversaw countless decisions on energy  
22 efficiency and resource planning, and led significant  
23 reforms to the agency as a whole. And at the Natural  
24 Resources Agency, she worked on myriad legal and policy  
25 issues, including implementing the Agency's first Tribal

1 Consultation Policy. Her contributions in previous State  
2 roles helped shape CARB to what it is today, even before  
3 she was appointed as our Chair.

4 And, Liane, on a personal note, I just want to  
5 thank you for your leadership, your friendship, and being  
6 a mentor to me and to the staff. You have really been a  
7 great friend and, you know, an important colleague. We --  
8 I don't know. We talk every single day at 5:30 p.m., and  
9 sometimes many more times during the day. So, I really  
10 appreciate and will miss -- will miss that. I know we'll  
11 still get a chance to check in every now and then.

12 I also just want to note that we have a few  
13 tokens of our appreciation here. And I believe Brian  
14 Goldman is in the audience, is that still -- yes.  
15 Starting the clock.

16 BRIAN GOLDMAN: Thank you, Dr. Cliff. Chair  
17 Randolph, I have a letter from the Governor.

18 "Dear, Liane. On behalf of the State of  
19 California, please accept my warmest congratulations on  
20 your upcoming retirement from State service after 20 years  
21 of working to better the lives of Californians.

22 "You agreed to take the helm at the Air Resources  
23 Board in January 2021 at a challenging time as California  
24 was entering a critical period of rebuilding, emerging  
25 from the COVID pandemic, still reeling from the federal

1 government's assaults on our clean car standards and our  
2 carbon markets, and recovering from months of wildfires  
3 driven by climate change that choked our skies with smoke.

4 "What you've accomplished in the five years since  
5 is nothing short of remarkable, expanding critical clean  
6 air protections to communities in need, launching a  
7 first-in-the-nation satellite project to detect and reduce  
8 methane leaks, and recovering our authority to set clean  
9 car rules, and adopting cutting edge new standards for  
10 zero-emission technologies for vehicles and beyond.

11 "Most recently, you successfully worked with the  
12 California Legislature to extend our Cap-and-Invest  
13 Program, so that we can continue to fight climate change  
14 by driving down carbon emissions for another 20 years.  
15 You have led the Board in all this with wisdom and with  
16 grace, and with the gift for truly listening to others,  
17 community members, nonprofit leaders, industry  
18 representatives, fellow government officials, allowing you  
19 to forge compromise and deliver results through  
20 creativity, intelligence, compassion, and above all  
21 respect. Our future is brighter and our children's future  
22 will be healthier because of your leadership at CARB.

23 "Thank you. I wish you all the best as you  
24 embark on our next chapter. Sincerely, Gavin Newsom."

25 (Applause).

1 EXECUTIVE OFFICER CLIFF: Thank you, Brian.

2 CHAIR RANDOLPH: Thank you, Brain.

3 CHAIR RANDOLPH: It's amazing.

4 It's not your turn yet

5 (Laughter).

6 EXECUTIVE OFFICER CLIFF: Well, you know.

7 Finally, I'm excited to present to you a gift

8 from everyone in the Chair's office and the Executive

9 Office. Something -- this actually stems from a

10 conversation you and I had some months back, where I don't

11 remember exactly what we were doing, but you made a

12 comment, "Don't poke the bear." And my response was, "We

13 are the bear." So, this has turned into kind of a bigger

14 thing within the executive team and the Chair's office.

15 And a few weeks ago, we had our softball tournament. And,

16 the Chair's office and executive office team name is The

17 Bear, so -- oh, yes, MSCD won that tournament.

18 There you go.

19 (Laughter).

20 CHAIR RANDOLPH: Yeah, just want to make sure the

21 record is clear, MSCD won.

22 (Laughter).

23 EXECUTIVE OFFICER CLIFF: That's right. So we

24 have for you this jersey that you will -- even though

25 you're leaving, of course. You're always going to be a



1 member of the team. So, here is the bear.

2 CHAIR RANDOLPH: Oh, "Don't poke the bear."

3 (Laughter).

4 EXECUTIVE OFFICER CLIFF: So I will -- I will --

5 CHAIR RANDOLPH: Thank you.

6 EXECUTIVE OFFICER CLIFF: -- hand that off to you  
7 here momentarily.

8 CHAIR RANDOLPH: Thank you.

9 EXECUTIVE OFFICER CLIFF: And again, just thank  
10 you very much. And we want to give an opportunity to the  
11 Board members, if any would like, to recognize you. And  
12 so, would Board Member Takvorian please help me with that  
13 task.

14 BOARD MEMBER TAKVORIAN: You thought it was your  
15 turn. You thought you were just about done with the last  
16 public comment, right?

17 Not yet. So I'll take the prerogative that I  
18 have being -- that I have the mic, and then I'll call on  
19 Dr. Shaheen next, I believe, and then we'll just go down  
20 each side. So, get ready, but I just want to say that I  
21 am so enormously grateful to you for having taken this  
22 challenge in 2021, when we were suffering in many ways,  
23 not only from COVID, but also from the leftovers from  
24 Trump 1, and for your leadership, your collaboration, and  
25 most much of all, I think your integrity. And I really

1 appreciate the way that you've led, the way that you've  
2 advanced environmental justice. Making EJAC a permanent  
3 community was, I think, very, very important historically  
4 and practically. And I've appreciated working with you,  
5 so thank you so much. Appreciate it.

6 So, Dr. Shaheen.

7 BOARD MEMBER SHAHEEN: Okay. I have something  
8 for you. We've been working behind the scenes. Evan is  
9 involved in the flowers and Cliff has got more --

10 BOARD MEMBER RECHTSCHAFFEN: We also have a gift  
11 from your current and past Board members. We know you and  
12 your husband Chris, who's in the audience, like to eat  
13 out, so this will give you many times to eat out.

14 CHAIR RANDOLPH: Oh, wow. Lots of yummy gift  
15 certificates, ACRE, Sun Moon, lots of Oakland -- oh and  
16 Wood Tavern right in the neighborhood. Oh, yay. Yay.  
17 Thank you.

18 BOARD MEMBER SHAHEEN: We just adore you. You're  
19 just -- we're going to -- we're going to persevere,  
20 because we know you're going to be cheering us on. But  
21 you're a star and just a delight to work with. And  
22 everything everybody said is so true, your integrity, your  
23 authenticity. You lean into every conversation  
24 relentlessly. So I can't wait to see what happens next  
25 and maybe I can be part of that. So, those are my remarks

1 and I hope you enjoy the flowers.

2 BOARD MEMBER BALMES: And I want to say how I've  
3 appreciated how collaborative you've been with Board  
4 members. It's a little bit different style than I was  
5 used to originally. And also, I really appreciate the  
6 fact that when we had to fly back from Riverside to  
7 Oakland, you let me go into the airport lounge with you  
8 and get free drinks. But actually, we -- I got to know  
9 you a little bit. We talked about our kids, talked about  
10 life, and I would just -- I want to wish you the best in  
11 your retirement. And I know you're going to take some  
12 time to chill, but I'm sure that you're going to end up  
13 doing something really good, because you always have.

14 BOARD MEMBER HOPKINS: You know, when you look  
15 around the Country right now, there are too few good,  
16 intelligent, compassionate people in positions of power.  
17 And, we also live in a world, I think, that is very toxic  
18 and tends to eat good people in positions of leadership  
19 alive. And so the fact that, you know, I joined the  
20 Board, you had already been Chair for several years at  
21 that point, and you still were just, and are, filled with  
22 compassion, with clear diligence. I mean, you totally do  
23 so much research. And you're a shining example of what  
24 leadership should look like. And I wish that there were  
25 hundreds more people like you in positions like this, so

1 thank you.

2 BOARD MEMBER RECHTSCHAFFEN: Well, I have two  
3 statements. One from Senator -- one is long, one is  
4 short. One is from Senator Stern, one is mine. So I'll  
5 let you guess who's going to be long.

6 This is Senator Stern. "I want extend..." -- who  
7 couldn't -- who is out of State and couldn't be with you.

8 "I want to extend my deepest gratitude to Chair  
9 Liane Randolph for her years of dedicated public service  
10 and steadfast leadership at the California Air Resources  
11 Board. As she retires, we celebrate not only the progress  
12 made under her tenure, but also the integrity and  
13 thoughtfulness she has brought to every role she has held  
14 in State government.

15 "From her days at the Public Utilities Commission  
16 to her time at the Natural Resources Agency, I have had  
17 the privilege of working alongside the Chair through many  
18 pivotal moments in California's clean energy and climate  
19 journey. Together, we have grappled with difficult  
20 questions and forged pathways that continue to guide the  
21 State forward. Her steady hand and collaborative spirit  
22 have left an indelible mark on how we govern for the  
23 public good.

24 "At CARB, her leadership has been instrumental in  
25 implementing groundbreaking climate disclosure measures,

1 to SB 253 and SB 261 ensuring greater accountability in  
2 how businesses and institutions address their carbon  
3 footprint and climate-related risks. She's also pushed  
4 for bold strategies to reduce mobile source emissions with  
5 a special focus on uplifting the communities most impacted  
6 by pollution from ports, warehouses, and goods movement.

7 "While we will miss her leadership at CARB, her  
8 legacy will endure in the law -- in the laws she helped  
9 shape.

10 "Thank you, Liane for your partnership and your  
11 dedication."

12 So that's from Senator Stern.

13 And then I'm just going to do a one word  
14 association game for Liane, so I'll be quick. And you'll  
15 see a theme in all these remarks. Thoughtful. Integrity.  
16 Figure stuff out. Get stuff done. Poised. Pragmatic.  
17 Methodical. Clear. Lucid. Collaborative. Trustworthy.  
18 Legal brain. Leader. Kind. No drama. No ego.  
19 Colleague. Friend.

20 So we will really miss you.

21 CHAIR RANDOLPH: Thank you, Cliff.

22 (Applause.)

23 BOARD MEMBER GUERRA: One, I am definitely going  
24 to miss you, Liane. And I had the opportunity of, as they  
25 say, peering through the blinds across the street from

1 city all and watching your leadership here, and being --  
2 not being -- having the opportunity to serve with you.  
3 And I just have to say thank you for what you -- the  
4 commitment you've given in a time when you were also  
5 raising a family. And, you know, these public roles  
6 are -- as -- are not easy. There's one side being on the  
7 staff side, but then being on the public-facing side of it.  
8 And you've done those with so much example too, I think,  
9 future leaders. And so thank you for that commitment to  
10 our State of California. Thank you, Liane.

11 BOARD MEMBER ORTIZ-LEGG: Well, thank you. We  
12 haven't had much time to serve together, but your  
13 reputation precedes you in so many ways. And it was just  
14 last week that I had a chance to listen to Liane testify  
15 from the California Public Utilities Commission, and she  
16 noted that you gave her her first chance. And I've --  
17 that's not the first time I've heard that. There's a lot  
18 of people out there who you've influenced, who you've  
19 helped provide a path and now they're in these leadership  
20 roles. And I think it really testifies to your ability to  
21 look at the whole picture and really see people for where  
22 they are, and also just like lifting people up is what you  
23 do every day in this job.

24 So, here's to you and your service of so many  
25 years and so many people that you worked with. And I

1 think we all -- we're just really impressed and touched by  
2 your commitment and just your humanity.

3 So good luck and have a great retirement.

4 BOARD MEMBER EISENHUT: Has it all been -- it's  
5 been said, but not by all of us. So, I'll say what's most  
6 important, and meaningful, and what I remember most, and  
7 that is your sense of mission, your kindness, and from a  
8 process perspective, the manner in which -- the  
9 collaborative manner in which you run the meetings, the  
10 inclusionary manner and the way in which you're able to,  
11 in real time, sum up the -- pretty accurately sum up the  
12 will of the Board and the discussion that the Board has  
13 engaged in. And so I look forward very much to hearing  
14 about the next chapter.

15 Thank you.

16 BOARD MEMBER TAKVORIAN: Thank you, Board  
17 members. And I know we have a couple of Board members  
18 that are on Zoom. I'm not seeing hands, but if Board  
19 Member Florez or Pacheco-Werner would like to speak.

20 BOARD MEMBER PACHECO-WERNER: Yeah. Yes. Thank  
21 awe. Yes. And I'm so glad I'm not in person so you don't  
22 see my cry, but it's -- you know, Liane and I came in at  
23 the same time in to this Board. And I didn't realize when  
24 I was, you know, accepting to serve that I would find such  
25 a wise friend and just amazing mentor. And everything

1 kind has already been said about you, but I'll just say  
2 that what I'm committing to continuing as part of your  
3 legacy here is that sense of collaboration,  
4 thoughtfulness, and kindness. Thank you for that and, you  
5 know, my commitment is to keep that going as much as I can  
6 here. So big hug.

7 CHAIR RANDOLPH: Thanks, Tania.

8 Okay. Now, it's my turn.

9 Thank you so much for those amazing words. Yeah,  
10 I feel like people are talking about someone else who  
11 seems like really kind of fun.

12 This job has been the honor of a lifetime. And  
13 all of these roles have been just incredible. I'm so  
14 proud of everything CARB has done in the last five years  
15 and I'm so proud of the work that I did at the PUC with  
16 Cliff and my colleagues there, and at the Resources  
17 Agency, and at the FPPC. I want to thank Governor Newsom  
18 for this incredible opportunity. And thank Governor Brown  
19 for my previous opportunities, Governor Davis for my first  
20 opportunity.

21 And, of course, I want to thank my husband Chris.  
22 You know, as you -- as was mentioned, like I did all this  
23 while raising two amazing kids. And there is no way it  
24 would have been possible without the incredible support  
25 that Chris has provided over the years. That has morphed



1 into like him doing everything while I'm running all over  
2 the place. So, I am happy to be able to come home.

3 And I want to thank CARB staff. The heart of  
4 this organization is not the person in my seat. It's the  
5 staff team. Those of you who were doing that deep  
6 scientific, technical, and economic analysis, research,  
7 and application, the folks that are doing the HR work,  
8 doing the administrative heavy lifting, doing the  
9 contracts, doing the IT, reminding us that we need to do  
10 our security training, those who were doing the community  
11 engagement, those that are working with the vast apparatus  
12 that is California State government including the  
13 Legislature, our sister agencies, those that work with the  
14 entities that are regulated by our many programs that  
15 protect public health and the environment, of course, the  
16 lawyers who keep us on the straight and narrow are also  
17 fighting hard defending CARB and the State of California,  
18 the management team that keeps us all moving in the right  
19 direction, you all are the heart of this organization.  
20 And I want to thank you for your unwavering commitment to  
21 the mission of clean air and fighting climate change.

22 Oh, and I can't forget the communications staff.

23 See, I knew I would forget people. You know,  
24 bringing that message to people is such an important role  
25 and thank you all for doing that work as well.

1           So, to Dr. Cliff, it's been quite an adventure  
2 and I just want to thank you for all of -- all of the  
3 work, all of the phone calls, all of the texts, all the  
4 wine that you've shared with me over time, and to our  
5 amazing deputy team, both past and present. It's been  
6 just a joy working with all of you.

7           My first Board meeting was actually agricultural  
8 burning. That was like my first meeting, implementing,  
9 you know, Senator Florez's legislation on agricultural  
10 burning. And I was like what have I gotten myself into?  
11 And as this meeting indicates, like it has been that way  
12 the whole time, right? None of this is easy. This is  
13 really hard stuff. But as I pointed out in my closing  
14 speech at the CPUC, we can do hard things. We have done  
15 hard things. We continue to do hard things. And being a  
16 leader in this work requires deep commitment and delivers  
17 incredible fulfillment. And it comes with real sacrifice.  
18 And I know all of you as staff and Board members have  
19 sacrificed a lot for the people of California, and I just  
20 am grateful for that.

21           So, I'm confident that we're going to continue  
22 doing what we need to do for Californians and continuing  
23 to make progress despite the larger challenges that we're  
24 facing. So, I just can't thank you all enough. I will --  
25 I will miss you. A couple times people have said sort of,

1 you know, what are you going to miss the most about this  
2 job? And it's the people, both within CARB and outside  
3 CARB. It's the running into people on the street and  
4 getting a big hug. I'm really going to miss all of you  
5 out there. So thank you so much for your support.

6 (Applause.)

7 (Standing applause.)

8 CHAIR RANDOLPH: Thank you just doesn't seem like  
9 enough, but thank you. That means a lot to me. And we're  
10 not done with our meeting yet, because we have a legal  
11 requirement to have open public comment. So do we have  
12 any public commenters? If not, that's fine.

13 BOARD CLERK FRENCH: We currently have three  
14 in-person public commenters.

15 CHAIR RANDOLPH: Okay.

16 BOARD CLERK FRENCH: The first is Greg Hurner.

17 GREG HURNER: Good afternoon, Madam Chair, Board  
18 members. I want to start -- I have two things.

19 At the July meeting, I made an impassioned  
20 statement as I had met many of the workers and their  
21 families in the tow industry where their jobs were in  
22 jeopardy, over 30 of those in Councilmember Guerra's  
23 district. You know, and I do take representing those  
24 individual livelihoods personally, just as I did when I  
25 was representing the small family-owned charter fishing

1 vessels, which we successfully addressed, and I appreciate  
2 that.

3           However, while expressing the urgency and what  
4 was -- and I went back and actually watched the tape. I  
5 was dismissive of the staff's efforts and sincerity in  
6 reaching out on issues that we were trying to talk about,  
7 and it didn't align with my notes. And since I did that  
8 publicly at the July meeting, I wanted to apologize  
9 publicly at this meeting to the staff. And that was  
10 not -- that was not intended as an inappropriate  
11 characterization of what their intent was.

12           On another note, this is slightly premature, but  
13 given that this is your last meeting Madam Chair, I wanted  
14 to -- I wanted to -- I actually first worked with you at  
15 the Natural Resources Agency on issues. But we are  
16 releasing a press release on hopefully September 30th,  
17 where we are going out to bid for two fully electric  
18 ferries in San Diego. These are 275-person ferries, ADA  
19 compliant, room for bicycles, room for everything else.

20           You know, San Diego is turning into an innovation  
21 hub in the maritime industry. We're going to have 50  
22 people that are uptrained in maritime -- clean maritime  
23 technologies. We attended the crane dedication down  
24 there. We have the eWolf the with Crowley, who I've  
25 worked with. We have the hydrogen hybrid research vessel.

1           So, in the last four seconds, Madam Chair, I hope  
2 you'll just stay in touch, because I would love to have  
3 you come to the commissioning ceremony for these ferries,  
4 which we're hoping to do in 2026.

5           Thank you.

6           CHAIR RANDOLPH: That's great news. Thank you.

7           BOARD CLERK FRENCH: Next commenter is Evan  
8 Edgar.

9           EVAN EDGAR: Chair, Board members, my name is  
10 Evan Edgar. I'm the engineer for the California Compost  
11 Coalition. I am here to talk about biomass to hydrogen.

12           At one time, the urban biomass, which is pallets,  
13 tree trims, compost overs went to old line biomass. We  
14 had 1.8 million tons a year capacity back in 2015. Today,  
15 we're down to 0.4. So we lost 1.4 million tons of  
16 bioenergy capacity in California. And we're trying to  
17 transition old line biomass to new biomass using  
18 gasification and non-combustion technologies under the  
19 BioMAT program.

20           But over at PUC they're ending it, without  
21 statute, the BioMAT Program, 250 megawatt, meanwhile being  
22 delayed by PG&E. We can't get it done. So we need help  
23 at PUC to extend the BioMAT program where the Bioenergy  
24 Association of California has a lawsuit to do that. We  
25 need some help there. We're trying to create more markets

1 out there.

2 And at the same time, SB 1383 says we have to  
3 divert 75 percent of the organics at the landfill. That's  
4 3.5 million more tons of organics in the home.

5 So CalRecycle is up on Tuesday. They have a zero  
6 waste plan. As far as zero waste plan, it's a \$2 million  
7 study. And I've been for two years testifying at  
8 CalRecycle, your sister agency, under 1383 implementation  
9 to move biomass to hydrogen. And this report, it was  
10 released today, zero mention of hydrogen, zero mention of  
11 biomass. And I've been on this for two years and the only  
12 market we have for that is biomass is to hydrogen.

13 I work Green Hydrogen Council as a technical  
14 advisor and we released a paper about doing 1.1 million  
15 tons of biomass in LA for hydrogen at nine plants, totally  
16 disregarded by CalRecycle. So there's no mention for --  
17 and zero mention for zero waste and zero hydrogen. So I  
18 implore upon CARB to work with CalRecycle to get the  
19 message that we need biomass to hydrogen, where there's no  
20 mention of it today or tomorrow. We need your help.

21 Thank you.

22 BOARD CLERK FRENCH: Next is Muriel Strand.

23 MURIEL STRAND: Does this work?

24 Yes. My name is Muriel Strand. I'm a retired  
25 air resources engineer. And I just wanted to highlight

1 the written comments that staff were kind enough to help  
2 me post to the docket.

3 I recently took a course about the idea that  
4 water is an unrecognized, underappreciated greenhouse gas,  
5 and that the water cycles operate in a way that is not  
6 really completely appreciated, including overlooked  
7 cooling effects. Now, in the memo that you'll find in the  
8 docket, I summarized some of the reasons and the  
9 informational resources about this. I think it's  
10 important. We don't know -- it will -- it's to be  
11 determined how this might pertain.

12 As I say, I think it is important. That's why I  
13 came all the way down here in person. Now, if you can't  
14 question something, if you're not supposed to question  
15 something, it's not science. So I hope that the Board  
16 will ask staff and colleagues to really take a serious  
17 look at this possibility, starting with the information  
18 that I've included in my memo.

19 Thank you for the opportunity to comment.

20 CHAIR RANDOLPH: Thank you.

21 BOARD CLERK FRENCH: We currently have one Zoom  
22 commenter. Moses Huerta, your mic has been unmuted and  
23 you can now begin.

24 MOSES HUERTA: Thank you for the opportunity to  
25 speak. Chair Randolph, it's with -- with sharing the

1 sentiment with everybody in the staff there. My sincerest  
2 gratitude here from a community level and somebody who has  
3 been benefiting from your leadership over the years in my  
4 journey in understanding what environmental justice is and  
5 something that you champion.

6 Your generosity with time and our conversations  
7 that we've had are delved in my mind. And I really am  
8 super grateful for you continuing that leadership. I wish  
9 you all the best in your retirement and have confidence  
10 that your work is yielding benefits. I can tell you here  
11 from my point of view. It's advancing the equitable  
12 conversation from a community level and work -- and  
13 breaking the barriers down and strengthening the  
14 relationship with staff to advance the knowledge that  
15 we've been working for, and that is to your leadership.

16 So I wish you all the best. I'm saddened to see  
17 you go and looking forward to continuing your work along  
18 the way. And I wish you again the best. Thank you so  
19 much.

20 CHAIR RANDOLPH: Thank you. That's so sweet.  
21 It's lovely to hear from you. Thank you.

22 BOARD CLERK FRENCH: Madam Chair, those are all  
23 our public commenters.

24 CHAIR RANDOLPH: All right. And with that, the  
25 September 25th California Air Resources Board meeting is



1 now adjourned.

2 (Applause).

3 (Thereupon the California Air Resources Board  
4 meeting adjourned at 4:21 p.m.)

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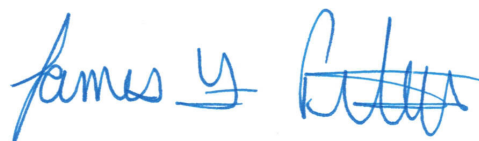
CERTIFICATE OF REPORTER

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

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

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

IN WITNESS WHEREOF, I have hereunto set my hand this 3rd day of October, 2025.



JAMES F. PETERS, CSR  
Certified Shorthand Reporter  
License No. 10063