MEETING

STATE OF CALIFORNIA
AIR RESOURCES BOARD

ZOOM PLATFORM

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

BYRON SHER AUDITORIUM

1001 I STREET

SACRAMENTO, CALIFORNIA

FRIDAY, DECEMBER 16, 2022 8:32 A.M.

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

APPEARANCES

BOARD MEMBERS:

Liane Randolph, Chair

Sandra Berg, Vice Chair

John Balmes, MD

Hector De La Torre

John Eisenhut

Senator Dean Florez

Davina Hurt

Gideon Kracov

Tania Pacheco-Werner, PhD

Barbara Riordan

Supervisor Phil Serna

Professor Dan Sperling, PhD

Supervisor Nora Vargas

STAFF:

Steve Cliff, PhD, Executive Officer

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

Chanell Fletcher, Deputy Executive Officer, Environmental Justice

Annette Hébert, Deputy Executive Officer, Southern California Headquarters and Mobile Source Compliance

Edna Murphy, Deputy Executive Officer, Internal Operations

APPEARANCES CONTINUED

STAFF:

Rajinder Sahota, Deputy Executive Officer, Climate Change and Research

Craig Segall, Deputy Executive Officer, Mobile Sources and Incentives

Ellen Peter, Chief Counsel

Ashley Arax, Deputy Legislative Director, Office of Legislative Affairs, Office of the Chair

David Ernest Garcia, PhD, Legislative Director, Office of Legislative Affairs, Office of the Chair

Jorn Herner, PhD, Air Resources Supervisor II, Research Planning, Administration, and Emission Mitigation Branch, Research Division

Nicole Hutchinson, Legislative Analyst, Office of Legislation Affairs, Office of the Chair

José López, Air Pollution Specialist, Research Planning and Climate Analysis Section, Research Division

Claudia Nagy, Senior Attorney, Legal Office

Sarah Pittiglio, PhD, Air Resources Supervisor I, Research Planning and Climate Analysis Section, Research Division

Elizabeth Scheehle, Division Chief, Research Division

ALSO PRESENT:

Roya Bahreini, PhD, University of California, Riverside

Francesca Hopkins, PhD, University of California, Riverside

Bryan Hubbell, PhD, United States Environmental Protection Agency, Office of Research and Development

Mary Prunicki, PhD, MD, Sean Parker Center for Allergy and Asthma Research, Stanford University

APPEARANCES CONTINUED ALSO PRESENT: Sam Silva, PhD, University of Southern California Aly M. Tawfik, PhD, California State University, Fresno

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PROCEEDINGS 1 CHAIR RANDOLPH: Good morning. The December 2 16th, 2022 public meeting of the California Air Resources 3 Board will come to order. Board Clerk, will you please 4 5 call the roll. BOARD CLERK GARCIA: Dr. Balmes? 6 BOARD MEMBER BALMES: Here. 7 8 BOARD CLERK GARCIA: Mr. De La Torre? Mr. Eisenhut? 9 BOARD MEMBER EISENHUT: Here. 10 BOARD CLERK GARCIA: Senator Florez? 11 BOARD MEMBER FLOREZ: Florez, here. And there's 12 a password issue for others that may not be able to get 13 So I just got on. So, yeah, Dean Florez here. 14 BOARD CLERK GARCIA: Thank you. 15 16 Assemblymember Garcia? Ms. Hurt? 17 BOARD MEMBER HURT: Present. 18 BOARD CLERK GARCIA: Mr. Kracov? 19 BOARD MEMBER KRACOV: Here. 20 BOARD CLERK GARCIA: Dr. Pacheco-Werner? 21 BOARD MEMBER PACHECO-WERNER: Here. 2.2 23 BOARD CLERK GARCIA: Mrs. Riordan?

BOARD CLERK GARCIA: Supervisor Serna?

BOARD MEMBER RIORDAN: Here.

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BOARD MEMBER SERNA:
                                  Here.
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             BOARD CLERK GARCIA: Professor Sperling?
             BOARD MEMBER SPERLING:
                                     Here.
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             BOARD CLERK GARCIA: Ms. Takvorian?
             Supervisor Vargas?
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             BOARD MEMBER VARGAS: Vargas, here.
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             BOARD CLERK GARCIA: Vice Chair Berg?
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             VICE CHAIR BERG: Here.
             BOARD CLERK GARCIA: Chair Randolph?
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             CHAIR RANDOLPH: Here.
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             BOARD CLERK GARCIA: Madam Chair, we have a
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    quorum.
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             CHAIR RANDOLPH: All right. Thank you.
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    to begin with a few housekeeping items before we get
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    started. We are conducting today's meeting in person as
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    well as offering remote options for public participation
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   both by phone and in Zoom.
             Anyone who wishes to testify in person should
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    fill out a request to speak card in the foyer outside the
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   Board room. Please turn it into a Board assistant prior
    to the commencement of the item. If you are participating
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    remotely, you will raise your hand in Zoom or dial star
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nine, if calling in by phone. The Clerk will provide

further details regarding how public participation will

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work in just a moment.

For safety reasons, please note the emergency commit to the rear of the room through the foyer. In the event of a fire alarm, we are required to evacuate this room immediately and go down the stairs to the lobby and out of the building. When the all-clear signal is given, we will return to the auditorium and resume the hearing.

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A closed captioning feature is available for those of you joining us in the Zoom environment. In order to turn on the subtitles, please look for a button labeled "CC" at the bottom of the Zoom window as shown in the example on the screen now. I would like to take this opportunity to remind everyone to speak clearly and from a quiet location, whether you are joining us in Zoom or calling in by phone. And I'd like to remind both the online commenters and the in-person attendees to please silence your phones.

Interpretation services will be provided today in Spanish for both in-person and Zoom attendees. If you are joining us using Zoom, there is a button labeled "Interpretation" on the Zoom screen. Click on that button and select Spanish to hear the meeting in Spanish. If you are joining us here in person and would like to listen to the meeting in Spanish, please speak to a Board assistant and they will provide you with further instructions. I want to remind all of our speakers to speak slowly and

pause intermittently to allow the interpreters the opportunity to accurately interpret your comments.

(Interpreter translated in Spanish).

THE INTERPRETER: Thank you, Chair Randolph. Back to you.

CHAIR RANDOLPH: Thank you.

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I will now ask the Board clerk to provide more details regarding public participation.

BOARD CLERK GARCIA: Thank you, Chair Randolph.

Good morning, everyone. My name is Lindsay

Garcia. I'm one of the Board clerks here at CARB. I will be providing additional information on how public

participation will be organized for today's meeting.

We will first be calling on any in-person commenters who have turned in a request to speak card and then I will be calling on commenters who are joining us remotely. If you are joining us remotely and wish to make a verbal comment on today's Board items, or during the open comment period at the end of today's meeting, you will need to be using Zoom webinar or calling in by telephone. If you are currently watching the webcast on CAL-SPAN, but you wish to comment remotely, please register for the Zoom webinar or call in. Information for both can be found on the public agenda for today's meeting.

To make a verbal comment, we will be using the raise hand feature in Zoom. If you wish to speak on a Board item, please virtually raise your hand as soon as the item has begun to let us know you wish to speak. To do this, if you are using a computer or tablet, there is a raise hand button. And if you are calling in on the telephone, dial star nine to raise your hand. Even if you previously indicated which item you wish to speak on when you registered, you must raise your hand at the beginning of the item, so that you can be added to the queue.

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If you will be giving your verbal comment today in Spanish and require an interpreter's assistance, please indicate so at the beginning of your testimony and our translator will assist you. During your comment, please pause after each sentence to allow for the interpreter to translate your comment into English.

When the comment period starts, the order of commenters will be determined by who raises their hand first. We will call each commenter by name and will activate each commenter's audio when it is their turn to speak. And for those calling in, we will identify you by the last three digits of your phone number. We will not show a list of remote commenters, however, we will be announcing the next three or so commenters in the queue, so you are ready to testify and know who is coming up

next. Please note, you will not appear by video during your testimony. I would also like to remind everyone to please state your name for the record before you speak. This is especially important for those calling in by phone.

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We will have a time limit for each commenter and we'll begin the comment period with a three-minute time limit, although this could change at the Chair's discretion. During public testimony, you will see a timer on the screen. For those calling in by phone, we will run the timer and let you know when you have 30 seconds left and when your time is up. If you require Spanish interpretation for your comment, your time will be doubled.

If you wish to submit written comments today, please visit CARB's send-us-your-comments page or look at the public agenda on our webpage for links to send these documents electronically. Written comments will be accepted on each item until the Chair closes the record for that Board item.

If you experience any technical difficulties, please call (805)772-2715 so that an IT person can assist. This number is also noted on the public agenda.

Thank you. I will turn the microphone back to Chair Randolph now.

CHAIR RANDOLPH: All right. Thank you.

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The first item on the agenda today is Item number 22-16-2, a proposed research contract with the University of California, Berkeley, titled, "Impact of Air Pollution Exposure on Metabolic Health Outcomes for California Residents". If you are here with us in the room and wish to comment on this item, please fill out a request-to-speak card. If you are joining us remotely and wish to comment, please click the raise hand button or dial star nine now and we will call on commenters when we get to the public comment portion.

This item is listed on the agenda to comply with Board approval requirements in Government Code section 1091, because Board Member Balmes is affiliated with UC Berkeley. Therefore, Board Member Balmes will abstain from the discussion and vote.

Dr. Cliff, would you please summarize the item.

EXECUTIVE OFFICER CLIFF: Thank you Chair

Randolph. In April 2020, this Board approved Resolution

20-13 directing CARB staff to expand health analysis

methodologies to provide a more comprehensive analysis of air pollution impacts, including adding health endpoints to the methodologies. In response to the Board direction, this proposed study will develop statewide concentration response functions to evaluate air pollutant effects for

metabolic health outcomes. The study will also estimate economic benefits from reducing air pollution exposures on metabolic out -- health outcomes. This research will examine health effects in racial and ethnic subgroups as well as statewide average effects. Some of the metabolic health endpoints to be studied include incidence of diabetes, diabetic medication use, diabetes-related ER visits, hospitalizations, and mortality. The information gained through this contract will support CARB's ability to evaluate the effects of its policies and programs, including a wide range of public health benefits.

Approval by the Board will authorize staff to put this contract in place. This concludes my summary of the item. Thank you.

CHAIR RANDOLPH: Thank you.

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Clerk, are there any members of the public who have raised their hands or submitted cards to comment?

BOARD CLERK HARRINGTON: Thank. No, there are currently no public commenters in person.

CHAIR RANDOLPH: Okay. I will now close the record on this agenda item. Do I have a motion and a second to approve this item and have staff proceed with executing this contract?

BOARD MEMBER HURT: Move approval.

BOARD MEMBER RIORDAN: I'll second that motion.

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CHAIR RANDOLPH: All right. Clerk, will you
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   please call the roll.
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             BOARD CLERK GARCIA: Mr. Eisenhut?
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             BOARD MEMBER EISENHUT: Yes.
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             BOARD CLERK GARCIA: Senator Florez?
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             BOARD MEMBER FLOREZ: Florez, aye.
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             BOARD CLERK GARCIA: Ms. Hurt?
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             BOARD MEMBER HURT: Aye.
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             BOARD CLERK GARCIA: Mr. Kracov?
             BOARD MEMBER KRACOV: Yes.
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             BOARD CLERK GARCIA: Dr. Pacheco-Werner?
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             BOARD MEMBER PACHECO-WERNER: Yes.
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             BOARD CLERK GARCIA: Mrs. Riordan?
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             BOARD MEMBER RIORDAN: Aye.
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             BOARD CLERK GARCIA: Supervisor Serna?
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             BOARD MEMBER SERNA: Aye.
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             BOARD CLERK GARCIA: Professor Sperling?
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             BOARD MEMBER SPERLING:
                                     Aye.
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             BOARD CLERK GARCIA: Supervisor Vargas?
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             BOARD MEMBER VARGAS: Vargas, aye.
             BOARD CLERK GARCIA: Vice Chair Berg?
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             VICE CHAIR BERG: Aye.
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             BOARD CLERK GARCIA: Chair Randolph?
             CHAIR RANDOLPH: Yes.
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             BOARD CLERK GARCIA: Madam Chair, the motion
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passes.

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CHAIR RANDOLPH: All right. Thank you.

The next item on today's agenda is item number 22-16-3, public meeting to consider the proposed new members for the California Air Resources Board's Research Screening Committee. If you are here with us in the room, please fill out a request to speak card. If you are joining us remotely and wish to comment, please click the raise-hand button or dial star nine now. We will call on the commenters when we get to the public comment portion of the item.

Research Screening Committee, also known as the RSC, provides robust scientific peer review for CARB's research projects. There are currently multiple vacant positions on the RSC that need to be filled. Staff have developed a new process for appointing RSC members to increase transparency and promote diversity. Staff will introduce the proposed new members for the Board to consider for appointment to the RSC.

Dr. Cliff, would you please introduce the item.

EXECUTIVE OFFICER CLIFF: Thank you, Chair Randolph. Today staff will provide an overview of the roles and responsibilities of the RSC and introduced the proposed new RSC members. The new RSC members would fill current vacancies and expand the fields of expertise in

the RSC. The proposed members were selected through a public nomination and application process. Staff reviewed all submissions and interviewed the top candidates. The candidates introduced to you today demonstrated experience in one or more desired areas of expertise. If appointed, they will help the RSC continue to uphold the scientific rigor of CARB funded research that supports and informs the goals and priorities of the agency.

I will now ask Jose López of the Research Division to begin the staff presentation.

Jose.

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(Thereupon a slide presentation).

RD AIR POLLUTION SPECIALIST LÓPEZ: Thank you.

Good morning Chair Randolph and Board members. My name is

Jose López. I am an Air Pollution Specialist in the

Research Division. And today, I will be providing to you

an overview of the Research Screening Committee, also

referred to as the RSC, and present the six candidates

that CARB staff is recommending for Board approval to be

appointed to the RSC.

Towards the end of my presentation, I will ask the RSC candidates in attendance to introduce themselves. They are joining us today via Zoom.

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RD AIR POLLUTION SPECIALIST LÓPEZ: I will first

provide a brief history of CARB's research program and overview of the RSC. The Legislature created CARB's research program in 1971 and identified it as an integral part of an effective air pollution control program.

CARB's research program continues to play an important role in meeting the challenges of increasingly stringent federal air quality standards and long-term climate goals, and serves as the foundation for effective regulatory decisions.

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The program sponsors fundamental air pollution and climate studies, supports the development of new and innovative pollution-reduction strategies, and evaluates ongoing programs and regulatory efforts. To assist the Board in managing a technically sound research program, the Legislature, through the Health and Safety Code, mandated CARB to establish the RSC.

But what exactly is the RSC and what does it do?

The RSC is composed of qualified experts, such as physicians, scientists, biologists, chemists, engineers, meteorologists, and other persons who are knowledgeable, technically qualified, and experienced in air pollution problems for which projects are being reviewed. The Committee can have up to eleven members and at least two members need to have demonstrated expertise in the field of climate change.

Ultimately, the key role of the Committee is to review, and give advice and recommendations with respect to all air pollution and climate change-related research projects funded by CARB.

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RD AIR POLLUTION SPECIALIST LÓPEZ: Now, I will highlight a few key -- a few key requirements. First, RSC members commit to attend meetings -- Committee meetings, which are held approximately six times a year. At these meetings, RSC members review and provide comments on project proposals and draft final reports. It is important to note that all Committee meetings are subject to the Bagley-Keene Open Meeting Act. This means that the Committee meetings must be noticed in advance, open to the public, and allow comments from interested members of the public.

Second, CARB recommends a term length of four years and each member can serve no more than three terms.

Finally, sitting RSC members cannot apply or receive funding from CARB due to Government Code section 87104, which prohibits members from any existing CARB advisory committee from being a signatory, administrator, or project leader on any CARB grant or contract.

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RD AIR POLLUTION SPECIALIST LÓPEZ: The process

to select new RSC members was triggered by the transitioning out of existing members to other roles or retirement. Staff began the process by identifying priority areas of expertise that we hoped could be reflected in the new RSC members. These areas were chosen to address the emerging topics and expanded CARB program mandates that the research program now supports with sound science.

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In particular, staff identified the need for expertise in community-based research and equity. Staff also developed a new public nomination and application process to increase transparency and expand the recruitment of new members.

In March of 2022, staff released the public listserv announcement to solicit nominations and applications. When the nominations closed in April, staff reached out to every nominated candidate to encourage them to submit an application. The application period closed in May and the most qualified applicants were interviewed in order to identify the top six candidates now being recommended for appointment today. Both the application screening and interview panels were multidivisional with diverse racial and gender participation, which aligns with diverse interview panels as outlined in a Diversity and Racial Equity Task Force memo on our website.

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RD AIR POLLUTION SPECIALIST LÓPEZ: Before I present the six candidates, I want to share who the current RSC members are. They are professor Suzanne Paulson, from UCLA's Department of Atmospheric & Oceanic Sciences; Dr. Alan Vette, the Deputy National Program Director at US EPA; Dr. Tim Wallington, a Senior Technical Leader for Environmental Sciences at Ford Motor Company; and Professor Yifang Zhu from UCLA's Fielding School of Public Health.

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RD AIR POLLUTION SPECIALIST LÓPEZ: I will now introduce the six proposed new members of the RSC. Please note that the candidates in the slides are paired by area of expertise.

Beginning with professor Aly Tawfik who teaches at University of -- who teaches at California State University, Fresno and is the Director of the Transportation Institute at CSU, Fresno. Professor Tawfik is passionate about transportation sustainability and the future of transportation. The areas of expertise he has been considered for are transportation services and technology, big data analytics, and expertise in San Joaquin Valley -- San Joaquin Valley air quality concerns.

Dr. Sam Silva teaches at the University of

Southern California in the Department of Earth Sciences and the Department of Civil and Environmental Engineering. Dr. Silva's research focuses on air pollution and climate change. The areas of expertise he has been considered for are big data analytics, air emission measurements, monitoring, modeling, and climate science.

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RD AIR POLLUTION SPECIALIST LÓPEZ: Dr. Bryan Hubbell is the National Program Director for the Air, Climate, and Energy Research Program in the United States Environmental Protection Agency, Office of Research and Development. Dr Hubbell is an expert on the health and environmental impacts of air pollution. The areas of expertise he has been considered for are economics, including behavioral and public health economics, health impacts and regulatory benefits analysis, and epidemiology.

Mary Prunicki is a Physician Scientist and Senior Director of air pollution and health research at the Sean Parker Center for Allergy & Asthma Research at Stanford University. Her research focuses on the impacts of environmental exposures on the immune system. She is also passionate about using her research findings to advocate for those who are most vulnerable. The areas of expertise she has been considered for are public health,

particularly in social determinants of health and exposure, climate science and impacts, and respiratory medicine.

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RD AIR POLLUTION SPECIALIST LÓPEZ: Professor Francesca Hopkins teaches at the University of California, Riverside in the Department of Environmental Sciences. Professor Hopkins' research focuses on the effects of human activities on the global carbon cycle, with particular interest in greenhouse emissions and feedbacks to climate change. The areas of expertise she has been considered for are climate science and impacts, and expertise in South Coast and San Joaquin Valley air quality concerns.

Professor Roya Bahreini teaches at the University of California, Riverside in the Department of Environmental Sciences, where she is also the Vice Chair of the Department. Professor Bahreini research focuses on airborne, ground-based, and laboratory measurements of aerosol composition and microphysical properties. And the areas of expertise she has been considered for are air emissions measurements and expertise in South Coast and San Joaquin Valley air quality concerns.

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RD AIR POLLUTION SPECIALIST LÓPEZ: Staff are

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recommending that the Board approve Resolution 22-22,
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    which will appoint the six candidates to the RSC. The
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    approval will fill six of the existing vacancies to help
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    increase the capacity and expertise needed to support
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    CARB's research program. CARB will then begin the process
    to fill the remaining RSC positions and will build upon
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    our existing outreach efforts to ensure that all expertise
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    needed by CARB is covered by the 11 members.
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    includes community-based research, as we continue to
    expand projects such as the one in Imperial Valley where
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    we are creating a research roadmap with community members.
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    We would also welcome any recommendations for the Board --
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    from the Board members or others as to experts we should
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    reach out to as we continue to build a broad base of
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    expertise on this Committee.
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With that, I would like to thank the Board and the public for your attention today.

This concludes my presentation.

CHAIR RANDOLPH: Thank you. Do we have any public commenters on this item?

BOARD CLERK GARCIA: No commenters for this item.

CHAIR RANDOLPH: All right. Thank you.

Do Board members have any questions or comments?

Board Member Hurt.

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BOARD MEMBER HURT: Thank you, Chair. I want to

thank the staff for the briefing and answering some of my questions, and, of course, Rajinder for circling back around for a deeper dive on the selection process. And I definitely feel better about the path forward. To give folks a flavor, some of my questions I asked whether there was targeted community engagement for applications in committees -- communities of color or our highly impacted communities. I asked whether Chanell Fletcher was a member -- for a member of the -- her department of panelists who reviewed applications, what sort of work have these folks done with or in disadvantaged communities. I was curious about that background.

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The Research Screening Committee, in my opinion, is a really important job, extremely important. They can state whether a proposal is lacking aspects or can be improved. And so diverse lived experiences is really going to be essential on this panel.

And I have a little sensitivity about how we deal with research and medicine in different areas. Especially when it comes in this country, and I think about Henrietta Lacks, and African Americans, and Native Americans, and women, and again knowing that there are serious inequities in the field of medicine that we do not perpetuate a lack of diverse views or have implicit bias on certain topics in the screening of research topics.

So I just wanted to uplift that. I know we're really trying hard to operationalize equity and make sure that it's throughout the DNA of this agency. I hope in the next set we do a really extensive outreach and a more robust process in targeting people in communities of color and disadvantaged communities so that we can have those views on the Screening Committee.

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And I guess maybe the last thing I'll say is I would never simplify like who a person is based on how they look or the school that they attended, which is one of the reasons why I'm really excited about many of the applicants, just doing a very cursory review, very intelligent, smart people. So this comment has nothing to do with the individuals specifically. I'm really excited about their leadership in the Screening Committee. But I do want this agency to expand their horizons and look for more community members, specifically in disadvantaged communities, and again thinking a lot about African Americans and women who their voice should be raised in that space.

So maybe some of my colleagues have other thoughts. Oh, one last thing. I understand from that review that one of the things that happens in this process is that you cannot receive funding for four plus years. So this becomes somewhat a Committee on the haves. And I

think that we should -- we should think a little bit more closely about how to tailor, making sure there aren't conflicts of interest, so that we can get those folks who maybe are in disadvantaged communities a part of this process, because I could see that being something that prevents people from putting an application in.

So I struggle with that on the city council when that's not a paid living wage. And sometimes I think about the screening committee and how can we think about that and just be a little bit more thoughtful and tailored about conflicts of interest when it comes to folks like that. And Maybe Dr. Balmes or others can speak to this a little bit more. So thank you.

CHAIR RANDOLPH: Yes. And Dr. Pacheco-Werner actually has her hand up, so I'm going to call on her first and then we'll get to the rest of the folks on the dais.

Dr. Pacheco-Werner.

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BOARD MEMBER PACHECO-WERNER: Thank you, Chair. First of all, I just wanted to congratulate my colleagues, Dr. Tawfik, who is a really brilliant researcher, really committed to the area, and has brought some really important insights that are really impactful nationwide, particularly during the COVID pandemic. So I'm really excited to see what he's going to bring to this body and

as well as a big congratulation to the rest of the new members. Excited for the research that you'll be bringing.

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I do want to echo Board Member Hurt's comments. I know that I've talked to our folks in the Research Division about this since I've been on, and we -- we've done some good outreach. You know, I really appreciated the deadline being extended and I think that that -- you know, things like that, you know, flexibilities like that really allow additional opportunities. I do want to say that I personally know extremely brilliant, extremely qualified African American and female public health scholars that -- experts in social determinants of health. I know epidemiologists, you know, African American women and community based research epidemiology, all of those.

So I do think that there is that opportunity out there in California and I do think that there are, you know, strategies that we can continue to think about to outreach, in particular, you know, really thinking about how we -- how we reach out to the professional societies for example or some of the work groups that are out there on these topics through like national organizations, like APHA.

So I do think that -- you know, I know personally can name several off the top of my head. And so I do know

that the expertise exists here in California and I -- with lived experiences, as Dr. Hurt said, and -- who would provide valuable, valuable insight to this. So I do look forward to if staff could reach out to me to -- about filling the next vacancies and when that opens up. And, you know, I can help with outreach on that, be more than happy to. Thank you.

CHAIR RANDOLPH: Okay. Dr. Balmes.

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BOARD MEMBER BALMES: Well, first of all, I want to totally agree with Supervisor Hurt and Dr.

Pacheco-Werner. And I also agree with Dr. Pacheco-Werner that I, too, am willing to help. I know some people of color who are excellent scientists who may not know about the Research Screening Committee. You know, it's not like this is widely understood as a funding agency for research as the NIH, or the CDC, or even the U.S. EPA. So I'm 100 percent behind that effort and will help, just like Dr. Pacheco-Werner.

I wanted to mention a couple things. One is that I now several of the new RSC members, if we can pass the resolution, personally. And Bryan Hubbell is a really good catch. I applaud the Research Division for getting him. Some of you may know about BenMAP. It's how health benefits of various air pollution regulatory actions and policies can be predicted, and assessed. And he's

basically one of the originators of BenMAP, and I've known him for many years. He's really thoughtful and I think it's a great contribution to our RSC.

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And then Mary Prunicki, I don't even how many papers I have with Mary. She's at Stanford. I probably have a least 10 co-authored papers with here, because she works with me in Fresno on the Children's Health Air and Air pollution Study. And so she actually -- Dr. Pacheco-Werner and Supervisor Hurt, she actually has worked doing research in low-income population of color. Our CHAPS population is 80 percent Latinx and 14 percent African American. There's hardly any people who aren't of color.

So she is -- she doesn't have the lived experience, but she has research experience, including working with the community. So with that, I would say that I'm ready to move a resolution.

CHAIR RANDOLPH: I just want to double check and make sure nobody else has any comments. Before we do the motion, I think there want -- some Committee members wanted the opportunity to speak, is that correct?

DEPUTY EXECUTIVE OFFICER SAHOTA: That's correct, Chair Randolph, but I want to make sure that I round out the conversation on why we're here today with the RSC proposal in front of you. That Committee has been around

for decades. And under the leadership of the Division Chief Scheehle, who's siting right behind me, she went back and looked at that as a tool in the context of the racial equity resolution that we had about two, two and a half years ago, and realized that it was a static committee that had static positions. They were never updated. There were no term limits and it lacked diversity.

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And so we've spent the better part of a year revamping the entire process, doing the outreach to try and make it a more relevant tool with today's issues with term limits to make sure that we constantly get new voices that can be part of the process and the things that came before the Board as the years go by. So there was a concerted effort to actually go back and look at one tool in particular this time, which was this, and we're doing across other areas to actually figure out what we could do better. And there were members that weren't even showing up to meetings. So we're excited about the folks that are being proposed in front of you. And we would love it if they could have a few minutes to talk about their interest and their backgrounds, if that's okay.

CHAIR RANDOLPH: Okay. And I also did want to circle back on the question about the restriction on grants. My understanding is that is actually a statutory

restriction, is that correct?

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Okay. So we don't have the discretion unfortunately to modify that, is that right?

CHIEF COUNSEL PETER: That's correct. I can add a little bit more if you'd -- if you'd like.

So it is a statutory requirement, which is Government Code section 87104, which is actually the item we had this morning where we had to vote, because Dr. Balmes actually had this. And so the Research Screening Committee, along with some of the other committees for -- at CARB, like the EJAC, like the AB 617 Consultation Group, like the Scientific Review Panel, are all Bagley-Keene organizations. So when you have that, then this Government Code section kicks in, but it's little a bit narrower than what was portrayed in terms of the question.

So, for example, the actual member on the RSC cannot get money directly, but their organization can get money. Obviously, you don't want to have somebody that's -- you know, has power, you know, like, you know, yourselves or like people on these advisory committees to advocate for their own organization. So there's some limits on what they can do, but it's actually not that difficult. They can't sign the contract, but, you know, their colleague can sign the contract. So the limitations

are hot as broad as one would think. I think they're able to be, you know, worked out without kind of violating the whole notion of what's fair to the other people who are applying for grants.

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And also, just because this is unclear, the Legal Office put together a memo on this exact topic and it's posted on the webpage under the RSC. So you go to RSC, this memo is there and it's a couple pages and lays out the requirements, you know, kind of Bagley-Keene, kind of what's your obligations. And the way Legal Office wrote this was we want to talk about transparency. And so RSC, the Research Screening Committee, needs to be transparent to the public. That's why it's Bagley-Keene and that's why we have these, you know, conflict provisions built in.

So if you say, oh, they can't get involved, it's -- that's a little broader than the actual restrictions. We have talked with people before of how they can negotiation, you know, that kind of line. And since it's a common issue and we have more than one Bagley-Keene committee, that's why Legal put together the memo and it's posted. It's been given to all the different members. And then we decided to get it posted on the RSC. So if you go there, you can see the whole -- all the -- all the gnarly details, but I just wanted to touch on that.

CHAIR RANDOLPH: All right. Thank you.

Dr. Balmes.

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BOARD MEMBER BALMES: Well, I think I'm the only Board member who's actually been on the RSC, so -- because I don't think Dr. Sperling was. And I had to think twice about it, because I knew that I wouldn't be able to get CARB funding. But, you know, fortunately I could get funding from other sources and I had an NIH grant and a Health Effects Institute grant that got my lab -- kept my going so I didn't have to rely on CARB. So that's -- I just wanted to note that for researchers for some of our big ticket projects that community members probably wouldn't be applying for, they can -- they have other sources, you know, aside from CARB.

You know, as Dr. Sperling and I have often said, the amount of money we have for research at CARB is -- it's like a pittance compared to other sources. I very much appreciate all that we do, but it's like I wish we had a lot more.

CHAIR RANDOLPH: Thank you. Okay. I'll turn it back to staff to call on the RSC members and how did you want to.

RD AIR POLLUTION SPECIALIST LÓPEZ: Yeah. Thank you, Chair. So we have a list. And I would like to now call on the candidates.

Professor Tawfik, please begin. You can unmute yourself and you can share your screen as well.

DR. ALY TAWFIK: Thank you. So obviously in my celebration uniform for the -- being selected for this Committee

(Laughter).

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DR. ALY TAWFIK: Thank you very much.

Actually, I am late for my graduation. Our graduate ceremony started -- well, it is about to start in seven minutes, so I'll try to be brief, then I'll ask for you to excuse me to run for the graduation ceremony.

But -- so thank you, Jose, and thank you, all.

I'm very happy to be here with you today and I'm excited about the possibility of serving on this steering committee for several reasons. One reason is I live in the Central valley and the San Joaquin Valley, and in my opinion the biggest problem that we have in the San Joaquin Valley is air pollution and air quality. I have two little boys and this is always, always on my mind.

They are -- they both practice sports and they're all always outside. And it's always a concern for me how can we make this better for my kids, and for everyone's kid, and for everyone. I mean, this is my home.

I think also climate change is a huge -- is the biggest problem that faces the whole globe, whether in the

Central Valley, or California, or anywhere else. And for these two reasons, I think I'm a great admirer and supporter of CARB, and for the work that CARB does. So I was very excited when Dr. Pacheco shared this opportunity with me and encouraged me to apply.

And I think someone just mentioned that when they were first thought about this opportunity, they thought twice. I think I thought maybe a hundred times, so -- but I think -- I'm excited about being here and about the possibility of being of service to this community.

I'm also excited about the diversity of the backgrounds of my colleagues on the -- on this Committee.

And I think I'll be learning a lot from them, so I look forward to that as well.

Last comment is I want to thank the review committee. I think I can attest that this process of selection was extremely rigorous. It's probably one of the most rigorous processes I have witnessed beyond my job application when I was hired at the University.

So I want to thank you for even the interview process. I mean, there were many thought-provoking questions that I enjoyed thinking about and answering myself. So I want to thank you all for this opportunity, and I hope I could be of service.

Thank you.

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RD AIR POLLUTION SPECIALIST LÓPEZ: Thank you, Professor Tawfik.

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Now, I would like to ask physician scientist Mary Prunicki to please unmute yourself and share your opening remarks. Thank you.

DR. MARY PRUNICKI: Hi. Good morning everyone. My name is Mary Prunicki and I am also excited to be a part of this important Committee and the CARB organization.

My research interests align well with your goals. For the past eight and a half years, I've worked at Stanford. And we've investigated how air pollution, wildfires, environmental exposures impact health, especially immunohealth. I come from an immunology lab and I'm passionate about the groups we do focus on, which are typically the vulnerable populations. So we've looked at pregnant women, children, firefighters, you know, underserved populations, a lot of research, as Dr. Balmes said, in Fresno, where, you know, everyone is exposed to chronic air pollution.

And given the widespread impacts of air quality, especially with our wildfires increasing, and the impact of climate change, I just think this -- the area of air quality could not be more important right now. So I thank you for the opportunity and look forward to hopefully

participating.

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Thank you.

RD AIR POLLUTION SPECIALIST LÓPEZ: Thank you.

Now, I would like to call on Professor Bahreini to please share your camera

DR. ROYA BAHREINI: Good morning. Thank you, everyone for your time. I'd just like to take this opportunity to say a few words. When I tell my students about the history of CARB and what has been achieved since its establishment, I always tell them that these past decades have been a real good example of how scientists, engineers, regulators, and stakeholders can work together to improve air quality in California. And if I'm approved today to join the Committee, it will be really a great honor to be part of this organization and help achieve CARB's mission for improving air quality in California, controlling climate change, and continue being really a pioneer organization as it has been in the last decades for the rest of the world.

Thank you for your time.

RD AIR POLLUTION SPECIALIST LÓPEZ: Thank you. And I would like to call on Professor Hopkins to please share your camera.

DR. FRANCESCA HOPKINS: Good morning. Thank you for having me here and thanks to the selection committee

for considering my application.

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I'm really excited, because California has been at the forefront of climate change mitigation and adaptation. And that's the area where I focus my research efforts. And California also has been a leader both globally and nationally in addressing air pollution problems. And California and CARB specifically has a unique role as a leader and a proving ground for emission reduction efforts, both for greenhouse gases and the air quality arena.

New research is needed to support mitigation and improve our understanding of how we can achieve these goals and practice. And I see CARB as being really fundamental to this. And as a researcher, I'm deeply invested in developing research ideas in support of emission reduction goals that ideally have an optimal benefit for air quality and equity in tandem. And I hope in this Committee to use my research expertise to help develop future research plans in support of CARB's mission and goals.

So I really am hoping I can contribute my understanding of the complexity of the controls on greenhouse gas emissions from both human and natural systems and how they vary in space and time. And I really hope that we in this context can talk and consider deeply

how we can effectively manage greenhouse gases in the context of protecting our broader environment and way of life in California, while ensuring environmental and climate justice for our communities. And I note that both the inland parts of Southern California and the San Joaquin Valley are particularly vulnerable to the effects of climate change, in addition to the air pollution problems we already have.

So I also am really proud to represent the University of California, Riverside and our region, the Inland Empire of Southern California, that are currently underrepresented at the State level in many ways. And so I'm hoping that through being on the Research Screening Committee both UCR and the Inland Empire can have a seat at the table with the importance of air quality research and issues in the state.

Thank you.

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RD AIR POLLUTION SPECIALIST LÓPEZ: Thank you.

Now, I would like to call Dr. Hubbell to please share your camera.

DR. BRYAN HUBBELL: Okay. Hold on just one second. I'm having to do this with my non-dominant hand for just a moment.

Okay. So I appreciate being here. I look a little casual, because on Tuesday I'd to have shoulder

replacement surgery, so I'm still in the stage of getting used to my sling and having to do everything with my offhand.

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But I wanted to just say how much I appreciate the opportunity to work with CARB. And John, I appreciate your very kind comments about the work we did with BenMAP over time, and EPA. And, you know, one thing I wanted to note is that I very much appreciate the comments of the Board members about the need to have, you know, a diverse screening committee and the importance of having those lived experiences represented on the Committee. And, you know, I obviously don't have that ability to bring that, but what I do bring is the experiences of our research program at EPA, which has really been ramping up to address the twin challenges of climate change and environmental justice. These are priorities that the Biden Administration administrator Regan at EPA have really emphasized and we're trying to reflect that in our scientific programs.

And so we've really been thinking over the last several years about how we can build a program that really embodies that integration of environmental justice and considerations of equity throughout our research programs, which is not just siloed into one area. And I want to bring that same perspective to the way I can interact with

this Screening Committee.

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So I think it's a real opportunity for us to work together, for EPA to work with CARB to be able to leverage the various different research efforts that we have underway with yours and to be able to really think about ways that, where possible, we can -- we can share information, and share data, and share results in ways that enhance our ability at the national level and at the State level to be able to implement effective evidence-based solutions.

One thing I did want to also highlight too is that we have been working very hard to also think about ways to integrate social sciences and natural sciences together to solve problems. And I think that's a perspective that you all share as well based on your most recent Strategic Plan. And I think it's something that I can bring to this because of my background in a wide range of air quality related -- air quality and climate related research, including public health and economics, as well as more traditional air quality related -- it looks like air quality modeling.

So again, I'm Just really excited about working with everyone on this -- on this Committee and we're working with the Board. I did want to note that we also have been doing a lot of work recently with communities

directly. We're building up our ability to do co-production research, so I will bring that perspective as well that I think is really important when thinking about engaging with communities about research is to think about bringing them directly into the research process itself.

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And the last thing I'll note is just on a personal basis, my son lives in Los Angeles -- just outside of Los Angeles in Burbank, and so I have a pretty direct connection to some of the most horrific types of air pollution we see down there. And then also the -- I am very aware and concerned about the growing threats from wildfires and the smoke that they cause. And our program is doing a lot of work in that area. And again, we look forward to working with CARB to try to solve some of these problems. So thank you again for being part of this.

RD AIR POLLUTION SPECIALIST LÓPEZ: Thank you.

And now I would like to call on Dr. Silva to please share your camera.

DR. SAM SILVA: Hi. Thank you all for considering me for this position and for all the work that you put into the detailed interview process. I share -- I share many of the feelings with the past -- with the past speakers, so it's a difficult to act to follow, but I will just say in brief that I'm very, very enthusiastic about

the opportunity to work with CARB. I view it as a very important organization, both locally and nationally. And so any contribution I can make towards the efforts of CARB to address both air quality issues and climate issues is something that is of deep sort of personal interest to me.

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I'm interested in this -- the RSC specifically for both professional and personal reasons. Like many of the other candidates here, I live in southern -- in California. I live in Eastern LA County and I have two young children. And we sometimes play a game with whether or not we can see the mountains, depending on how bad the ozone air quality is in the area. And that -- while it's a cute game to hear a two-year old play, it's often a little bit demoralizing as an air quality scientist of course.

From a professional perspective, the group that I lead at USC is really focused on these big data analytics, these data science and machine learning techniques as applied to atmospheric chemistry and composition. And while I believe that these techniques are very powerful and can do a lot to help us address these environmental crises, there are major issues with these techniques, both from the perspective of robustness and justice and equity in predictions. And this is something that I care deeply about and would look forward to bringing my perspective on

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to the RSC. 1 2 So thank you. RD AIR POLLUTION SPECIALIST LÓPEZ: Thank you, 3 That concludes the opening -- the introductory Chair. 4 remarks on the RSC candidates. Thank you. 5 CHAIR RANDOLPH: Thank you so much. What an 6 impressive group of people. I'm so excited that you're 7 8 going to be participating in this process, and helping us work on these important issues, and really invigorating 9 our research program. So with that, now I will accept a 10 11 motion. BOARD MEMBER BALMES: So I move acceptance of 12 these candidates. 1.3 CHAIR RANDOLPH: Is there a second? 14 BOARD MEMBER HURT: I'll second. 15 16 BOARD MEMBER PACHECO-WERNER: 17 CHAIR RANDOLPH: We have many seconds. (Laughter). 18 19 CHAIR RANDOLPH: Clerk, will you please call the 20 roll. BOARD CLERK GARCIA: Yes. Dr. Balmes? 21 BOARD MEMBER BALMES: Yes. 2.2 23 BOARD CLERK GARCIA: Mr. De La Torre?

BOARD MEMBER DE LA TORRE: Yes.

BOARD CLERK GARCIA: Mr. Eisenhut?

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BOARD MEMBER EISENHUT: Yes.
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             BOARD CLERK GARCIA: Senator Florez?
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             BOARD MEMBER FLOREZ: Florez, aye.
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             BOARD CLERK GARCIA: Ms. Hurt?
             BOARD MEMBER HURT: Ave.
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             BOARD CLERK GARCIA: Mr. Kracov?
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             BOARD MEMBER KRACOV: Yes.
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             BOARD CLERK GARCIA: Dr. Pacheco-Werner?
             BOARD MEMBER PACHECO-WERNER: Yes.
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             BOARD CLERK GARCIA: Mrs. Riordan?
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             BOARD MEMBER RIORDAN: Aye.
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             BOARD CLERK GARCIA: Supervisor Serna?
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             BOARD MEMBER SERNA: Aye.
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             BOARD CLERK GARCIA: Professor Sperling?
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             BOARD MEMBER SPERLING:
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                                     Aye.
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             BOARD CLERK GARCIA: Supervisor Vargas?
             Vice Chair Berg?
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             VICE CHAIR BERG: Enthusiastically --
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             BOARD MEMBER VARGAS: Vargas aye. I'm sorry I
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   couldn't find my mute.
             BOARD CLERK GARCIA: No problem. Thank you.
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             Vice Chair Berg?
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             VICE CHAIR BERG: Enthusiastically and
   gratefully, yes.
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             BOARD CLERK GARCIA: Chair Randolph?
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CHAIR RANDOLPH: Yes. And again, thank you to the Committee member for being willing to serve in this role. It's incredibly important and we really deeply appreciate it.

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Okay. The last item on the agenda is Item number 22-16-4, the 2022 legislative update. If you are here with us in the room and wish to comment on the item, please fill out a request-to-speak card. If you are joining us remotely and wish to comment, please click the raise hand button or dial star nine now and we will call on you when we get to the public comment portion of this item.

CARB and for the state overall, as we saw the passage of many critical bills that will help move the needle on California's climate, air quality, and equity goals. Of particular note is the passage of the Governor's climate package, which includes groundbreaking measures critical to CARB's mission, such as establishing in law a goal of carbon neutrality by 2045, establishing new setback measures, protecting communities from oil drilling, setting the stage for responsible deployment of carbon capture technology, advancing nature-based solutions, and much more.

In addition to the passage of important

legislation, the Legislature also appropriated a historic level of funding to CARB and its sister agencies to support and accelerate the transition of the transportation sector to zero-emission. These investments are aimed at decarbonizing California's most polluting sectors and improving public health.

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The new legislative session that began in December of this year started a little differently with the opening of a concurrent special session requested by Governor Newsom. The purpose of the special session is to consider his price gauging penalty proposal on oil companies and increase State oversight of the gasoline market. This is the first time a Governor has proclaimed a special session in six years.

The support of the California Legislature is critical to CARB's success in ensuring clean air and preventing the worst impacts of climate change. We are excited to sere what comes out of this special session and to continue to work together towards a healthy future for all Californians.

Dr. Cliff, would you please introduce the item. EXECUTIVE OFFICER CLIFF: Thank you, Chair Randolph.

As you mentioned, this legislative session will not only have a significant impact on CARB's mission, but

change the trajectory of the entire state by advancing our climate and air quality goals.

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The climate package commits CARB to several new responsibilities, such as creating a new carbon removal and sequestration program that must be consistent with existing permitting and public health and safety requirements, developing methods for multiple agencies to set targets and track reductions from natural and working lands, approving leak detection and repair plans for oil and gas wells near vulnerable communities, and undertaking a variety of other actions that expand the state's fight against climate change.

Also notable was the passage of SB 1206 by Senator Skinner that provides a critical regulatory framework for transitioning our economy away from reliance on hyper potent hydrofluorocarbons, which have global warming potential thousands of times higher than carbon dioxide.

Assembly Bill 2836 by Assemblymember and Board Member Garcia, among other things, extended fee authority and important policy provisions associated with reducing particulate matter emissions from the Carl Moyer Program.

Finally, as noted by the Chair, the Legislature continues to show its support for the rapid electrification of the transportation sector, by investing

a total of \$3 billion in CARB's incentive programs. These programs are designed to accelerate the transition to zero-emission technologies across a wide range of economic sectors and industries. Given the funding opportunities at both the State and federal levels, we have a once-in-a-lifetime opportunity to leverage both and accelerate the development of clean technology.

I will now ask Nicole Hutchinson of the Office of Legislative Affairs to begin the staff presentation.

Nicole.

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(Thereupon a slide presentation).

LEGISLATIVE ANALYST HUTCHINSON: Thank you, Dr. Cliff.

Good morning, Chair and Members. My name is

Nicole Hutchinson. I work -- and I work in the California

Air Resources Board Office of Legislative Affairs. Today,

I will be providing you an overview of this past year's

Legislative Session.

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LEGISLATIVE ANALYST HUTCHINSON: During today's presentation, I will cover notable legislation, the budget, key bill statistics from the last year, and finally I'll provide an update on the makeup of the Legislature in light of last month's elections and touch on the special session.

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LEGISLATIVE ANALYST HUTCHINSON: It was an eventful session for CARB, most notably for the passage of Governor Newsom's ambitious climate package, proving yet again that California is a global leader in setting aggressive climate policy. Legislation of particular note for CARB in the climate package includes AB 1279, SB 905, AB 1757, SB 1137, and SB 1020, which I will discuss further -- in further detail in the next few slides.

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Assemblymember Muratsuchi establishes a clear, legally binding, and achievable goal for California to achieve statewide carbon neutrality as soon as possible, and no later than 2045, and establishes an 85 percent anthropogenic emissions reductions target as part of that goal. AB 1279 also requires CARB to ensure that the Scoping Plan updates include policies and strategies that would enable carbon dioxide removal solutions and carbon capture — sorry, carbon capture utilization and storage technologies. The climate package and this legislation demonstrates California's commitment to lead on climate policy and achieve net zero greenhouse gas emissions on or before 2045.

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LEGISLATIVE ANALYST HUTCHINSON: The
International Panel on Climate Change and CARB's own
modeling in the 2022 Scoping Plan Update makes it clear
that the carbon capture and sequestration and carbon
dioxide removal will be essential tools for achieving
carbon neutrality. The Legislature has recognized the
long-term need for these projects by adopting SB 905 by
Senator Caballero, which creates the State's first
statutory framework for the use of these technologies,
including requirements for CARB to evaluate projects and
track their deployment.

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Assemblymember C. Garcia is landmark legislation in the Natural and Working lands space, because it is the first statutory requirement for State agencies, led by CNRA, to set targets for natural carbon sequestration and nature-based climate solutions. The targets must be integrated into the Scoping Plan updates and other State policies to support achieving carbon neutrality by 2045. And CARB is also required to develop methods to track emissions and reductions on natural and working lands to facilitate this effort.

CNRA has already started a public solicitation for an advisory committee to support this effort and Dr.

Cliff will be part of that process to approve those committee members.

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LEGISLATIVE ANALYST HUTCHINSON: The Legislature has also recognized that while we transition away from fossil fuels, frontline communities need greater protections from emissions from oil and gas extraction activities. SB 1137 by Senator Gonzalez creates new setback requirements that preclude the development of new oil and gas wells and infrastructure in health protection zones. These zones are defined as areas within 3,200 feet of sensitive receptors such as schools, community centers, and health care facilities. SB 1137 also importantly contains extensive monitoring and leak detection and repair requirements for existing wells within these zones.

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LEGISLATIVE ANALYST HUTCHINSON: SB 1020 by
Senator Laird imparts new vigor into the State's
transition to a clean energy future by establishing
interim renewable and zero carbon energy targets,
including a 90 percent target in 2035 and 95 percent in
2040. This bill will all -- this bill also requires State
agencies to rely on 100 percent renewable energy and zero
carbon resources by 2030 and establishes a Climate and
Equity Trust Fund to address rising electricity rates.

Also, of relevance for CARB, this bill adds to CARB's robust public process by requiring CARB to hold Scoping Plan workshops in federal extreme non-attainment areas with an aim to better engage with minority and low-income communities in the development of this critical plan.

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LEGISLATIVE ANALYST HUTCHINSON: While not technically a part of the Governor's climate package, SB 1206 by Senator Skinner was a critically important piece of climate policy. The bill prohibits the sale of bulk high global warming potential hydrofluorocarbons, commonly called HFCs, over a period of time shown on the slide. The bill also establishes a regulatory framework to transition the State to the use of reclaimed or recycled HFCs, which are powerful short-lived climate pollutants with GWP thousands of times higher that -- than that of carbon dioxide. While CARB already regulates HFCs in new products, HFC equipment often lasts 10 to 20 years, which means there's a need to recover and reuse reclaimed HFCs in existing air conditioning or refrigeration equipment while the market for very low GWP equipment is getting established.

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LEGISLATIVE ANALYST HUTCHINSON: Beyond climate

legislation, the Legislature also put forward its first significant statutory update to the AB 617 Program, a program focused on reducing air pollution at the community level. AB 1749 by Assemblymember C. Garcia requires air districts' annual AB 617 reports to describe how existing Community Emissions Reduction Programs, or CERPs, have been updated to align with the latest AB 617 Blueprint. This provision ensures that CERPS developed during the early years of the program continue to evolve with the latest guidance. Additionally, the bill requires air districts with a population of over one million to post all stationary source permits on their websites.

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the budget. In addition to approving over two dozen of CARB's budget change proposals, the Legislature continued unprecedented levels of investment in CARB's programs and incentives via the appropriation of over \$3 billion just this year. The Budget included \$310M in funding for the AB 617 Community Air Protection program, which includes incentive funding, district ops, and technical assistance to community groups. The budget also included \$150 million for CARB's FARMER Program, \$130 million for CARB's Carl Moyer program, and \$45 million for CARB's F-Gas Reduction Incentive Program and Equitable Building

Decarbonization programs

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The Legislature also approved \$105 million in funding for the production of eight satellites that will enable CARB to monitor and quickly identify methane leaks, with \$5 million of this for technical assistance grants to community-based organizations to support community input and engagement around the methane monitoring data. The data will be made available to the public and lead to enhanced implementation of existing methane regulations.

Additionally, building on last year's investments, the Legislature appropriated -- sorry, appropriated approximately \$2.6 billion as part of the ZEV package, which we'll discuss further on the next slide.

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two budget sessions, Governor Newsom and the California
Legislature agreed to a transformational \$10 billion
investment package over six years to accelerate the
transition of the transportation sector to zero emissions,
with a focus on the communities most impacted by
pollution. These groundbreaking investments are aimed at
improving public health by decarbonizing California's most
polluting sector. The implementation of these funds is a
coordinated effort among the State's air quality,
transportation, energy, and business development agencies.

As you all saw last month with the adoption of the funding plan, CARB received a total of \$2.6 billion in funding this year as a part of the ZEV package. And this funding includes: over a billion dollars to electrify California's school bus fleet which will go a long way to reducing harmful exposure to air pollution for school children; \$381 million in funding for CARB's suite of equity programs, including the Clean Cars 4 All Program, the Clean Vehicle Assistance Program, the Clean Mobility Options program, and the new Zero-Emission Assurance Project.

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The Legislature also appropriated \$600 million for Heavy-Duty and Off-Road Incentive programs, including programs like HVIP and CORE. And in addition to the \$600 million, the Legislature also dedicated \$157 million specifically for drayage trucks, \$70 million for transit buses, \$60 million for commercial harbor craft, and \$53 million for the emerging opportunities program, which funds pilot and demonstration projects.

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LEGISLATIVE ANALYST HUTCHINSON: Additionally, the Legislature also adopted language signaling their intent to provide \$10 million in next year's budget for CARB to assist with what the Legislature called the necessary transition away from the use of hexavalent

chromium. This signal from the Legislature is an important one as CARB staff moves forward with a proposal to amend the Chrome Plating Air Toxic Control Measure to further reduce harmful cancer-causing emissions from chrome plating operations. Staff is expected to present concepts to the Board in January and April of 2023.

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LEGISLATIVE ANALYST HUTCHINSON: In addition to appropriating significant funds in the budget, the Legislature also passed AB 2836 by Assemblymember and Board Member Eduardo Garcia, which extends critical incentive funding for emissions reduction programs administered by both the State and the air districts, including the Carl Moyer Program, the AB 923 program, and other special district funds for air quality related incentive programs.

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the highlights in terms of bills and budget, I want to turn the discussion to key statistics for the last year. In 2022, legislative members introduced over 2,000 bills, and of those, CARB's Office of Legislative Affairs tracked 452 bills and resolutions related to air quality and climate and analyzed 131 of those bills.

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LEGISLATIVE ANALYST HUTCHINSON: In terms of
Legislation analyzed by CARB, unsurprisingly nearly a
third of the bills analyzed related to climate change
policy with introduced bills ranging in objectives from
setting new climate goals broadly, to bills targeting
short-lived climate pollutants, as well as bills targeting
industry specific sources of greenhouse gas emissions.

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The next leading category is incentives. This category includes legislation relating to CARB's multitude of incentive programs, such as the Carl Moyer or the Clean Cars 4 All program, as well as administering requirements to incentive programs funded by the Greenhouse Gas Reduction Fund.

Following incentives, other areas of interest include bills aimed at improving air quality, bills relating to zero-emission vehicle and infrastructure deployment, and energy policy.

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LEGISLATIVE ANALYST HUTCHINSON: As this graph illustrates, the number of bills that the Office of Legislative Affairs tracked and analyzed over the last decade continues to trend upward, with this year breaking our legislative -- or legislation analyzed record. The oscillation that you see generally coincides with the first and second year of the two-year legislative cycle,

with the second year typically having more bills than the first. A full summary of the bills that we tracked can be found on CARB's website using the link included on this slide.

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LEGISLATIVE ANALYST HUTCHINSON: Before I conclude this presentation, it's worth briefly touching on the outcome of the November elections. A combination of redistricting and term limits resulted in 37 of the 120 current legislators leaving their seats. Despite this enormous change in individual representation, ultimately there will be no significant change in the partisan makeup of the Legislature as the Democrats will retain their supermajority status.

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LEGISLATIVE ANALYST HUTCHINSON: Additionally, on December 5th, the Legislature welcomed its new members and opened a special session requested by Governor Newsom to consider a financial penalty on oil companies' excessive profit margins as a way of determining -- deterring price gouging. The special session will run concurrent with the regular session.

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LEGISLATIVE ANALYST HUTCHINSON: The Office of Legislative Affairs relies on close coordination from a

dedicated team, as well as collaboration with staff in every division across CARB. We are incredibly grateful for the support of all CARB staff who make our work possible. Their assistance and expertise are invaluable.

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Thank you for the opportunity to provide an overview of legislative actions from the last year. Our Legislative Director, David Garcia and I are happy to answer any questions you may have.

CHAIR RANDOLPH: All right. Thank you.

Clerk, are there any public comment on this item?

BOARD CLERK GARCIA: No commenters for this item.

CHAIR RANDOLPH: All right. Board members, any

questions or comments.

It looks like nothing on Zoom either, so I think we are ready to -- oh, okay, Vice Chair Berg.

VICE CHAIR BERG: I would just like to say, you know, the Legislative Office often, you know, you're just under radar a lot on the -- on the screen here, but, oh, my gosh, the work that you do, how important it is to have those relationships across the street. It is critical to us being successful. So we certainly appreciate this update. It's -- the amount of work is, as shown on your slide, absolutely is trajecting upwards, and probably the future does not indicate a slow down. So we truly do appreciate your department, everybody's efforts, and you

make us shine, and we really, really want to say thank you. So great job.

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BOARD MEMBER BALMES: And Chair Randolph could I add one little thing, since Vice Chair Berg opened the door? So Ashley Arax is my former student. I hope she's doing well.

LEGISLATIVE DIRECTOR GARCIA: She is. She would have been here today, except she caught some sniffles and didn't want to expose anyone else, but she is listening online.

BOARD MEMBER BALMES: Hope you feel better, Ashley.

CHAIR RANDOLPH: All right. Thank you and thank you Vice Chair Berg. The Legislative office is very critical to our work and they do work really hard. And I also want to give a shout-out to our program staff who has to respond to these really quick frequently last minute urgent requests and gather information and share it with our legislative staff to make -- to make their jobs more effective. So I really appreciate the work of all of the staff in supporting our legislative team and the importance of the work they are doing.

This is an informational item, so we don't need to take a vote or anything. So thank you again for your work and thank you for that summary. I think it was a

really important year for climate action and really appreciate the work of the Governor and the Legislature.

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Okay. Do we have any public comment for items not on the agenda?

BOARD CLERK GARCIA: No commenters.

CHAIR RANDOLPH: Okay. And we do have a couple of Board members who are -- for whom this is their last meeting and we are going to be -- in January, we're going to be in Riverside, so we're going to celebrate Board Member Riordan in Riverside closer to her home, so she can join us in person. But Supervisor Serna, this is also going to be his last meeting and he wanted to say a few words.

be long, but I guess I'll start with just a note of extreme thanks. Start with the staff. As I've mentioned many times before, it's very humbling and it's been an extraordinary experience working with what I sincerely believe to be the most committed and smart people in State service, and I mean that. It's something very special to me that I had this opportunity to be surrounded by this intellectual trust that does the work that they do, that is focused obviously on public health, and addressing the impacts of climate change. And it's just been a very unique opportunity for the last almost 10 years serving on

this Board.

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I do want to thank all of the Board members, past and present, that I've had the great opportunity of serving with. I don't just consider you colleagues, I consider you friends. And I've come to know you personally and admire your dedicated service as well and would hope that we certainly stay in contact. And as you though, I have the shortest commute to these meetings -- (Laughter).

BOARD MEMBER SERNA: -- with my office just two blocks away. And so it probably shouldn't shock you that I'll be checking in once in awhile, either maybe in person, but, you know, certainly over CAL-SPAN.

And I do want to also extend my thanks to our former Chair, Mary Nichols. She -- I consider her a mentor and she entrusted me with a couple of very specific initiatives during her tenure, while I was on the Board serving with her. And Rajinder actually mentioned one earlier in terms of the racial equity resolution. And also working closely as a conduit from this Board to the EJAC, I think it was actually during the last Scoping Plan update.

You know, I don't want to say too much more, because I know that there's going to be some mention of both Member Riordan's and my presence and service on this

Board. But it is very, very special to me that I've had the opportunity to serve not with the -- not just with the people, but in this building that bears my late father's name, Joe Serna, Jr., who was our Mayor here in the City of Sacramento. And you know, not a lot of people can say that, so that's always been a very special part of the service here.

Of course, I want to thank Governor Brown for appointing me and past Assembly Member and my predecessor on the Board of Supervisors, Roger Dickinson who actually carried the legislation to add a -- to finally add a Sacramento region dedicated member to represent the five air districts in this part of California. So it's also been an honor to be kind of the first to do that.

And again, I just want to just make sure people understand how people here understand how much I have appreciated your friendship. And to all the administrative staff, Tracy and Evan, and all those that do so much to make these meetings run and function very smoothly, I want to send my thanks to you too.

So I appreciate the few minutes Madam Chair to say these words. But because I won't be able to join my colleagues and staff in Riverside, I thought I'd be remiss if I didn't put these -- make note of how grateful I am.

Thank you

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CHAIR RANDOLPH: Thank you.

Board Member De La Torre.

BOARD MEMBER DE LA TORRE: This is not great.

(Laughter).

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BOARD MEMBER BALMES: I second that.

BOARD MEMBER DE LA TORRE: Phil is a true public servant. He didn't have to do this. You know, he's got plenty to do as a supervisor two blocks away, but he is --there's no ulterior motive. There's no BS. Very straightforward. He believes what he believes and that's it. And there's no horse trading, none of the negative connotations of a politician. And to me that's the bar is are you a public servant or are you a politician, because there's plenty of the latter. And what I found with Phil, as a former elected official, is that he is very much a public servant and willing to sacrifice things, self-interest in terms of the region he represents for the good of the state of California.

And it's really hard for people in this kind of a setting to set aside their outside role and come here and be a policymaker, not an advocate, a policymaker, for the people of California. And I never ever doubted for a second what Phil was here to do, that he was here to make as good policy as can be made for the people of California.

So for that, I'm sorry to see you leave, but thank you.

BOARD MEMBER SERNA: Thank you CHAIR RANDOLPH: Dr. Sperling.

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BOARD MEMBER SPERLING: Yeah, I want to add to what Hector just said, you know, exactly. You know, I've been on the Board -- I've overlapped with Phil the whole time he's been on the Board. And it's just -- I've just come to admire Phil so much. It really is a huge loss to us. I mean, he's got -- you know, to play off of the idea of politician, he's not here to, you know, promote himself, to just draw attention. He really contributes where he has something to contribute. He's -- I should point out he's got such a big part. He does so many things outside that are so -- you know, so impressive. Great musician on top of that. And, you know, he's brought a perspective to the Board, you know, in terms of local government, regional, some of the issues there that we don't always fully appreciate. So Phil has just been one of the best Board members we've had and I am so sad that he's leaving. But thank you, Phil. You've been great and it's been wonderful serving with you.

BOARD MEMBER SERNA: Thank you.

CHAIR RANDOLPH: Dr. Pacheco-Werner.

You're muted.

BOARD MEMBER PACHECO-WERNER: Can you hear me? 1 2 CHAIR RANDOLPH: Yes, now we can hear you. BOARD MEMBER PACHECO-WERNER: Sorry. I just 3 really want to thank Supervisor Serna for your help being 4 I know I only got to meet you a short time, 5 on the Board. but really, really thankful for everything that you've 6 7 done and just a pleasure. And I wish you the best and 8 thank you for your service to all of the things that you do. Thank you. 9 BOARD MEMBER SERNA: 10 Thank you. CHAIR RANDOLPH: All right. Dr. Balmes. 11 BOARD MEMBER BALMES: I'll be brief. Thank you, 12 Mr. Bassman. 1.3 14 (Laughter). 15 BOARD MEMBER SERNA: Thank you. 16 CHAIR RANDOLPH: Vice Chair Berg.

VICE CHAIR BERG: Thank you, Phil. We got to work together on some of those key projects. It has just been a delight. I echo all of my colleagues' comments and delighted that we will end our friends and look forward to the next unsupervised performance.

(Laughter).

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VICE CHAIR BERG: So enjoy the holidays and we'll have lunch. Thanks.

BOARD MEMBER SERNA: Great. Thank you.

CHAIR RANDOLPH: Board Member Riordan.

BOARD MEMBER RIORDAN: Yes. I just want to say thank you to Supervisor Serna, because he was sort of my colleague in always reminding the Board about the differences between the very large air pollution control districts and those of us who live in the more rural smaller air pollution control districts, and how our rules sometimes don't fit every air pollution control district equally. So I shall miss him very much and wish him the best and hope that he does remain a resource for the Board.

BOARD MEMBER SERNA: Thank you, Barbara.

CHAIR RANDOLPH: Okay. And I'll just add that like -- I think Board Member De La Torre said it perfectly, this is not great.

(Laughter).

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Very much and your sort of wise counsel and participation on this Board. And the people of the County of Sacramento are so incredibly fortunate to have you as their supervisor. And we will miss you very, very much on this Board, and -- but I know you have a lot to do and a lot to give to the people of Sacramento, so I really appreciate working with you these last few years.

BOARD MEMBER SERNA: Thank you, Chair.

CHAIR RANDOLPH: All right. On that note, I think we are ready to adjourn and we will -- I wish you all a Happy Holidays and we will see you in January. Thank you. (Thereupon the Air Resources Board meeting adjourned at 9:53 a.m.)

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 5th day of January, 2023.

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James 4 Patter

JAMES F. PETERS, CSR

Certified Shorthand Reporter

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