MEETING

STATE OF CALIFORNIA
AIR RESOURCES BOARD

ZOOM PLATFORM

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

BYRON SHER AUDITORIUM

1001 I STREET

SACRAMENTO, CALIFORNIA

THURSDAY, JANUARY 25, 2024 9:03 A.M.

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

APPEARANCES

BOARD MEMBERS:

Liane Randolph, Chair

John Balmes, MD

Hector De La Torre

John Eisenhut

Dean Florez

Eric Guerra

Davina Hurt

Gideon Kracov

Tania Pacheco-Werner, PhD

V. Manuel Perez

Cliff Rechtschaffen

Susan Shaheen, PhD

Senator Henry Stern

Diane Takvorian

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 & Mobile Source Compliance

APPEARANCES CONTINUED

STAFF:

Edna Murphy, Deputy Executive Officer, Internal Operations
Rajinder Sahota, Deputy Executive Officer, Climate Change
and Research

Sydney Vergis, PhD, Deputy Executive Officer, Mobile Sources & Incentives

Ellen Peter, Chief Counsel

Analisa Bevan, Assistant Division Chief, Mobile Source Control Division (MSCD)

Banpreet Bhambra, ZEV Infrastructure Section, Sustainable Transportation and Communities Division (STCD)

Joshua Cunningham, Vehicle Program Specialist, STCD

Caitlin Greenway, Staff Air Pollution Specialist, STCD

Jennifer Gress, Division Chief, STCD

Diane Kiyota, Senior Attorney, Legal Office

Andrew Martinez, Manager, ZEV Infrastructure Section, STCD

Lys Mendez, Communications Director, Chair's Office

Andrea Morgan, Staff Air Pollution Specialist, MSCD

Margaret Sanchez, Information Officer II, Chair's Office

Annalisa Schilla, Assistant Division Chief, STCD

ALSO PRESENT:

Ricardo Alvarado

Leslie Austin, Let's Green CA!

Robert Barrosa, Electrify America

Sara Baumann, Port of Long Beach

APPEARANCES CONTINUED

ALSO PRESENT:

Maureen Blanc, Charge Across Town

Mary Matteson Bryan, MMB Engineering

Piet Canin, Ecology Action

Wendy Chou, Acterra: Action for a Health Planet

Carleen Cullen, Cool the Earth

Sarah Deslauriers, California Association Sanitation Agencies

Emily Dilger, Ignited

Sean Edgar, Cleanfleets.net

Elena Engel, 350 Bay Area

William Forsythe

Laura Rosenberger Haider

Stephen Israel, BTC Power

Steve Jepsen, Clean Water SoCal

Tom Knox, Valley Clean Air Now

Munni Krishna, Veloz

Julia Levin, Bioenergy Association of California

Amy Lilly, Mercedes-Benz

Cameron Lind

Jerome Mayfield

Ralph Megna

Frank Meza, BTC Power

APPEARANCES CONTINUED

ALSO PRESENT:

Kevin Morrison, Above the Beehive

Jim O'Leary, NFI

Maria Perez, Regeneración - Pajaro Valley Climate Action

Brenna Rivett, EVHybridNoire

Kaia Robinson, Los Angeles Cleantech Incubator

Michele Robinson

Vanessa Rodriguez

David Rothbart, Clean Water SoCal

Savannah Saunders, Indivisible Ross Valley

David Silberfarb, BTC Power

Susan Smith, SeaHold, LLC

Eric Way, News Coulomb

Kyle Williams, Electrify America

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1

PROCEEDINGS 1 2 CHAIR RANDOLPH: Good morning. The January 25th, 2024 public meeting of the California Air Resources Board 3 will come to order. 4 Board clerk, please call the roll. 5 BOARD CLERK GARCIA: Dr. Balmes? 6 BOARD MEMBER BALMES: Here. 7 8 BOARD CLERK GARCIA: Mr. De La Torre? BOARD MEMBER DE LA TORRE: Here. 9 BOARD CLERK GARCIA: Mr. Eisenhut? 10 BOARD MEMBER EISENHUT: Here. 11 BOARD CLERK GARCIA: Senator Florez? 12 BOARD MEMBER FLOREZ: Here. 13 BOARD CLERK GARCIA: Assemblymember Garcia? 14 Ms. Guerra? 15 16 BOARD MEMBER GUERRA: Here. BOARD CLERK GARCIA: Ms. Hurt. 17 BOARD MEMBER HURT: Here. 18 BOARD CLERK GARCIA: Mr. Kracov? 19 20 BOARD MEMBER KRACOV: I'm here. I'm just landing on the airplane and I'll be in the Board member as soon as 21 2.2 I can, hopefully before 10. BOARD CLERK GARCIA: Noted. Thank you. 23 Dr. Pacheco-Werner? 24 25 Supervisor Perez?

2

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BOARD MEMBER PEREZ:
                                  Here.
1
             BOARD CLERK GARCIA: Mr. Rechtschaffen?
2
             BOARD MEMBER RECHTSCHAFFEN:
 3
             BOARD CLERK GARCIA: Dr. Shaheen?
             BOARD MEMBER SHAHEEN:
 5
                                     Here.
             BOARD CLERK GARCIA: Senator Stern?
 6
             Ms. Takvorian?
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8
             BOARD MEMBER TAKVORIAN:
                                       Here.
             BOARD CLERK GARCIA: Supervisor Vargas?
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             BOARD MEMBER VARGAS: Vargas here.
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             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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14
    quorum.
             CHAIR RANDOLPH:
                              Thank you.
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                                           Okay.
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             So we are going to start with our housekeeping
            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.
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             Anyone who wishes to testify in person should
    fill out a request-to-speak card available in the foyer
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    outside the Board room. Please turn it into a Board
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    assistant prior to the commencement of the item.
   are participating remotely, you will raise your hand in
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Zoom or dial star nine, if calling in by phone. The Clerk

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will provide further details regarding how public participation will work in just a moment.

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For safety reasons, please note the emergency exit 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.

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.

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 interpretation 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

commenters to speak slowly and pause intermittently to allow the interpreters the opportunity to accurately interpret your comments.

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THE INTERPRETER: Thank you, Madam Chair. I'll now -- I will now repeat the same instructions for your Spanish speaking audience.

(Interpreter translated in Spanish).

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

CHAIR RANDOLPH: Thank you, Chair Randolph.

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

BOARD CLERK GARCIA: Thank you, Chair Randolph.

Good morning, everyone. 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 we will be calling on commenters who are joining us remotely. If you are joining us remotely and wish to make a verbal comment on one of today's Board items or during the open comment period at the end of today's meeting, you must 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.

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To make a verbal comment, we will be using the raise-hand feature in Zoom. And 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 hands. 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.

And for anyone giving your verbal comments today in Spanish and requiring 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. 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 to testify.

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We will have a time limit for each commenter and we'll begin the comment period with a two-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.

And 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 item.

And if you experience any technical difficulties, please call (805)772-2715 so that an IT person can assist.

Thank you. I'll turn it back to Chair Randolph now.

2.2

CHAIR RANDOLPH: All right. Thank you. The first item on the agenda is item number 24-1-1, proposed 2023 amendments to area designations for State ambient air quality standards. If you are here with us in the room and wish to comment on this item, please fill out a request-to-speak card as soon as possible and submit it to a Board assistant. If you are joining us remotely and wish to comment on this item, please click the raise hand button or dial star nine now. We will first call on in-person commenters followed by any remote commenters when we get to the public comment portion of this item.

Dr. Cliff, will you please summarize this item.

EXECUTIVE OFFICER CLIFF: Thank you, Chair

Randolph.

State law requires CARB to annually review and update the area designations for the State ambient air quality standards as appropriate. Therefore, based on a review of 2020 through 2022 air quality data, staff is proposing amendments to existing area designations for ozone, hydrogen sulfide, and fine particulate matter or PM2.5.

For ozone, staff recommends the Board redesignate Lake Tahoe air basin, Amador, Calaveras, and Placer

counties in the Mountain Counties Air Basin; Butte,
Sutter, and Yuba counties in the Sacramento Valley Air
Basin; and San Francisco Bay Area Air Basin from
nonattainment to nonattainment transitional.

Additionally, for hydrogen sulfide, staff recommends the Board redesignate Riverside County in the Salton Sea Air Basin from unclassified to nonattainment.

Finally, for PM2.5, staff recommends the Board redesignate Butte County in the Sacramento Valley Air Basin from nonattainment to attainment.

In summary, these changes reflect the current air quality in these areas and staff recommends approval of the proposed changes to the state area designations. This concludes my summary of the item.

Thank you.

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CHAIR RANDOLPH: Thank you.

We will now hear from the public who signed up to speak on this item, either by submitting a

19 request-to-speak card or by a raised hand in Zoom.

Board Clerk, do we have public comment on this item?

BOARD CLERK GARCIA: We have no commenters for this item.

CHAIR RANDOLPH: Okay. I will now close the record on this agenda item.

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The Board has before them resolution number 24-1.
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    Do I have a motion and a second for this resolution?
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             BOARD MEMBER HURT: Move approval.
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             BOARD MEMBER BALMES:
                                   Second.
             CHAIR RANDOLPH: All right. Clerk, would you
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   please call the roll.
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             BOARD CLERK GARCIA: Dr. Balmes?
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             BOARD MEMBER BALMES: Yes.
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             BOARD CLERK GARCIA: Mr. De La Torrre?
             BOARD MEMBER DE LA TORRE: Yes.
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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: Aye.
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             BOARD CLERK GARCIA: Mr. Guerra?
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             BOARD MEMBER GUERRA: 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?
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             BOARD MEMBER KRACOV: Yes.
             BOARD CLERK GARCIA: Dr. Pacheco-Werner.
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             BOARD MEMBER KRACOV: Yes. Yes.
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             BOARD MEMBER PACHECO-WERNER: Yes.
             BOARD CLERK GARCIA: Noted. Thank you.
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             Supervisor Perez?
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BOARD MEMBER PEREZ: Yes.
1
             BOARD CLERK GARCIA: Mr. Rechtschaffen?
2
             BOARD MEMBER RECHTSCHAFFEN:
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             BOARD CLERK GARCIA: Dr. Shaheen?
             BOARD MEMBER SHAHEEN:
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                                    Ave.
             BOARD CLERK GARCIA:
                                  Ms. Takvorian?
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             BOARD MEMBER TAKVORIAN:
7
                                      Yes.
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             BOARD CLERK GARCIA: Supervisor Vargas?
             BOARD MEMBER VARGAS: Vargas yes.
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             BOARD CLERK GARCIA: Chair Randolph?
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             CHAIR RANDOLPH: Yes.
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             BOARD CLERK GARCIA: Madam Chair, the motion
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   passes.
             CHAIR RANDOLPH: All right. Thank you.
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             The next item on the agenda is Item number 24-1-2
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    to consider approval of Electrify America's proposed cycle
    4 zero-emission vehicle, or ZEV, investment plan.
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             If you are here with us in the room and wish to
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    comment on this item, please fill out a request-to-speak
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    card as soon as possible and submit it to a Board
    assistant. And if you are joining us remotely and wish to
21
    comment, please click the raise hand button or dial star
2.2
23
   nine now. We will first call on in-person commenters
    followed by any remote commenters when we get to the
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public comment portion of this item.

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For this item, we will be hearing about Electrify America's draft cycle 4 ZEV investment plan and staff's assessment of how well it aligns with the requirements set forth in appendix C of the Volkswagen 2.0 liter partial consent decree, to goals of Senate Bill 92, and Board resolutions 17-23, 18-54, and 21-14.

2.2

A growing ZEV market is essential for California to achieve our climate and public health goals. Electrify America's investments represent an important opportunity to enable widespread ZEV adoption in use.

The need to expand the fueling and charging network for ZEVs with reliable and accessible stations as well as to ensure consumer awareness about the benefits of ZEVs is significant. Executive Order B-48-18 sets a goal of 250,000 chargers including 10,000 fast chargers in California by 2025. With almost 94,000 EV chargers in California today, the State is still far from that goal. Additionally, with the Advanced Clean Cars II regulation setting the course to 100 percent ZEV sales by 2035, it's critical that we accelerate the deployment and maintenance of reliable ZEV fueling infrastructure well beyond the 2025 Executive Order goal for chargers.

Electrify America's investment in the cycle 4 plan intends to expand California's ZEV fueling infrastructure and importantly increase the overall

performance of the network helping to fill a critical gap in California's infrastructure needs and support our fast growing ZEV market.

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In addition to having adequately and reliable infrastructure, equitable access to ZEVs will be necessary for a successful transition to zero-emission transportation. And to that end, the proposed plan continues its commitments to ensure that at least 35 percent of its investments benefit low-income or disadvantaged communities. And Electrify America proposes to work closely with equity stakeholders and others to expand outreach and education.

I look forward to hearing much more about Electrify America's proposals to support an equitable transition and to ensure that its network remains accessible and reliable.

After the staff presentation, we have the opportunity to hear from Electrify America's President and CEO Rob Barrosa. And following public comment, we will consider a resolution to approve or disapprove in whole or in part the cycle 4 plan.

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

I'm pleased to introduce Electrify America's

cycle 4 zero-emission vehicle investment plan, which describes how Electrify America will invest its fourth and final \$200 million installment to fulfill the requirements of appendix C of the two liter partial consent decree.

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Appendix C of the two liter partial consent decree, also referred to as the ZEV investment commitment, is one component of Volkswagen's settlement with CARB resulting from the use of illegal defeat devices in VWs two and three liter diesel engines. The ZEV investment commitment requires VW to invest \$800 million in California over four consecutive 30-month periods to increase the availability and use of ZEVs. These investments will support ZEV adoption and raise ZEV awareness in California.

Eligible projects include ZEV charging and fueling infrastructure, brand neutral consumer awareness campaigns to increase ZEV awareness and grow the ZEV market and projects that will increase access to ZEVs for all Californians, including those in low-income and disadvantaged communities.

Today' presentation to the Board summarizes key provisions of the cycle 4 plan and provides an assessment of how well the plan aligns with the requirements set forth in appendix C of the partial consent decree, and the goals of Senate Bill 92 and Board resolutions 17-23,

18-54, and 21-14. It also highlights comments received during the public comment period established for this item.

I will note for the Board that the approval or disapproval can be in whole or in part and is limited to whether or not it meets the requirements of the consent decree SB 92 and past Board resolutions that provide guidance for Electrify America to consider in developing their plan, but do not serve as the basis for approval or rejection. Nevertheless, staff analyzed the extent to which the proposed cycle 4 plan is consistent with this guidance.

I will now ask Banpreet Bhambra of the Sustainable Transportation and Communities Division to begin the staff presentation.

Banpreet.

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(Thereupon a slide presentation).

STCD AIR RESOURCES ENGINEER BHAMBRA: Thank you, Dr. Cliff.

Good morning, Chair Randolph and members of the Board. Today, I will summarize Electrify America's proposed cycle 4 zero -- today, I will summarize Electrify America's proposed cycle 4 zero-emission vehicle investment plan as well as staff's assessment of the plan.

Next slide, please.

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presentation, I will first provide background on the Volkswagen diesel enforcement settlements that established the requirements for this investment plan. I will then provide an update on progress implementing investments for the first three cycles as directed by the Board when adopting the plans for cycles 1, 2, and 3. Following that background, I'll provide a summary of Electrify America's proposed cycle 4 plan and provide staff's assessment of how the proposed cycle 4 plan aligns with the requirements of the settlement agreements and is consistent with other guidance previously provided by the Legislature and the Board.

Finally, I'll review staff's recommendation to approve the proposed cycle 4 plan by adopting Board resolution 24-2, which among other actions, directs Electrify America to achieve uptime reliability that is consistent with industry standards

Following my presentation, Mr. Robert Barrosa, CEO and President of Electrify America, will provide a presentation to the Board.

Next slide, please.

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STCD AIR RESOURCES ENGINEER BHAMBRA: Why is this

plan before you today?

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In 2015, CARB discovered that Volkswagen had installed emission defeat devices on nearly 600,000 Volkswagen, Audi, and Porsche diesel vehicles sold in the United States. Approximately 85,000 of these vehicles were sold in California. The resulting settlement is comprise of the two liter engine, the three liter engine, and the California-only three liter partial consent decrees, as well as a California-only civil penalty agreement of approximately \$154 million.

The two liter partial consent decree is comprised of appendices A, B, C and D. Appendix A prescribes the requirements for buybacks of Volkswagen vehicles, while appendix B prescribes requirements for recall and repair of Volkswagen vehicles for consumers who did not wish to sell their vehicle back to Volkswagen. Appendix C is the Volkswagen ZEV investment commitment, which requires Volkswagen to invest \$800 million over ten years in California. And finally, appendix D provides CARB \$423 million to mitigate the past excess nitrogen oxide emissions from the sale of Volkswagen diesel vehicles equipped with emission defeat devices to California consumers.

The total settlement funding for California amounts to approximately \$1.4 billion. This presentation

focuses on Appendix C, the ZEV investment commitment.

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STCD AIR RESOURCES ENGINEER BHAMBRA: This slide illustrates the overall framework for investments under Appendix C, the ZEV investment commitment. Volkswagen must invest \$800 million in California over 10 years. The goal of the ZEV investment commitment is to increase the availability and the use of ZEVs in the State. Allowable investments -- investment categories include: ZEV infrastructure; public education and outreach that builds and increases awareness of ZEVs; ZEV access projects that increase exposure to ZEVs without making consumers purchase or lease a ZEV such as car sharing; and lastly, green city investments in two cities. Volkswagen created a subsidiary, Electrify America to implement these investments.

Next slide, please.

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STCD AIR RESOURCES ENGINEER BHAMBRA: The consent decree requires that the 10-year ZEV investment commitment be implemented in four 30-month cycles. For each cycle, Electrify America submits to CARB and investment plan that identifies what they intend to invest in, a projection of creditable costs, and how investments meet the goals of

the consent decree among other things.

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Electrify America is currently implementing its cycle 3 plan approved by the Board in June 2021. Once the Board approves the cycle 4 plan, Electrify America may begin investments identified in the plan.

Next slide, please.

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getting into the cycle 4 plan, let's talk about progress to date implementing the plans for the first three investment cycles. From this table, you can see that a majority of the approved investments have been allocated for ZEV infrastructure and the two green cities.

Electrify America also invested a significant amount into public education, outreach and marketing activities, and ZEV access through activities like ride and drives, car share services, as well as branded marketing to drive station utilization.

Electrify America's annual report indicates that cycle 3 investments are reasonably on track for completion. A third-party audit reveals that cycle 3 investments meet the requirements of the consent decree and all approved investments will be completed by the end of cycle 3.

Pursuant to previous Board resolutions, CARB

staff also convened a virtual stakeholder public meeting on August 16th, 2023 to receive public comments on progress implementing the plans.

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STCD AIR RESOURCES ENGINEER BHAMBRA: This graphic displays the status of Electrify America's ultra-fast chargers in California. As you can see, 1,093 chargers are operational, another 52 chargers have construction complete, 62 chargers have permits complete or are in construction, and 48 chargers have permits submitted. Electrify America has stated that more than 50 percent of the total chargers in each stage of the development process are in low-income and disadvantaged communities. This exceeds the commitment Electrify America made in previous Board resolutions to strive to ensure that at least 35 percent of its investments benefit low-income or disadvantaged communities.

Next slide, please.

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STCD AIR RESOURCES ENGINEER BHAMBRA: Moving to the green city investments. As part of cycle 1, Electrify America invested in the first green city in Sacramento, which brought charging stations, car share programs, and electric transit services to the city. The GIG free-float

or point-to-point car share fleet in Sacramento and the Envoy Multi-Unit Dwelling car share program operated in the Sacramento area from Q1 2019 until Q2 2023.

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Electrify America continues to work with the Sacramento Regional Transit and Yolo County Transportation District on the Causeway Connection, which is an electric bus service linking the University of California, Davis to downtown Sacramento, and the UC Davis Medical Center. Through this effort, Electrify America provided 12 Proterra E2 Catalyst electric transit buses and charging infrastructure.

Electrify America also continues to work with Sac RT and the Franklin Neighborhood Development Corporation to develop on-demand micro-transit shuttle bus service long Franklin Boulevard using two GreenPower EV Star shuttles -- two GreenPower EV Star shuttles.

As part of cycle 3, Electrify America invested in the second green city, which is in the Long Beach and Wilmington area, and primarily focused on zero-emission freight. Electrify America announced dedicated chargers at the Port of Long Beach with additional chargers to be installed at a nearby facility to support electric trucks. In June 2023, Electrify America broke ground on construction of 38 balanced fleet chargers and 4 megawatt battery energy storage systems to support 70 plus electric

trucks in drayage operations within the City of Ontario, which support operations at the Port of Long Beach. In May 2023, construction began on the 14 power balanced fleet chargers to support 60 electric trucks and drayage operations within the City of Rialto.

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STCD AIR RESOURCES ENGINEER BHAMBRA: With that background, let's move to Electrify America's proposed cycle 4 plan. The cycle 4 process began with Electrify America presenting CARB a straw man proposal of investment ideas for the plan. CARB staff provided feedback on ideas and budget allocations. Electrify America then submitted to CARB a confidential draft version of the cycle 4 plan. This provided CARB an additional opportunity to provide comments on the draft cycle 4 plan.

CARB also held a public meeting on August 16th, 2023, as noted in the prior slide, which also helped inform the plan. Following this input from the CARB and the public, Electrify America submitted to CARB and publicly posted the proposed cycle 4 plan on October 20th, 2023. With the posting of the cycle 4 plan, CARB opened a public comment docket on October 24th through November 7th to solicit comments on the cycle 4 plan.

CARB staff reviewed and evaluated the cycle 4

plan for compliance with the consent decree and consistency with SB 92 and Board resolutions. This analysis was summarized in the staff plan analysis, which was publicly released on January 11th. Today, staff is now presenting the cycle 4 plan for Board approval at the this meeting.

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STCD AIR RESOURCES ENGINEER BHAMBRA: Now, I will turn to summarizing Electrified America's proposed cycle 4 investment plan. The proposed cycle 4 plan would fund the following project categories in approximately the following amounts: \$172 million for fueling infrastructure - this includes \$91 million for new stations including operations and maintenance for those stations and \$81 million to upgrade existing stations, including operation, maintenance, and demand charges for those stations; \$5 million for ZEV awareness and education; \$3 million under the category of ZEV access for branded marketing that drives station utilization; and \$20 million for allowable operational expenses.

Let's take a closer look at these proposed investments.

Next slide, please.

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STCD AIR RESOURCES ENGINEER BHAMBRA: The largest piece of infrastructure spending \$91 million is to expand the charging network by increasing the number of charging stations and the geographic coverage of the fast-charging network in California. The \$91 million includes funding for operation and maintenance for the new stations installed during cycle 4. Expanding the network will be critical to supporting the growth of ZEVs we expect to see in the coming years due to the Advanced Clean Cars II regulations.

2.2

Electrify America will continue to invest in nine previously approved metropolitan areas from cycles 1, 2, and 3, and will expand to six additional metropolitan areas, El Centro, Merced, Modesto, Redding,

Vallejo-Fairfield, and Yuba City. On the right side of the slide are maps pulled from Electrify America's cycle 4 plan, which visually describe the minimum and maximum number of chargers that will go into each metropolitan area. The highest charger installation is in Los Angeles with up to 140 chargers estimated, while San Francisco Bay Area, San Diego, and Riverside counties could get up to 100. The rest of the metropolitan areas could receive between 10 and 60 chargers.

The key takeaway here is that this investment built on its previous investments in key markets while

also expanding to new areas. Furthermore, based on Electrify America's investments to date, we expect that a significant percentage of these stations will be in low-income and disadvantaged communities.

Next slide, please.

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STCD AIR RESOURCES ENGINEER BHAMBRA: The second largest piece of the infrastructure investment, \$81 million, is to upgrade existing sites. This investment amount is a combination of capital expense for charger replacement and operational and maintenance expenses related to increasing reliability. Electrify America has acknowledged the need to improve reliability of stations and the overall customer experience.

Accordingly, they are investing significantly more of their infrastructure investment to upgrade old stations relative to past cycles. Electrify America has established metrics to determine which sites will be eligible for upgrades, including the age of the charger, utilization, uptime performance, number and type of work orders for the station, customer feedback of the station, location on key travel routes, parts availability for the station, and service ability.

The chargers at these sites will be -- will be replaced with Electrify America's current gen 4 ultra-fast

chargers that are capable of delivering 350 kilowatts.

According to Electrify America, the gen 4 technology has improved reliability and allows for remote monitoring and repairs of some issues.

Within the station upgrades, Electrify America also proposes to remove the CHAdeMO charger, which can only deliver up to 50 kilowatts and replace it with a CCS charger, if there is another CHAdeMO charger within five miles of the Electrify America site.

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STCD AIR RESOURCES ENGINEER BHAMBRA: In recognition of the reliability challenges, Electrify

America has significantly expanded its maintenance plan relative to past investment plans. This slide highlights the key elements of its maintenance plan. These actions would apply to all stations including those built in previous cycles and those upgraded or installed with cycle 4 funds.

I will highlight a few items that could be particularly useful to ensure chargers are well maintained and operational: recurring preventative maintenance checks by conducting on-site visits periodically and continued quality assurance maintenance is conducted to identify any unreported issues.

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STCD AIR RESOURCES ENGINEER BHAMBRA: I'll turn now to Electrify America's proposed spending for ZEV education and outreach as well as for ZEV access.

Electrify America proposed to invest \$5 million in a number of programs to ensure that the benefits of zero-emission transportation and charging are socially responsible and accessible to all. As part of the fourth cycle, Electrify America has committed to support the California Workforce Development Science, Technology, Engineering and Mathematics Program, a Veloz "Electric For All" sponsorship, the California ZEV Equitable Access Program, and the California Membership and Sponsorship Program.

The ZEV Equitable Access Program will provide community-based organizations with funds to further education and awareness within California's low-income or disadvantaged communities. Electrify America proposes to engage with the CARB ZEV Equity Task Force to develop program requirements, which would be included in a Request for Proposal to select partners to implement the program.

The ZEV Equity Task Force is a task force established by CARB to help implement Board's direction when adopting Advanced Clean Cars II to bring stakeholders

together to identify programs and projects to ensure equitable access to zero-emission transportation.

Electrify American also proposes to invest \$3 million to use branded marketing to boost station utilization and educate consumers about the network.

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STCD AIR RESOURCES ENGINEER BHAMBRA: Staff completed an assessment of the proposed cycle 4 ZEV investment plan for compliance with the requirements in appendix C introduced earlier in this presentation. The cycle 4 plan meets the requirements of the consent decree. This slide highlights the key requirements. Some of the highlights include that it expanded the geographic reach of the network, thereby increasing access for more communities. The plan addresses maintenance. And Electrify America is planning to maintain its investments for the required 10 years. Infrastructure plans include all necessary geographic specifications, charger details, and plan data collection.

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STCD AIR RESOURCES ENGINEER BHAMBRA: Staff's assessment also considered the proposed plan's consistency with guidance provided in Senate Bill 92. In June 2016,

the Legislature passed SB 92, which set out a number of procedural requirements that CARB must follow and substantive direction to Electrify America.

In general, SB 92 focused on increasing transparency regarding the approval and implementation of the plans and it directed Electrify America to strive to ensure that at least 35 percent of its investments benefit low-income and disadvantaged communities. Electrify America's plan is consistent with the requirements of SB 92.

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STCD AIR RESOURCES ENGINEER BHAMBRA: Staff's assessment of the proposed cycle 4 plan also included consistency with guidance provided in previous Board resolutions 17-23, 18-54, and 21-14. The Board adopted these resolutions when approving Electrify America's cycles 1, 2, and 3 plans respectively. The plan is consistent with the resolutions.

Of note, the plan strives to ensure that at least 35 percent of investments benefit low-income and disadvantaged communities. It includes job creation and training estimates, especially minority, women, and veteran-owned businesses, and it provides hiring opportunities for qualified residents of disadvantaged

communities. And Electrify America has provided evidence that projects -- that projects will be executed in manners that ensure investments are self-sustaining and continue to exist after the 10-year period of the ZEV investment commitment.

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STCD AIR RESOURCES ENGINEER BHAMBRA: CARB will continue to monitor implementation by ensuring receipt of quarterly and annual reports from Electrify America and ensuring that the public reports continue to be publicly posted. CARB will report annually to the Legislature and the Board.

Finally, as required by the consent decree, an independent third-party auditor will continue to provide annual reports to CARB and will: review Electrify

America's implementation and accounting records; conduct select on-site audits; and review all expenses and recommend approval of only those that are found to be creditable.

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STCD AIR RESOURCES ENGINEER BHAMBRA: In conclusion, CARB staff recommends that the Board adopt Resolution 24-2 approving Electrify America's proposed

cycle 4 ZEV investment plan. Approval of the plan will allow Electrify America to commence the investments its plans, providing benefits to California's air quality, climate, and current and future ZEV drivers. The Board resolution always directs Electrify America to strive to ensure that at least 35 percent of its investments are in low-income or disadvantaged communities, and to achieve uptime reliability that has consistency with industry standards, such as those required by the National Electric Vehicle Infrastructure Program, or NEVI.

This concludes my presentation.

Thank you.

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EXECUTIVE OFFICER CLIFF: Thank you, Banpreet.

I would now like to introduce Mr. Robert Barrosa, President and CEO of Electrify America, to address the Board. It's helpful to have the leadership from Electrify America here in person to provide their perspective and be on hand to answer your questions.

(Thereupon a slide presentation).

ROBERT BARROSA: Okay. Perfect. So first off, thank you very much for giving me the opportunity to speak on behalf of Electrify America. I've been with the company since about 2018 -- early 2018 and held various positions. In June of last year, I was asked to take the leadership role as CEO and President of the company. I'm

a native Californian, born and raised in Southern

California in Los Angeles County. I grew up in South Gate

California right off the 710 freeway. I still live in the

San Gabriel Valley. And I know how important, living in

these communities, air quality is, so I want to thank the

Board and CARB for everything they have done throughout

the years to improve the life for millions of Angelenos

across the region there.

And one of the reasons why I've committed my career to transportation electrification to do my part to help the state and clean the air.

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ROBERT BARROSA: So I want to talk a little bit about what we've done today, highlight a few things. I want to tackle the network reliability. That is a big topic and something assuredly we're taking on head on and not shying away from. So I want to have a good discussion around that and then highlight some of the key points around our cycle 4 plan and how that incorporates a lot of the things that the public has concerns about and make sure we address those in that cycle 4 plan.

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ROBERT BARROSA: You can probably skip over a

couple here.

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You go one more.

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ROBERT BARROSA: So over last seven years, as you've heard, we have installed over a thousand DC fast chargers. These are high power chargers, 150 kilowatt, 350 kilowatt. People thought we were kind of crazy back in 2018 committing to that power, but talking to consumers in terms of what they wanted -- in terms of speed and seeing what automakers were coming out for. We decided to take a leap and push that technology forward.

We built the thousand chargers over 250 stations. In 2023 alone, we provided five million sessions across those thousand assets, right, 170 gigawatt hours in California alone. So massive, massive usage of the network, and rightfully so. As California has grown in adoption, hitting 25 percent market share of new vehicles being sold being electric, we see the network supporting that growth and we'll talk a little bit about some of the challenges we see going forward.

But certainly, great progress and we continue to invest across the region and we'll talk a little bit about our investments in the LIC, DAC, and rural communities.

But specifically in rural communities, we also made additional investments around level 2 chargers to bring

charging to places where maybe power can't get to. So we've put in over 60 grid independent level 2 chargers in a lot of community centers, hospitals, clinics and things like that where people go to support those communities.

We've also made a lot of investments outside of the consent decree. We are in this for the long term, right? We want to see this business be successful past 2026 and continue to thrive and support the market here in California. And so some of our investments outside of the consent decree is going to new stations, so we're building above and beyond what we've committed to in the consent decree. And we're also making long-term investments in terms of where our energy is coming from.

So we entered into a 15-year PPA deal with a developer to develop a solar plant that went live in July in the Mojave Desert to offset the power that we're dispensing through our network. So very important, but again to show the commitment we have to the state to continue forward well beyond 2026.

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ROBERT BARROSA: Again, you know, working with CARB in the early days, we established some strive-to-achieve metrics of 35 percent to make investments in our low-income and disadvantaged

communities. And we have taken that to heart and instituted that in how we think about our investments. And we've been able to far achieve a well beyond the 35 percent target and hit over 50 percent.

This is critical. These kind of metrics go into our logic as we think through our investments. And that's why we've been able to achieve the 50 percent. So it's been institutionalized and we take this very seriously as we look at our further investments.

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ROBERT BARROSA: In terms of the usage of the network and the growth in the network. It's been astonishing to see how fast it's grown, right? And I think part of that is as we deployed -- you know, when we started deploying equipment back in 2019, 2020, it was like our -- for those who drove CCS vehicles, there weren't very many out there, it was almost our personal stations that we had that we could use. But quickly, as the market share developed in California, capacity becomes a problem. And so you could see today, and we measure -- I want to talk about utilization. We measure utilization basically on a 24-hour period, a time basis how often are these stations basically used?

And so you can see in December of '22 about 41

percent of the stations were at 20 percent utilization. At that same time period, about only three percent of the stations were at 40 percent utilization. Fast forward just 12 months, over 20 percent of our stations are used -- or 80 percent of our stations are used 20 percent more of the time, 43 percent. So we moved 3 percent to 43 percent of our stations now are at over 40 percent utilization. That is astonishing. It's great to see that this -- the stations are being used.

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But it poses a couple problems. Obviously, uptime on the stations. And remember, when we built our stations, we had to balance density versus geography, right? We wanted to build the network to build that confidence to drive anywhere. But that meant with the amount of dollars we had, we could only build stations that were four stalls, four chargers big, right? So there's not a lot of capacity. In some metro markets, there's only three chargers at a station.

So when you start reaching 40 percent utilization on a four-charger site, it means there's probably three or four cars lined up waiting to charge. So we have people that are waiting an hour or two hours to charge. So already from a capacity standpoint, if everything works perfect, you still have a customer confidence problem, right? Because it doesn't drive a lot of motivation if I

know I have to sit for an hour and charge.

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So what I'm trying to get a point or trying to get across, we need more infrastructure in the state absolutely. Hands down. Not just from us, but from every one coming into the market and trying to support the growth that we're seeing in the state. It puts a lot of challenge on us as a network to make sure we can keep high uptime and reliability to meet this demand. But a lot of times, it's like jet engine, right? The system can only run many hours and then you've got to refurbish it, right? You've got to take a charger down and that becomes challenging, right? It becomes another pain point for customers. So it's something that we're working hard at and we'll talk a little bit more about that, but tremendous growth overall.

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ROBERT BARROSA: In terms of our education and awareness, we really focused in the three cycles dispelling myths about EVs through fun and different cultural ways to identify with the consumer base. So we ran three different media campaigns in the three cycles. Very successful. Again, just, you know, as the market develops figuring out different ways to connect with the public and dispel any myths and continue to drive

zero-emission vehicle adoption.

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ROBERT BARROSA: We've done a lot of work on our outreach, access, education. And we found a lot of success working with our community-based organizations throughout the state. They've been vital members in helping us get to -- get to different parts of the communities where we are not as effective getting there.

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And so we've helped fund various different community-based organizations to help us do that. They're trusted members of the community and they know how to reach this audience. And so we've funded different -- several different organizations throughout the cycles and have just had tremendous success overall helping teach people about zero-emission vehicles, helping get these communities into electric vehicles, as well as focusing on STEM, right, developing the next level of workforce that we need in the state to help install, maintain, and operate charging stations.

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ROBERT BARROSA: So next, I'll touch on network reliability and talk about kind of what we're seeing, what we're doing about it, and how we're moving forward.

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ROBERT BARROSA: So first off, I want to say is our head is not in the sand, right? We are listening to customers. We are looking at our data, and we're making substantial improvements to the system overall to better handle what we're seeing in the field. When we started this adventure seven years ago, there was not a vibrant high-powered DC fast charging market out there in terms of supply, right? There was a few suppliers out there. A lot of startups. And so we went -- there was probably five reputable companies that we could choose from and we actually went with four of these companies to procure equipment and deploy.

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And we are part of an open standard, right? So we don't control the vehicle. We don't necessarily control the charger. There's an interconnection and interoperability that happens based on this standard. Everyone interprets the standard their own way. So there was a lot of these things that we had to work there and we continue to have to work and struggle through some of these interoperability issues.

But certainly as we started deploying infrastructure, we started to see, as utilization increased, you know, different issues pop up with each

manufacturer. Each manufacturer had its own flavor in some sense. And so we've had to work through with these manufacturers all these different issues. Some were pretty quick and easy in terms of software change that we could do remotely or with a tech visit, some were deeper, right, where there needed to be a design change. And so that design change has to be re-qualified, right, and then production done, and then a campaign has to happen.

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And so we've been working those things, learning, feeding that information back into the manufacturers, as well as working with OEMs to work out these interconnection problems and feeding that back to the OEMs, so they can improve their vehicles and drive the industry forward. These advancements, these learnings, they go back into these manufacturers. We don't own an IP on those. They take that, put that into their product, and other CPOs and others get into this space to invest. They're taking those learnings and installing that in their product. So again, we're advancing the product forward.

But there is a lot of good that also happens, right? Five million sessions, 170 gigawatt hours. That doesn't necessarily happen with a network that doesn't work, right? So that is a significant amount of usage.

We're not perfect, absolutely, and we've got a lot of work

done -- a lot of work to work on.

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Hardware is a big problem and so we've invested also, together with these -- some of these manufacturers on our next generation charger, taking the learnings that we've had and pushing that forward, right? And I always give the example, you know, Tesla is sort of the gold standard that we all try to strive for and achieve. You know, when they started this adventure 12 years ago and, you know, about four or five years in as their vehicles started to take off and sell more, you started to see headlines, you know, long lines at Tesla stations, Tesla charger broken. But what did they do? They continued to invest in technology. They built their V1, V2, V3, V4 charger, and they doubled down in terms of the size of the station, right, to increase capacity, right, building more sites but bigger. Now you see 20-stall sites, 30-stall sites.

So we're all on sort of that similar trajectory taking the learnings, reinvesting with our manufacturers to improve the equipment and keep that moving forward, working with the OEMs to also take the learnings, because this is all based on an open standard, and again, pushing the ball forward overall for the industry.

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ROBERT BARROSA: So hardware is one part of it and we know we have hardware that, under intense pressure, that we're seeing especially in California, but even in moderate utilization, has some issues, right, and we've got to work through those. So part of it is working with manufacturers to drive corrective actions, the long-term corrective actions, but it's also about how do we respond? Do we have the right maintenance team and operations to be able to respond to issues quickly, because we have to, right? We have stalls that are three or four stalls big. Our stations that are three or four stalls. So if a four-stall charger goes down, now you're down to three. If you have a line of three or four cars waiting, right, the anxiety just goes up. The dissatisfaction goes up. So we have to respond faster.

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So our maintenance teams have been really working with our service providers in the state to find ways how do we respond faster, how do we get spare parts and other things into these four logistic areas and make the -- make the changes faster. And so, you know, over the year in 2023, that's something the team has really worked on and so we've been able to dis -- decrease our response time from 40 hours -- or 48 hours to almost 24 hours. So great progress, all the while utilization continues to increase at a high rate. So very good progress from the team and

this is working not only with our people and processes internally, but also our service providers throughout the state.

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BOBERT BARROSA: We -- to -- EV charging basically on an open standard, we're a part of a bigger puzzle, right? There's a lot of players that have to come in. I talked about the charger manufacturers. You have the network. You have the automaker, and then you have the customer in the middle of all that to make it happen. The standard is a standard, but it's not perfect. And it could -- and it needs to evolve, and grow, and be better.

So one of the things that we found is customers having to continually retry to get communication to work with the charger. There's several steps that have -- that happen when you plug in a car when electrons flow.

There's initiation communication, payment, other things, safety checks. If any one of those fails, the whole thing fails, and you to have interact, you have to unplug, and you've got to plug in again.

So one of the things we did after looking at the data, we went back with some automakers and the charger manufacturer and said, well, why don't -- why don't we just do an auto-restart. Why do we have to have the

customer go through this pain? And so we've developed it with some of the automakers, as well as with charger manufacturers. We deployed it on a pilot basis to see the success. We saw a better success rate overall the customers. And that -- we're driving that back into the standards organization, so it becomes a standard across the Board that everyone can implement. And we can drive that benefit to the industry overall.

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There are some things we don't have control over that have direct impact on customer experience. I'll give you one example in 2023 that really affected us heavily. In early 2023 again, we had customer complaints coming in. The car won't connect. I'm plugging it in. It will not connect. What's going on? And so we had to go -- and we see a huge amount of these coming in, specifically in and around California, surprisingly enough.

But when we actually did our investigation and started diving deeper, we actually physically looked at the connector. Inside one of the socket was this little plastic cap stuck inside the connector that was prohibiting a customer from connecting. So then we invested where is this cap coming from? And lo and behold, it's being dropped by some of the vehicles that are connecting. It's -- as you unplug this plastic cap, protective cap that's over one of the pins is being left

in connector.

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And so what that did is forced us to, when we identified this issue, we had to take that connector offline, right? We don't want a customer struggling, so it's better to take it offline. This was happening at hundreds of stations, hundreds of chargers. So we had to take several hundred connectors offline, dispatch technicians as fast as we could, clean out the connector, inspect the connector, make a repair to the connector if we needed to, or put that service -- that equipment back in service.

So it was -- it was sort of a whack-a-mole for a good period of the year there where we were taking hundreds of ports offline unfortunately. But we quickly got with our automaker partners, identified which were the culprit vehicles, had discussions with them. We reached out to our other CBO partners in the area, EVgo being one of them, shared data and information to make sure are you suing this? We're seeing this. And we collaborated together. We wrote a white paper that we published into CharIN. We brought the issue into the ChargeX Consortium, so that everyone is aware. And then we worked with automakers to make the appropriate fixes in place. And then also worked in the new standards development to make sure that the specifications that are being set for the

inlets that this won't happen in the future, right?

But to a customer what did this mean? "I pulled up. The port is unavailable. You guys are horrible," right? That's the feedback we get. But unfortunately, we have to protect everyone and we had to take certain matters. And then we got better ones so we can get ahead of it. We had a better way of detecting it and making the plan. So the reason I bring this up is, you know, some things are in our control in terms of reliability and uptime, and there are things that are out of our control, but we're working diligently within industry helping resolve these issues, figure them out, and push the industry forward.

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ROBERT BARROSA: So I talked a little bit about things we were doing on the current chargers. But obviously, to push this forward, we have to invest in newer technology, right? Technology needs to evolve to handle better performance, better reliability, but also more features so that we can have more flexibility in terms of how we deploy, especially with limiting the amount of energy or the interconnection size for utilities, which is a big part of this.

And so we've developed our gen -- our next gen

charger. We're building new stations with this technology. It's performing very well. We're very happy. Our manufacturers have really stepped up, taken the lessons learned and incorporated that into their product. And we're also going back, as staff had presented, looking at existing stations where we can upgrade, again to achieve better performance and better customer satisfaction overall.

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ROBERT BARROSA: Okay. So next, I'll just highlight quickly. Cycle 4. We've heard a lot from the staff update.

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ROBERT BARROSA: So really number one investment area, station reliability. That's our core area that we want to focus on and maintain as a top priority. Second is new station development and we'll talk a little bit about what that looks like. And then obviously continue on the great success we had working with our CBO partners funding those organizations, really get now to the communities they serve, and then working on a lot of the education and awareness around our branded and non-branded marketing.

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ROBERT BARROSA: So as part of the process, we ——
the cycle 4 process, we have a national outreach to
various stakeholders, drivers, customers, government
agencies, whoever can feed in comments. And we take those
comments in and see what are —— what are the things that
we should be investing in, as well as our own data in
terms of what we're hearing from customers. Reliability
obviously was a big one, right? And I think I touched on
a —— quite a few different areas. Making sure partners
are there, chargers are working, right, is critical to
drive ZEV adoption. Understood 100 percent. And so
that's why the number one topic for us is really focused
in that area and going forward.

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ROBERT BARROSA: In terms of the spend, we kind of saw this already in our split via the station upgrades and the operation and maintenance. That will continue on. That's a good portion of the spend. Where we can expand, we'll expand. So if we have a three-charger site or a four-charger site and we can make that a 10-charger site, we'll expand that location, as well as build new stations. And then obviously, we -- we'll talk a little bit more

in-depth in terms of our work with The CBOs and how that will move forward.

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ROBERT BARROSA: So again, three main areas we're focused on, high quality, which really means station reliability, growth of the network, the three to four charger sites served us well early on to build geography, build reach. But as you saw from the utilization numbers, they're being overwhelmed, so we need to find a pressure relief valve here, right? We can't -- having these stations run at above 40 percent, I mean, we have sites -- there's a couple sites in Burbank hitting 70 percent utilization, 70 percent. I mean, I go on the app and I look at two in the morning, and, you know, half the station is full.

So the usage of these stations is very high and so we have to -- we have to build bigger, right? We have to build more stations, but we've got to build them bigger, right, so we don't have as much queuing to drive that better customer experience. And that's very critical, right? Along with the reliability and everything that goes with it, but having to sit two hours to charge is not a good experience, right? That doesn't motivate somebody to get into an EV. And so building

bigger stations, not only us, but anyone else that's coming into the space, build bigger is my message overall.

And then obviously continue to focus on fast public charging. I think that served the industry well. It served the market well. We hear from customers they like speed. They want speed. They want to get in and out. And so that's very critical and we see the roadmaps of electric vehicles going that route.

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ROBERT BARROSA: We continue to make significant investments from the operation and maintenance side, and that's people, processes, and systems across the board, right? There's a lot of learnings from the early days from where we're at today. And so how we organize, how we dispatch, that also feeds into the technology. What more information can we get from the charger to the network operation centers, so that if an issue does happen, we're able to better respond with the right kind of technician, the right kind of parts to quickly fix an issue. So we're getting better at it. We saw in our response times in California, they're coming down. We're getting better at getting out there and getting things fixed.

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ROBERT BARROSA: We're also looking at our rural communities, right? A lot of these stations are in pretty remote locations. And so how we address issues there needs to change as well, right? Technicians maybe live two or three hours away from these locations. And so we need to make sure that the way we're handling these stations when we go visit is a little bit broader and more in scope in terms of maybe some stations that we handle in urban areas. So, for example, when we go to a site now for a specific issue that may happen outside of a preventative maintenance activity, but if a connector broke on a station or something like that, we'll go out to replace that connector.

But while a technician is there now, their scope of work has increased to go in depth on every single station that's there in terms of cleaning, checking out subsystems to see what may fail next and make the proper repairs while they're there, right? So trying to be as proactive as possible in these rural communities, because they serve, you know, vital linkage points as well, and making sure we can -- we can, you know, address issues before they happen.

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ROBERT BARROSA: Staff talked about our

replacement plan. So, you know, we have a set of metrics by which we look at chargers in terms of what -- which should -- which should be on the list first in terms of replacement. In the plan, we have somewhere about 500 chargers, 600 chargers that we would like to replace going forward. About half of those are in LIC/DAC communities as well as rural communities. And if you can look by the map, right? It's spread out, you know, by geography across the state. So there's no one region, no one urban core that's getting all the upgrades, right? We took a broad-based approach in terms of how we look at this and making sure we're serving the whole of the state.

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ROBERT BARROSA: In terms of new investment, we'll use the same rubric that we've continued to use through or cycle 1, 2, and 3. A big part of that rubric is also focusing on the LIC/DAC community. That's why we've been successful to achieve the above 50 percent target. We'll continue to do that and move forward using that in our metric. Again, that is ingrained in our organization in terms of how we think about our investments and making sure we're always addressing those communities.

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ROBERT BARROSA: Again, power. I think it's -everyone knows, power -- the power delivery in terms of
vehicles is growing bigger and bigger. And so the early
investments we've made in the 350, 150 kilowatt charging
has served the industry well. It served the market well.
Automakers are potentially looking at going higher and so
we'll continue to listen to the market to figure out what
we need to bring to the market in the future, but
high-powered charging is certainly a much needed product
in the market.

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ROBERT BARROSA: So a little bit of our community engagement in marketing.

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ROBERT BARROSA: So we're really excited and happy to support CARB in the ZEAP Program. So we will -- we will, in cycle 4, support that effort, as well as continue to work with our community-based organizations. They've been, like I said, the most effective folks in terms of our investment, getting to the communities, helping with ride and drives, helping these folks get out of old dirty vehicles and either into used or a new

vehicle -- electric vehicle, and helping them with incentives and other things and figuring those things out.

So they've been very vital. They've also really helped us from a STEM standpoint, right, not only providing curriculum in teaching for 4th to 12th graders, but also at the -- at the trade level, right, working with community colleges to provide education to create the next technicians that can work on electric vehicle supply equipment.

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ROBERT BARROSA: And on our branded and non-branded marketing side, I think the real focus we want to take here is education, right? How do you use a charger, what to expect when you go on? Our data says if it's a first-time user, they have a high success of failing on their first try, probably on their first two tries. So we know we have work to do there.

I'm a long-time user. I drove from LA to
Sacramento. On Tuesday, I stopped in Kettleman City. I
went to charge, I plugged it in, and I got a communication
error. But what happens is I didn't plug the connector
all the way. I didn't hear the little click that you have
to hear, right? And I've charged thousands of times, but
it happens, right? And so for a new user, how do you deal

with that situation and, you know, how do we inform the driver.

So a lot of education still has to go in terms of how you use the stations and how to handle certain situations. So we'll continue to do that.

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ROBERT BARROSA: In terms of timeline, this is very similar as we've done in previous cycles, especially as it relates to new station development.

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ROBERT BARROSA: The sooner we can get going, the better, right? The total cycle to develop a new station is somewhere in the 18th month -- 18-month time frame. So it's a very long cycle. Some projects can take 24 months or longer depending on where we're pulling. We're also looking to build bigger sites. So we've really got to start early in terms of starting the real estate acquisition. And once we acquire the real estate, that moves on to design and permitting, and then the construction and commissioning of the station.

And parallel to that, we'll continue all of our activities around the maintenance -- operations and maintenance, all the good work the Electrify America

people, plus our suppliers and partners in the space have done to continue to focus on reliability and improvement of the network. All that will continue, as well as then starting our next cycle in the CBOs and working with those community-based organizations.

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And with that, I think that's the last slide, so thank you very much. I'm happy to take questions, if there are any, or whatever the process is next.

CHAIR RANDOLPH: All right. Thank you. I think what we'll do is have some time for Board members to ask you some questions, and then we will go to public comment, then we'll bring it back to the Board for some more discussion.

I'm going to go -- I'm going to go ahead and start the questions, because as you know, longtime very heavy user of the Electrify America network. Appreciate the growth of that network, you know, seeing some of these gaps starting to fill in. I think that growth is really important. And I'm really pleased to see the maintenance piece in this plan, because that customer experience is, as you have articulated, the biggest concern and the biggest challenge I think you all need to overcome.

I know Electrify America is not alone in this issue. You know, there are reliability challenges with the other companies as well. And so I paid particular

attention to the maintenance plan and it's partly informed by, you know, obviously by my own anecdotal experience, which is not --

ROBERT BARROSA: Absolutely, yeah.

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CHAIR RANDOLPH: -- you know -- which as we know is not scientifically valid, but it is what people are -- ROBERT BARROSA: Absolutely.

CHAIR RANDOLPH: -- hearing when they're making decisions about electric vehicles. In slide 20, you had a picture of the Raju Countryside Mart in Lost Hills. I was there two weeks ago. I tried to charge a charger 3, it didn't work. Called the customer service line, waited, you know, like 10-ish minutes. The guy goes -- oh, and it was showing operable on the -- on the app. And the guy goes, oh, my data is showing me that that has not had a successful charge in three days. I'm like, okay, why is it showing available on the app, and, you know, consider this yet another report of an unsuccessful charge. The next day I went on my app after I got home, still showing available. PlugShare check-in still showing, oh, charger 3 is not working, charger 3 is not working.

And I know this is not unique to the older stations, because as I'm sure you are aware at Kettleman City over the holidays, there were three chargers out at that beautiful brand new station and they were out for

several days.

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ROBERT BARROSA: Um-hmm.

CHAIR RANDOLPH: So I am getting to my question, which is your presentation had more detail around customer response time and responses to outages than is presented in your maintenance plan. So I kind of want to dig into that a little bit, because I do think it's important to have some standards for, you know, what are you -- what are you trying to achieve, what are you trying to target in terms getting out there and addressing the problem?

And so my two-part question is what are your goals for customer response and what are some of the specific strategies you're using to speed up that process? Because to your point, there's a lot of a point -- potential points of failure. And so perfection is not possible, but responsiveness makes all the difference.

ROBERT BARROSA: Right. Yes.

CHAIR RANDOLPH: So can you talk about that?

ROBERT BARROSA: Yeah. You know, these issues

are not -- are not easy. And so there's a lot of things

that have to come together. So in terms of metrics of

what we're trying to achieve, right, we're always across

the network trying to respond and get to charging stations

within 48 hours. That's sort of been our internal metric.

But even in California as we've seen such high

utilization, we knew we needed to do better, right? We're in this -- in this sort of -- I would say a bit unsustainable, I think especially in some of these -- some of these stations at 70 percent utilization, 80 percent utilization that we have to bolster up with the teams and the service personnel that we use throughout the state.

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So we've done a lot of training material. So we've done a lot of videos and other things to help our service providers and companies like Pearce, who is a California-based company who does a lot of our service, helping them, providing them the training materials and other things, so that they can go find members throughout the state to be closer to where the work is going to be, so they can respond faster, right? But to train them up and get them there, it could be a long process. So we've actually stepped in and helped provide a lot of the materials they need to find the -- to find the people and then train them to be adequately capable of responding and dealing with issues.

A lot of the issues have been supply chain challenges I'd say overall. So while we can respond and potentially work through a connector issue, a more consumable problem, if it's a deeper issue -- I have all these terms inside like main board. There's all these specific names that we see failures around. Sometimes

supply chain issues are what drive and keep a station down longer.

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We also -- you know, we have a lot of issues in terms of -- or I've seen a lot of issues which kind of cause these inaccuracies in terms of the data that comes from the charger to the back-end network system and making sure that those are -- those are aligned, right? And so there's still a significant amount of work going on there. We work with, you know, essentially three different -- well, we had four original manufacturers. One stepped out of the market completely. Now, we're down to three.

You know, every software implementation they do, while we try to standardize it, you know, how that integrates into the back-end still has some challenges.

And I think that's what you see in some of the app inaccuracies that we've improving along the way.

We've gone ahead and invested more on the software side, especially for us internally, so that we can get a handle on that. And we actually -- you know, when we originally started, we actually went to the open market and used a cloud service provider to manage the network, and we quickly saw the limitations of that system. We'd get to ten or twenty thousand sessions and the system would crash and we would literally put the stations on free vend, basically free to use for a week,

while we sort out problems. And in 2021 and 2022, we invested and developed a new back-end system that's better capable of handling the number of sessions that we're seeing.

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And now today across the county we see on a weekly basis, and it's growing, 250,000 to 300,000 sessions a week and the system is maintaining. There's still some improvements we need to make in how they integrate to the charging station, so that we don't have this discrepancy in terms of what's available, but it is getting better and we're doing software releases as often as possible to make that happen.

CHAIR RANDOLPH: And so how are you thinking about your response times, your process -- you know, your process, your tracking, and metrics around response times?

ROBERT BARROSA: Yeah. Like I said, we have our internal metrics and SLAs that we work with our partners and hold them to, as well as ourselves. And so we work to those, but obviously in certain regions, like, you know, heavily utilized stations and how we deal with a lot of these rural communities, we had to make improvements, right? We've got to strengthen those. And even if it's for a short period of time until there's a pressure relief, right, to take some of the utilization down, improve the equipment, right -- we had to staff up and do

some things to get better. And that's where you see, I think, the improvement in response time, number one, getting out there.

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And then I think what you're starting to see too is the improvements in equipment are starting to drive -- at least as utilizations go up, the number of work orders isn't necessarily going up, so we're able to stabilize that. So we're getting the technology to be better, right, not only from a legacy standpoint, but also from a -- from a new product standpoint.

CHAIR RANDOLPH: Okay. I'll let me other colleagues jump in with their questions. I will just say that the -- you know, perhaps it's a transparency issue, perhaps some of these internal metrics should become part of more of the maintenance plan that you have articulated, because you've sort of articulated your overall spend, some of your strategies, but, you know, haven't taken the additional step to kind of say, okay, this is -- this is what we're striving for, so that there is an opportunity to really, you know, see if that's how that's playing out.

I will let my other colleagues go. I'm going to start from the right. Board Member Rechtschaffen. I almost called you commissioner.

BOARD MEMBER RECHTSCHAFFEN: Thank you. I have a couple of questions. And maybe this just follows on Chair

Randolph. What are your figures in uptime? And I know you said it was a complex mix of factors determining when the stations are up. But what are your figures and what are you striving for?

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ROBERT BARROSA: So we're striving for 97 percent and above uptime across all our equipment. Obviously, with the legacy equipment, we have -- it's a struggle, right? It's a struggle to keep it at the 90 percent or above number. And we're working hard with our manufacturers to do that.

The newer equipment, we're seeing great success with that equipment. And we're seeing that 97 percent up or thereabouts, right, on a daily basis. So we have confidence in the new equipment and we've seen -- we see the progress and the learnings that we've taken from, you know, the first generation to the second generation and how that's improved the experience overall.

It's still -- again, it's new technology.

There's a lot of tweaks and things that we can still do to improve it even further. And we're working closely with our charger manufacturers to do that, as well as our own software side of things. And we'll continue to do that, right? And that's to drive the numbers even higher or be able to live in an environment where we're seeing a majority of the stations at 40 percent utilization or

higher, right?

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Living at that duty cycle -- living at that duty cycle in that regime is going to challenge any piece of equipment you put out there in the public to use in the public sphere, right? Things are going to break. It's getting more runtime. It's like a jet engine, like I said, you've got to take that thing. You've got to refurbish more often.

So living in that regime is a very difficult space to be and that's where we're in today, especially in California. So part of this is having to figure out how do we build that pressure relief, right? There's other infrastructure that needs to come in so we can drive the utilization back to a reasonable level. That improves customer experience as well, right, not having to sit in long lines or queues.

BOARD MEMBER RECHTSCHAFFEN: Well, I'm going to ask you again, what -- do you have figures on uptime that you can share with us and the public? I understand it's difficult. You have more success with the newer chargers, but surely you must have some figures internally on what uptime is. Can you share those with us?

ROBERT BARROSA: Yeah. So like I said, our new generation equipment is achieving high uptime percentages, in the 97 percent range. The legacy equipment still

struggles, right? It's in the lower percentage range of the 90s, right? Sometimes at 90 or maybe a little bit below depending on what's happening on utilization across the network. So I'm trying to be as transparent as possible. It's work to be done, but that's where we're at today.

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BOARD MEMBER RECHTSCHAFFEN: All right. Well, I guess maybe as a follow-up, you could send us the specific information. And maybe staff has it. I don't know. But I don't have it as a Board member and I'd be interested in seeing exactly what the uptime is for all your stations.

And did you put in the investment plan a commitment to 97 percent as a goal, uptime, or did you have a specific uptime goal?

ROBERT BARROSA: Yeah. Again, our strive-to-achieve and what we're trying to get to is 97 percent or above. I don't think that -- our interests are aligned, right? Drive highest reliability across the Board, so -- and it's a matter of like how do we get there, right? And can we get there potentially with the legacy equipment? That's going to be -- that's going to be a struggle, right, because we know the issues that exist there. Can we get it with, as we improve the technology and equipment and we see some pressure relief coming off of -- off the network, right, with other

stations taking on load as well and bringing down the utilization factors, to be at a more reasonable level, I would say.

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You know, a lot of things have to come together to make that happen, right? We can't put a thousand chargers out there, see 25 percent new vehicle market -- you know, new vehicles being sold being BEVs, and then expect this just to handle the whole capacity, right? More has to happen. Obviously, reliability. We've got to do everything we can to keep that up as high as possible - absolutely. Don't disagree there - but more and bigger infrastructure is also needed.

BOARD MEMBER RECHTSCHAFFEN: All right. My second question deals with how you decide on where these chargers are placed and you described a data-driven process. You described compliance with SB 92. Can you talk about how you work to achieve other State goals in where you're deciding to place the chargers, as opposed to profit maximization, for example?

ROBERT BARROSA: So, I mean, we certainly support all the State goals in driving electrification, right?

And I think that's the primary goal. And then we have subsequent goals around making sure our investments are also going to low-income and disadvantaged communities.

And so, you know, we take that into the rubric into the

metrics that we look at, right?

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But there's a whole series of things that we look at, not just profitability of a station, but, you know, what is the market, what are the travel patterns, where are other stations being announced now with NEVI coming in, right? We don't want to build right next to where a NEVI station is going to go in, so how do we make one plus one equal three, right? So we take a lot of those different factors into account, as well as our LIC/DAC communities.

BOARD MEMBER RECHTSCHAFFEN: Thank you.

CHAIR RANDOLPH: Dr. Pacheco-Werner.

BOARD MEMBER PACHECO-WERNER: Thank you so much. I really appreciate seeing -- you know, I thank Electrify America for the commitment to equity, both in the past and then what's in the plan now. I mean, the public who should be the ultimate benefactors of the investments have had questions about the network as it stands now, and some of my Board members have asked and will be asking.

I think my concern is really how we're setting up these investments to look like and function in year 11, particularly how the investments in the disadvantaged communities have been set up to succeed from an equity and business perspective. My primary concern with the plan as it stands now is how the criteria proposed for the up --

for the -- not the -- necessarily the new stations, but the upgrades how those are prioritized and ensuring how that 35 percent threshold investment is kept well and in shape.

ROBERT BARROSA: Um-hmm. Yep.

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BOARD MEMBER PACHECO-WERNER: While the eight million proposed in education and outreach is crucial, I'm concerned right now that the reliability upgrade methodology doesn't account for the intersection of how a disadvantaged community may be uniquely experiencing challenges to, and reporting or lack of reporting. And so -- and so I'm concerned on that end in terms of the criteria as it stands now.

I think the network growth has a good methodology that has accounted for some of this. But I'd like to see more forward-looking planning on the upgrade methodology, so that in year 11 those chargers in disadvantaged communities are not left behind.

know, you talked about cycle 3 some as well. And I don't know if this is a question for staff or for you, but is all of the money from cycle 3 investment planning committed now, and if not, is there -- you know, are there amendments that we could make to really respond to the public's concerns as they stand now on the reliability and

upgrade question?

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ROBERT BARROSA: So I don't know if staff wants to answer the -- sort of the committed dollars, but those dollars are committed based on the cycle 3 plan and what we're moving forward with there.

In terms of answering your questions on the reliability and upgrade, right, the map I showed showed a wide dispersion of these upgrades happening throughout the In fact, you know, we've identified about 490 sites that we'd like to proceed with. Over 50 percent of those are in low-income and disadvantaged communities. lot of our sites in low-income and disadvantaged communities are actually performing quite well in terms of from a utilization standpoint. So they're very important stations in our network and we treat those just the same as we would any others in terms of making sure we -- we're putting all the resources just like we would any other region of the state. And especially like I talk about in our rural regions, right, making sure we're beefing up and really thinking through our maintenance strategy and being as proactive in those areas.

So we'll continue to do that. And like I said in the beginning, right, we've institutionalize how we think about these communities and making that part of the investment cycle. And the business overall, right, we've

always intended this business to be sustainable. It has to go beyond 2026, all the infrastructure we put out there, right? And that's why we've made long-term commitments like in PPA and our Solar 1 Glow -- or Solar Glow 1 deal. We're making a long-term commitment to the renewable energy space, right, in terms of offsetting our power that we're dispensing across the region. But also, too, is we're investing additional stations, right, throughout the state outside of the consent decree, right, through other -- through other investments that we're raising and moving forward with.

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So we want to push this industry forward. We want to push adoption forward. And really our focus on high-powered charging has always been to drive electric for all, right? To make sure that folks that don't have an overnight place to charge their car or workplace to charge their car, that they can still drive an electric vehicle. And having ultra-fast charging where you can get your 300 miles of range in 20 minutes, right, that helps people get confidence to get into an electric vehicle. That's where we focused and that helps all Californians get into the electric movement.

BOARD MEMBER PACHECO-WERNER: You mentioned -one last question. You mentioned in response to the
Chair's question, one of the issues that you're working on

is the supply chain. And in your plan, you mention under that section I believe like a warehouse or something to that effect. What other things are you doing that may be aren't in the plan around that particular issue?

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ROBERT BARROSA: Yeah. So having adequate stock, riaht? We cam out of COVID and still deal with still lingering supply chain issues around connectors and other things. And then there's instances like the pin cap issue I described, right, where we had to take a lot of chargers There were -- there were a number of connectors that we had to upgrade, because there was damage from customer frustration, trying to wiggle a connector in and something may have happened to the connector where we had to change it. So then we had a huge increase need of connectors, right? And that kind of blew through our stock inventory for replacement parts and now we had to go back to the manufacturer and expedite and hurry up to try to get more connectors. And so that has a lot of downstream effects. So there's situations like that we can't always account for.

But what we do do is look at the replacement parts that we need that we look at network-wide, what are the common failure modes, what are the common replacement parts. Let's make sure we set thresholds in terms of our better managed inventory, or VMIs we call it and keep

those at certain levels with our suppliers. And then we look at how do we put them at more forward logistics areas, so that we can get it to technicians faster. And so really looking at how do we close down that gap to get the right parts to the technician. But a lot of that also has to do with what information are we getting from the chargers that tell us what to fix.

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And a big part of sort of the struggle with a lot of the legacy equipment that we have to deal with, right? So we may not know exactly what we have, and so that might take a one trip, two trips, sometimes three types to fix. And then you layer on if there's any delays in a particular part trying to get to that -- to that location, then that can extend the time for a repair.

CHAIR RANDOLPH: Dr. Balmes.

BOARD MEMBER BALMES: Thank you, Chair Randolph. And thank you, Mr. Barrosa. You know, I'm going to say some good things before I have more critical comments.

I appreciate the new focus that Electrify America is making on maintenance. I could go through my personal stories with Electrify America. And the Fresno location is the only place I've ever charged, actually the same charging station behind a fashion mall. And, you know, I found kiosks that weren't working. I have had trouble

connecting. And I just was down there and it took me 40 minutes to charge my EV 6, which is one of the fast-charging cars to go -- because I was literally down to 20 miles of battery range. So I didn't look to see if that was one of your brand new gen 4 or whatever chargers.

ROBERT BARROSA: Um-hmm.

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BOARD MEMBER BALMES: So I've experienced, like Chair Randolph, frustration at Electrify America locations, but I appreciate that this new approach to putting almost half the funds into maintenance is appropriate at this point.

I also realize there's a need to expand the network. So I think overall, the funding allocation is reasonable, but I -- I also -- in part, because I used to be his boss, I've read Dr. Rempel's and Cool the Earth's 2022 evaluation of Bay Area charging stations. And while Electrify America did the best of the three companies that were being looked at, and had the most charging stations -- kiosks, it's -- it was nowhere near -- the uptime was nowhere near the 97 percent that you're striving for.

So I guess my first question is I'm sure you read that report. How did you -- how did Electrify America respond to that report, which was -- I think it was well conducted and pretty straightforward the results. So how

did you respond to that?

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ROBERT BARROSA: Yeah like any reports and data that's -- you know, analyzes the infrastructure, we take it very seriously, right, and we look at that. And we had conversations with Cool the Earth and the UC professor -- UC Berkeley professor that conducted this study. There were a couple things, I think -- you know, we had a few explanations in terms of this that would have increased our scores a little bit, but okay, we would have gotten to 80 percent. Still nowhere near, right, to your point, before we wanted to get to, and that's well understood.

So how did we respond?

Those were actually some of the first pilot sites and replacement sites we took on to improve. So we've actually upgraded that equipment. I think it's probably, out of the sites they visited, almost 60 percent of those sites now have been upgraded to the newer generation equipment, because we looked at that those sites and then trying to figure out, okay, well how many work orders are we doing, how often are we going out there, what's the utilization, are we meeting the demand. So we've gone ahead and made upgrades to those stations, so that we can -- we can improve performance, as well as looking across the state, where else we could take advantage and start -- get started early on some of these upgrades.

So we've taken no steps as well as a lot of the other steps that we've talked about, right, in terms of how are we increasing our response time, right? How are we — how are we moving our logistics a little bit forward, how are we increasing our spare ports inventory? How are we looking at all these things and how can we do better, because we're living in a world now, especially in the Bay Area — those sites I could probably guarantee you, they're all at 40 percent or above utilization. So you're in a heavy-duty cycle and that requires us to, you know, act differently, do a few things differently. And so we've done that.

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Is it perfect? No. Are we getting better?

Absolutely. And that's through a combination of upgrades, that's a combination of what we're doing from a maintenance standpoint, and it's combination of what we want to do in the future of build bigger, right?

One of the sites we're opening up right off of Harrison Street right when you get off the Bay Bridge, it's a brand new --

BOARD MEMBER BALMES: I just got an invitation. I'm going to go to the opening.

ROBERT BARROSA: Oh, perfect. But it's a 20-stall site, right? That's one of the -- as I made my way up from Los Angeles to Sacramento, I stopped there to

see how things were coming along. It's a 20-stall location, right? Building bigger, building more availability, trying to provide that pressure relief that we're seeing now in the network.

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And we -- as an industry, as a state, we've really got to push forward on the pressure relief. We need more infrastructure. We see our growth continue to grow as more adoption happens. And so trying to figure out how we can do that, not just with our investment. Because even though the cycle 4 plan, that's still not enough. We're -- if it's just us doing it and a few others doing a little bit, it's not enough. We've got to really push forward on that aspect.

BOARD MEMBER BALMES: And a specific critique from that Cool the Earth report. You know, seven percent of your kiosk had in quotes "Design failure," because the cable wasn't long enough to charge Bolts -- Chevy Bolts. Have you fixed that at all your locations?

ROBERT BARROSA: So that was actually one of the points of contention we had with the study, because our early design or gen 1 kiosk, one of the things we wanted to avoid was a -- was a long cable and a cable retraction system, so we decided for each dispenser, there would be two tables. And two cables only power can go through one at a time, so one dispenser only services one car. So you

pick one connector that can -- that can fit any -- if the port location is on the -- sort of the front quarter panel or the front of the car, it reaches that side. The other connector reaches the rear quarter panel, right? So that provides you the length and the reach. It's not meant to you park and both connectors must fit into your vehicle. Only one needs to fit into your vehicle to service your vehicle.

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And so that was one of the areas that -- BOARD MEMBER BALMES: That's how you could get to 80 percent.

ROBERT BARROSA: Yeah. That's how you get to 80 percent. But again, to your point, 80 percent is still not good enough, right? We have work to do. That was 2022. We went through our wrath of issues on sort of the pin caps in '23. That took a lot of ports offline and we had to restore those and we're getting a head of that now. And we've seen progress overall in the network.

BOARD MEMBER BALMES: And my last comment is I just want to echo Dr. Pacheco-Werner's concern about your chargers -- your charging stations in low-income, disadvantaged communities because they frequently cannot charge at home like I can. And so it's really vital that those stations are maintained to the best of your company's ability.

ROBERT BARROSA: Yeah, absolutely agree.

Thank you.

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CHAIR RANDOLPH: Thank you.

Board Member Takvorian.

BOARD MEMBER TAKVORIAN: Thank you, Chair. Thank you for being here today. Appreciate it. My colleagues have covered a few of the issues that I had, so I'm going to follow up on the issues related to disadvantaged communities and accessibility in those communities. The report indicates and you said that Electrify America is exceeding the DAC requirement with 55 percent in DACs.

I'm concerned about the validity of that number frankly. And I'm not sure how it's calculated. I ask staff and appreciate that they sent me a map of the charging stations. And so I was able to take a look at that. And the first thing that jumps out is that many of the chargers are adjacent to freeways, which happen to be in our communities — in disadvantaged communities. So you get points for disadvantaged communities, but also it's good for motorists who are on freeways. So that's good, but it really doesn't serve residents of disadvantaged communities I think in the way that we anticipated.

The second thing is that I drilled down for South San Diego, which is where I'm from. And I know those

communities, so I could kind of take a look at them point by point, and there's one charger in Barrio Logan and there are six in Coronado. They're about a mile apart from each other, but they're about a million miles apart in terms of income. So I think that there's a clear discrepancy there and it's a big concern.

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Barrio Logan is a huge workforce area and I think could really benefit from charging stations and there are virtually none there. There's two in Imperial Beach. And there's more than I can count in La Jolla. So I think there's a clear discrepancy. There's four in National City and they all appear to be at car dealerships, which I don't think are available to the public.

So I could be wrong about that, but that's what shows up. It's Mossy Nissan and something else Toyota. So I'm just -- my takeaway is that DACs really aren't being served. And I'm concerned about reliability as my colleagues are, but we need those stations to be in our communities. And so I'd like to know how you're planning to improve that, not just reliability, which is obviously critical, but actual accessibility, because it -- from my look, it's -- they're not there. So that's my first question. I have a second one, but I wanted you to answer that.

ROBERT BARROSA: Yeah. So, you know, we take

that into the metrics as we -- as we look and how we invest. I can look like, for example, Los Angeles, which I'm also very familiar with, and the investments we've made in Riverside county, and the San Bernardino counties as well, have put a lot of stations in the community in and around those areas. And so we'll continue to look at all these communities to see where we can put infrastructure in.

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Imperial Valley is another area. We know we need to do more. We have several projects going on in that area and we've invested a lot through the Central Valley, in Bakersfield, Fresno, and other communities through there that are just not on the highways, but in the communities themselves. So, you know, it's hard to do --sort of kind of please everybody. Absolutely. And there's an evolution to this, right, that the spending goes on.

And so we'll continue to look those -- at those communities, continue to factor that into our investment into what the network looks like, and try to address as many concerns, right, and communities as possible.

BOARD MEMBER TAKVORIAN: Okay. Well, maybe this is a question to staff, but I feel like if we're looking at entire communities as low-income communities and being -- all of those areas are not high on

CalEnviroScreen, let me put it that way, that I see that are on -- that are blue on the map. So perhaps we could have more of a conversation about targeting more. I understand that that's what's specified in the agreement, but it really doesn't get to where people live and work, I think, in at least some of the communities I'm looking at. So I don't know if you all would like to respond to that and have other ideas for how we might target better.

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STCD CHIEF GRESS: This is Jennifer Gress, Chief of the Sustainable Transportation and Communities

Division. Certainly, you know, we meet with Electrify

America staff every month. And as they proceed on cycle

4, these are the kinds of conversations we can have with them, you know, how are they thinking about LIC/DAC and what is -- you know, what more can they do to get within communities?

So I think some dialogue will be helpful. But the other thing we can do, at least with staff, is I think do a little more analysis about -- to get at this question of what's the sort of the level of LIC/DAC. So we map out where the stations are, as you know, and maybe we can do a little bit more analysis to determine kind of what the level is.

BOARD MEMBER TAKVORIAN: Okay. That would be helpful I think. And, you know, I know we're all evolving

for that. And so if we can help Electrify America to target a little bit better. And we have representatives from all over the state here. And I think we know our communities. And the Chair has shared her experience. And so, you know, I think we can be tapped to talk about where we think would be appropriate locations.

So the second question I have, and I talked to staff about this a little bit, but didn't have a chance to talk with you when we met, but I'm interested in what the evaluation analysis of the education and outreach campaigns are.

ROBERT BARROSA: Um-hmm.

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BOARD MEMBER TAKVORIAN: I really appreciate the fact that you're working with CBOs. I think that's really an important way to get the message out. They are trusted messengers in our communities. And so I think that's great. But what I don't see it's like a check the box that you did the -- you're doing the CBO agreements, you're doing the social media and the videos, and that's great, but we don't know whether they're working. And so I wonder if you have a plan for how you're going to evaluate the media and education and outreach work that you're doing to see how effective it is, not just that you're doing it.

ROBERT BARROSA: Yeah. No. Certainly, as we

work with our CBO partners and we go through the RFP process to select different programs, once they're selected, we actually sit down and map out what are the metrics by which we're going to measure the work and the activity. So if it's a ride and drive in sort of a rural community or a disadvantaged community, you know, how many of those are you going to have? Like, okay, let's set some metrics and some timelines of what you want to achieve by when.

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And then let's -- how many participants are you going to try to get to, right? So let's some targets around that. Are you helping community members with applications, right, for incentives and other things?

Okay. How many -- how many do you want to -- how many can we hit? Let's set some targets and try to map those out.

And so we sit down with the CBOs and map these targets out and then meet with them on a monthly basis to kind of understand how they're progressing in this process. If they're having issues, how can we step in, how can we help support? Many times we'll bring a lot of the CBOs together to kind of take lessons learned. So we'll kind of be the glue that brings them together to bring best practices from each of the different regions and the work they're doing, so that everyone can advance in their mission. And so we'll track this, meet with them

on a monthly basis, and then we report out in our quarterly annual reports, and also in our meetings with staff on a regular basis of how these programs are progressing.

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BOARD MEMBER TAKVORIAN: Okay. Thank you. On that, so what's your qualitative analysis for your media campaigns?

ROBERT BARROSA: So yeah, we look at census tracts, viewership, and there's a bunch of other metrics that we look at. I don't have all the data in front of me, but there are a set of metrics that we look at. What audiences are they reaching in the state? And so we -- and we provide all that back into the reporting that we do.

BOARD MEMBER TAKVORIAN: But can you see whether they're having an effect about whether or not those populations are purchasing EVs more than other populations that aren't seeing that or do you --

ROBERT BARROSA: Yeah. I think it's -- I think it's difficult. I think we have to go back and look at the data. I don't if we've reported on that specific factor and what's driving which. It's difficult, but we can certainly get back and provide more information to you on that.

BOARD MEMBER TAKVORIAN: Okay. Thanks very much.

ROBERT BARROSA: Yeah.

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CHAIR RANDOLPH: Dr. Shaheen.

BOARD MEMBER SHAHEEN: Thank you, Chair. And I'd like to thank the staff and Mr. Barrosa for your briefing. So one of the questions I have is around sustainability of the business model and ultimately the charging affordability. So the goal is to be as self-sustaining business model after the 10-year investment. One of the concerns I have is is how much the charging rate going to be? These rates are quite high for many people. And that's something I think should be on the table, in addition to many of the other discussion items. And I have a second follow-up question.

ROBERT BARROSA: No, absolutely. Yeah. And look, it's a -- it's a -- obviously, it's a big concern for us, right, because we want to make sure this is a sustainable business model going forward. There are a lot of other companies that are now public, that are sort of in a similar business model, and you see sort of the financial strains, and, you know, their ability to try to get to profitability is also very difficult as the -- as the market is emerging, right, and growing.

We have always tried to make sure we're providing simplicity in pricing, especially in these early years.

You know, a lot of other companies have gone to

time-of-use pricing and try to, you know -- and sometimes it kind of complicate. Charging is already hard enough. I don't want to confuse customers on like, okay, is it 2 o'clock, is it 3 o'clock? Should I -- you know, what should I do, right?

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So we try to keep standard prices, you know, throughout the day and those things to help grow the market. Obviously, there are energy rates that we have to cover that are not covered by the consent decree. So the money that's raised through the stations primarily goes to cover energy, as the network grows across the country. And so -- and we see those rates going higher, right? I think we see some pretty heavy rates, you know, summer time, peak times, PG&E and SCE we're hitting \$0.55, \$0.60 a kilowatt hour.

So that's a -- that's a -- you know, that is pretty stressful. And so one of the things we've also done is invested quite a bit in energy storage to help offset some of that energy expense. We've deployed, I think it's about 70 energy storage devices. Alongside our DC fast chargers, I want to say we are probably the world's largest deployment of energy storage along with DC fast chargers. And that's helping to keep things in check, especially from a demand charge perspective, also from least time-of-use, so that we can start to offer sort

of a one price all day.

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Eventually that will change, right, to drive certain customer behavior, but certainly we've tried to keep it as simple as possible for customers. And these assets we've deployed also now provide services back to the grid. So we've actually aggregated some of these assets. Participate in the CAISO market as well as some other programs through PG&E that take advantage of the energy storage. So we're providing not only a benefit to, you know, trying to keep prices as low as possible, but also supporting the grid at the same time, because we are putting some heavy loads on the grid and we need to make sure we look at that side of the equation as well.

BOARD MEMBER SHAHEEN: Yeah. Thank you. I'm very interested in continuing to know more about that and I believe there's quarterly and annual reporting requirements. So I think that's something we really need to keep our eye on.

And then obviously, the big topic today has been the reliability in the maintenance plan. And I'm delighted to hear that you think the NEVI uptake 97 percent standard is achievable for your new chargers. In terms of the legacy, I believe you were saying that approximately 90 percent uptime is your objective, is that correct?

ROBERT BARROSA: We'd like to get all equipment up to 97 percent, so that's our goal of overall, whatever the equipment is. That equipment varies drastically depending on time of year, things that are happening in the field, but we're trying to drive everything to 97 percent and striving for that figure.

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BOARD MEMBER SHAHEEN: Okay. So a couple just data questions, simple quick answers. So you mentioned that you wanted to upgrade 490 chargers as part of cycle 4. How many legacy chargers does that leave us with in the system?

ROBERT BARROSA: I'd have to go back and look at the numbers. Approximately 700 at the end of -- that would be at the end of the consent decree -- by the end of the consent decree based on new station development.

BOARD MEMBER SHAHEEN: And the target would be to raise those as well to a 97 percent uptick?

ROBERT BARROSA: Yeah, it would improve reliability across the board, right.

BOARD MEMBER SHAHEEN: Okay. So the response time you talked about in terms of a metric, you said you had internal metrics for response time. The closest I could get to in understanding of what that metric might be seemed to be related to reducing it to a period of a day. So I think we went from 48 hours to 24 hours. So would it

be reasonable to use some kind of an hour metric for evaluating response time? What would be the appropriate data for that?

ROBERT BARROSA: Yeah. So I think looking at response times in terms of number of hours you could get out there is reasonable, absolutely.

BOARD MEMBER SHAHEEN: Okay. I'd love to follow up in bit more on some of these issues, but thank you for your time and questions -- answers to my questions.

ROBERT BARROSA: Thank you.

CHAIR RANDOLPH: All right. Board Member Florez.

BOARD MEMBER FLOREZ: Thank you. Am I the

13 last --

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CHAIR RANDOLPH: No. There's more people in the queue.

BOARD MEMBER FLOREZ: Great. I think -- first I thank you very much. I know we also had an opportunity to chat. I want to put it in context. So you are the third CEO coming to the Board within the last five years, correct?

ROBERT BARROSA: Yes.

BOARD MEMBER FLOREZ: Okay. So I mean, maybe to the Board -- when this item came up, I think my concern at that time was how are we going to view this investment?

This came from obviously a big scandal of which our staff

rightfully caught. But I think my issue then and it is now is, you know, how would we view this investment?

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So we knew that charging companies were going to be building at some point in time, and it's really ratcheted up, towards some deployment in the State of California. And I think at that very first hearing, we understood that Dr. Balmes' point and to my colleague's point, Diane's point, north and south seem to be the paths for our charging stations. It's east/west that they're challenged to me. And if you look at where disadvantaged communities are in the state of California is probably and east/west pattern. Most are going across towns. Most are working nearby. Most aren't driving, you know, an hour up and down I-5 or 405, there's going to be -- they're probably trying to travel, particularly in rural communities, east/west.

And so when this item came up, I think we had a lot of conversations with your predecessor who promised that he would be back here at the very last investment.

And I kind of had a little skepticism towards that. And I think if you go back to the tape, I said you're going to be here the last investment, right? And we find ourselves with a third CEO of a company -- great company by the way that is giving us this last rendition for the last drop of \$200 million.

I guess my thought and to speak to Diane's point, I always felt like this investment should be the additional, the extra. Because this is a drop of dollars due to a penalty, it should be something that goes on top of. In other words, we know where electric charging companies are not going to build. We really do. I bet if we got a list of free school lunch programs and we overlaid charging stations, on top of that free school lunch program map, we'd find very little charging stations, if any.

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Why is that? Because there's no incentive for these companies to build and what I think they believe is really not quote "a market", a place where communities have not yet adopted. And so the Board was struggling with how do we get those communities to adopt. The CEC has got a program. We've got thoughts. How do we get more people of color, get more disadvantaged communities to move to the next level of charging. And yet, the companies themselves and -- are moving in a different direction. You know, we know Kettleman City. We know the large places where people are going San Francisco to Los Angeles. I can tell you there a lot of those. We know the affluent communities near Ms. Takvorian's area. You know, we know where those are. You know, they're probably not likely to be in, you know, El Centro. They're

probably likely to be in Encinitas.

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I guess my question to the Board and maybe to you is if you look at this final last drop of 200 million and a deployment of, let's say, 500 new chargers, I'm not sure we really do know whether that 35 percent that's been mentioned is really going to not -- but 35 percent is a great goal. It would produce a lot in communities of color. But what -- how can you -- this is kind of the same question I asked your first predecessor. How can we be assured that at the end of the day, the monthly check-in with our staff, everything that's pointed out in the resolution, all of the kind of the bells and whistles that at least staff will get to see -- because I believe this may be our last hearing on this item.

Staff is the one that really gets to evaluate in some sense. And I'm sure we're going to ask Mr. Cliff to come back at some point and say how did it go? But how do we know that you'll come through on the 35 percent. I mean, what's the specific plan? And I appreciate the overlay. And I did see some of those communities it looks like made greater progress than the past two CEOs. But just kind of maybe give me and the Board a thought process on how that's going to be achieved.

ROBERT BARROSA: Yeah. So first -- to address your first question.

1 BOARD MEMBER FLOREZ: Sure.

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ROBERT BARROSA: I've Been with the company since 2018.

BOARD MEMBER FLOREZ: Okay.

ROBERT BARROSA: So I just didn't appear on the stage. And I've been electrification for over -- well over 15 years now. I started my career fast charging forklifts, if you can believe that, lead acid batteries back in the day. So I've been in the world of electrification and believe in it dearly. And I'm committed to this space. Giovanni Palazzo has not gone away. He's the chairman of our board. We were texting just before this and -- to get prepared. So he's very much involved in the business, and in the process, and in this investment.

In terms of, you know, making sure we continue this progress, right, I think we set great relationships up with staff to really look at our investments and where they're going, right, and identifying where our achievements are and highlighting where our achievements are not, right?

BOARD MEMBER FLOREZ: Um-hmm.

ROBERT BARROSA: And I don'T think we shy away from those. And so we're always continually looking to see how we can do better, right? We have the 35 percent

target. We've been able to achieve 55. Obviously, I think there's some question of like, well, let's really dig into that and see, okay, if you get down to the micro level. That's at the macro. Now, let's get to the micro and look at certain areas in San Diego or other regions, right, are we really addressing those areas?

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And it those are -- those are tough, you know, ones to look at and see how we can make investments there. But the nice thing to see is that I think overall, right, you know, when we look at to cycle one, there were very few CCS vehicles out on the market, right? We really needed to figure out how are we going to spur growth overall to try to meet the State's goals, right? And we did that in a way that was fair and balanced in terms of making sure we take care of our rural, and low-income, and disadvantaged communities, right, while we're making investments in other areas in the state.

And we've seen that growth in the marketplace now and the 25 percent new vehicles sold being electric, which is fantastic. And so we've got to continue that progress, right, to continue to look at these investments, take these census data, data tracts, and other things looking at the network map and take those into account when we do our investments. And that's exactly what we do. We've taken that to heart. We've institutionalized. It's part

of our rubric when we make our investments. And so we'll continue to do that and strive to hit the largest targets possible.

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BOARD MEMBER FLOREZ: Okay. Maybe just a last comment. I think most of the Board members spoke to the disadvantaged community question. I guess for staff, as we hear the next round of folks and public comment, we are going to be voting on this resolution. And I just wanted to ask a question for you, given this resolution has to do with this. Do you have any problems with us adding and incorporating a similar report from Electrify America on low-income and disadvantaged communities, because our resolution right now remember speak to "strive towards."

And those are great words, but it isn't really specific to I think what this Board wants to see and measure. And, you know, I think one of the -- what is that famous saying, you know, what gets measured, gets managed, right? So if we can't measure it and if we're asking you to strive for it -- it's just maybe the mismatch of language. Diane mentioned earlier like being suspect of the 35 percent, because I don't think anything to date is somewhat measurable in the metrics that you're tack about. We're fixing old ones. We're upgrading others. We're taking 91 million -- or 81 million for upgrades out of a total of 91 million for new. Ninety-one

gets us how many, like 500 chargers or something of that sort, but yet, we're spending half the dollars to just upgrade cycle 1 and 2 chargers.

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So we're not building anymore chargers. We're actually upgrading, which are great. We just heard about the reliability issues. Those need to happen. But I think in our minds, when this money was looked at towards infrastructure, it was building many, many chargers with the entire maximum amount, knowing you still had to do maintenance. But this is a very large number. It's almost 30 percent where you're now going back cycle 1 and 2 and actually retrofitting, expanding. Those are all great goals, but now we're down to the last 500, right?

Now, we're actually down to the last 200 million.

Mr. Cliff talk and maybe talk to the Chair as well looking at some additional language -- and I know how staff feels about last minute language on resolutions, but I think this would be very simple. And I'll just as -- before we get to the comment, let me just read it. It would basically say to the very last paragraph to the resolution, "Additionally, incorporate a similar report on Electrify America's website regarding the charging stations situated in low-income and disadvantaged communities. And it would provide details on the number

of stations in these areas accompanied by maps illustrating their locations and identifying any existing public stations within these communities."

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It is just a furtherance and a little more micro down, at least for me, to vote for this resolution, because it feels like that's measurable, it's tangible, and it's a little bit more than strive for, which I think is super important. And I just -- you know, as CEO, do you have any issues with that type of language from your perspective?

ROBERT BARROSA: Well, look, I think we set to strive for a 35 percent goal.

BOARD MEMBER FLOREZ: Sure.

ROBERT BARROSA: And we've overachieved that goal, right? We took it seriously --

BOARD MEMBER FLOREZ: Yeah.

ROBERT BARROSA: -- whether it's hard or strive, however you want to term it, and we've moved forward on it and continued to do that. So we've demonstrated and hopefully we've built some trust that we continue to execute in that -- in that arena. There is already I believe quite a bit we report in the annual and quarterly report in terms of our investments as they relate to LIC/DAC.

So I would look first towards, you know, the data

the we share with staff and how that's incorporated, because it may answer a lot of the questions that you already have in terms of seeing the data. And so I would suggest we start there and look at that.

BOARD MEMBER FLOREZ: So the -- just that the answer is yes or no?

ROBERT BARROSA: I think what we've established 35 -- is a strive to 35 percent. And so I think from Electrify America's viewpoint, that's accurate.

BOARD MEMBER FLOREZ: Yeah.

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ROBERT BARROSA: And we continue to achieve that and we continue to report on those metrics.

I'm having - I don't know about the Board members - is that striving -- it sounds like we've committed to 35 percent. We don't see -- we see the commitment to 35 percent, but we don't see the actual roadmap - no pun intended - in terms of what specifically that looks like on an ongoing basis on the monthly meetings you'll have with our staff. I think if we know -- if we have some sense of that, it will allow us to measure your progress, but more importantly it will help I think us to also manage what we think is the most -- probably I think the most important thing about this settlement is having the ability to build in disadvantaged communities where maybe

other companies won't go.

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And then not to say that you shouldn't do what other companies are doing, but remember these are settlement dollars due to a violation. And I always have felt under this agreement, we should mandate that you build in those areas, because this is not a compet -- you can build with your own anywhere you want. But for these dollars, it feels like it should go specifically towards those communities that don't have a chance in the regular marketplace to ever get a charging station. To me, you're our last hope with these settlement dollars. So I think the goal is to try to measure that. So please consider it as we have public comment. Thank you.

CHAIR RANDOLPH: Okay. We have two more. Board Member Guerra and then Board Member Hurt.

BOARD MEMBER GUERRA: Thank you, Chair.

Appreciate it and appreciate my colleagues for asking a lot of questions. And so at least on the disadvantaged communities, you know, I'm hopeful and optimistic that we hit the 35 mark and beyond that. But I think that if and when we hit that mark, what I still have concern is is that the communities that will be dependent upon the infrastructure. And what we see here today again is the lack of specificity in the maintenance plan. And in general on a resolution like this, I probably wouldn't be

as concerned. Tend to be larger in scope very directive to staff. But, you know, in our conversation I first wanted to say thanks for -- thank you bringing to light the changes from a 48-hour response time to a 26-hour response time.

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But I think -- you know, in thinking about this today is I worry that we leave today in our last opportunity to really hold some accountability on making sure that those that are in disadvantaged communities that are looking at this as another option of reliability, of lower transportation costs for them, particularly as the new used car market comes in on electric vehicles, that the lack of maintenance will continue to do great.

And so -- and I -- and while it's laudable that 26 hours is a response -- a quick response time, when you have locations where there are only four chargers and one is down, that's only three, but many times you may have two down. And so I think that the -- this flat response of, you know, when something is down, there needs to be a I bigger response or a different way to recognize when we need to respond quicker to particular stations.

If you have a charging station with 10 chargers and is one down, that's different than one -- four when one is down. And particularly, and I think about it in my own council district, where there -- we have some of the

four-unit charging stations, those lines can be long. And I -- and when I think about who is using these type of charging stations, it is generally working families. And so I think about my commute this morning and I had two very upset toddlers who were, you know, waiting to get to school. And even on the return home there at their final part of their day and they're trying to get to a location, 26 hours, 26 hours is a very, very long time.

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And so I think for me the concern that I have, maybe a question for the Board here and Chair, and I think you brought it up Chair in the beginning is given the resolution, you know, what -- you know, what level of specificity should we be adding in for accountability and oversight when it comes to the maintenance plan. And so let me -- let me bring that as an open-ended question. This is a public hearing. Your comments are on the record, but there have been three prior CEOs, and so we take that into effect.

So let me stop there and say, you know, should we be adding more specificity in this maintenance plan. And particularly in our conversation, I worry about the subcontractors and the agreements that you have with your contractors to their responsiveness to fix these locations. And that may be extremely micromanaging of a resolution, but that's almost down to the point where

we're at is how are we ensuring that we have immediate responsiveness on this in areas where you -- where you -- where you have such limited charging?

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Finally, I'll just say thank you for recognizing the fact that bigger is better, more charging stations, more availability. We're doing a lot of that. But this hearing today is about the issues with maintenance of the EA system here. So let me ask that, Mr. Barrosa.

ROBERT BARROSA: No. Absolutely. Thank you for your comments. And look, much of the network across California are four-stall sites, right? It wasn't more towards the end of cycle 3 that we started building six-stall, some eight-stall sites, right, and you're starting see more of those. And that's where we want to progress, right, because, you know, just using Tesla as a proxy, they sort of double down, right, build bigger, build everywhere, build out -- built that confidence.

Yeah, because even if you have all four chargers perfectly working, there's still a line of cars and you're still waiting. So again, that's not a great customer experience, but, you know, we're living in a world where we're seeing, you know, half the station -- almost half the stations now at 40 percent or above utilization. So there's got to be some sort of pressure relief here at some point to drive a better customer experience, right,

so that's one aspect

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The maintenance aspect absolutely, right? And so we've been putting things in place. We're -- like, it doesn't -- it does us no good to have a broken charger, right, at all, right? We're -- our -- you know, we're aligned in terms of driving, right, uptime performance to the highest degree possible. And we're doing that, right, making the investments, like I've talked about, you know, training materials, videos, how-tos, so that we can work with our subcontractors and other service providers to train more techs to bring them on so we can continue to increase performance as we live in this world. Right now, we're carrying a pretty heavy load as market adoption increases.

And so that forces us as a business to try to increase things where we can and improve performance overall. And we'll continue to do that. We're committed to doing that. We want to see improved performance in areas where we just can't get there or it's sort of a this thing is a lemon now. We've got to move on and we need to make an upgrade to ensure better preponderance, absolutely. Especially if it's a site that maybe we can't expand and it's a four-charger site and its heavily utilized. Okay. Well, it's going to be there. Well, let's upgrade it to the latest equipment, get better

performance. We're still going to be have long lines.

That's not going to go away until we get more charging out there.

BOARD MEMBER GUERRA: Well, shouldn't we have more specificity in the maintenance plan? I mean, it almost would seem to me it's a benefit to you when you're working with your subcontractors saying this is what the State is requiring us --

ROBERT BARROSA: Um-hmm.

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BOARD MEMBER GUERRA: -- for us to be more responsiveness. And I guess that's my worry here. I don't want this -- maybe this is a question for our Board, but I would hate that today becomes a rubber stamp for a maintenance plan that says trust us. You know, I guess the question is how do we verify? That, to me -- that, to me, is the last point. So should we not have more specificity in the maintenance plans on how Electrify America is going to execute this?

CHAIR RANDOLPH: And I'm going to jump in here, because I think we've heard this point from several Board members and I think it's a really critical point. And I think, as we, you know, finish up the comments and for Board questions and then hear public comment, maybe staff can be thinking about like, you know, what are some options here, because I do hear that folks want to see

more specificity in the maintenance plans. So why don't we kind of mull that over as we are finishing our dialogue.

BOARD MEMBER GUERRA: Thank you.

CHAIR RANDOLPH: Board Member Hurt.

BOARD MEMBER HURT: What can be said going last?

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BOARD MEMBER HURT: Well, I'll start off by saying that I appreciate the leadership of Electrify America continuing to invest in our zero-emission transformation. I think, for me, my concerns this year are really based on reliability, maintenance, and partnerships, and in those areas, focusing on metrics, transparency, and auditing. And I agree with many of the comments that have already been said.

I am going to vote in favor of this, because I want to get the money out. I want to get the money out. I want it on the ground and I want people working. But we do need to tighten up the maintenance plan, because the numbers are just hard for me to understand. This investment that you have moving forward is a response to being bad actors. And so there's a need for there to be teeth and strength around the maintenance plan and the metrics.

And not just being, but being better is, I think,

what the whole community is really looking for in Electrify America and giving back to the community who's been harmed in this process. When I see 40 percent utilization, that seems extremely low to me out of 100. So can we talk about that some more? Can we understand that some more?

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When I hear how long it takes to get chargers back online, I think, gosh, the maintenance division needs to be bigger and better. When I hear that we have 700 old chargers, or legacy chargers, we've got a future where there's a lot of work that needs to be done. And I am very concerned about some of our priority communities that have been left behind that are mostly impacted by sources, freeways, and what we're doing to uplift them to be a part of this transformation.

So I hope and I'm looking to staff right now to see if we can do more when it comes to the maintenance plan. I think we have authority to do more and I think we need to take that authority and use it at this time. And that means more specificity. That means really getting towards those chargers that are quote/unquote legacy, how is that going to happen, how is that money going to be spent, and making a plan to make sure that it happens.

Again, I do really appreciate all the work that you all have done, but there's more that absolutely has to

be done. I would say -- you spoke a little bit about over a hundred sites have been identified for the future and I'd like to know whether you're coordinating with the local and regional associations of government to see what it is that they're also planning and thinking about and whether there can be partnerships there to work together.

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ROBERT BARROSA: Yeah. In terms of outreach with stakeholders, right, as part of our national outreach plan, and we hold webinars and other things with all sorts of community members to talk about our investment plan as we move forward, so -- and we take a lot of those inputs into account when we develop the cycle 4 plan. And we continue to engage where we can or where possible, right, to talk about our investment in what we're doing and what we're doing in those local communities.

BOARD MEMBER HURT: I would say it's probably not enough to just kind of have a community meeting and ask people to come. I would tell you many of the cities and counties are extremely busy. I think it really takes an extra direct walk over to say let's discuss. This is where we're talking about putting chargers. Where do you see the need? Because some of these entities have been --have been researching and thinking about this for years. And so I think it would behoove you to speak directly to the local cities and regional entities.

And I guess that is all for me. I just -- if we could, just looking back again at the staff, can we have a better maintenance plan and just more metrics and move forward with really ensuring that these are reliable.

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CHAIR RANDOLPH: Okay. You were not the last one. We have two Board members who are remote who would like to ask questions and then we do want to get public comment. So I'm going to call on Board member Eisenhut and then Supervisor Vargas.

BOARD MEMBER EISENHUT: Yeah. Thank you, Chair. This time slot seems to have morphed into a comment period, so I wanted to follow that -- follow that thread.

I also will vote to support this motion. I look forward to a more robust possibility or language with regard to the metrics of maintenance. In a -- in a slight shift of emphasis, I'd like to hear from staff about the lessons we have learned in this process since we've been very, very intimately involved with at least one, in this case Electrify America, provider of charging stations, what lessons we have learned, how those lessons are applicable to the charging infrastructure as a whole, and what our role might or could be in implementing those lessons.

CHAIR RANDOLPH: I think that's a great question.

I want to table it for a couple minutes and let Supervisor

Vargas ask her question, then do public comment. We'll let Mr. Barrosa sit down. And then I would love to hear from staff, because I think that's a great question it's -- it will be interesting to hear the response.

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BOARD MEMBER EISENHUT: Okay. Thank you.

CHAIR RANDOLPH: So Supervisor Vargas.

BOARD MEMBER VARGAS: Thank you. I think most of my colleagues have already shared some of my concerns, particularly in communities of color. I think the part that -- and maybe I might have missed it, but -- so the relationship with some of the non-profits that are doing some of this work already as well, and if there's any relationship that are taking place because I -- because of their connection to community as well in addition to everything that's been said. So it is a question specifically.

ROBERT BARROSA: Yeah, absolutely. So every cycle we go through an RFP process to select different community-based organizations and specific projects they have, and we'll select those. So we've had a few in cycle 3. Ecology Action, Valley CAN are a couple that come to mind. And so we'll go through that same process as we look to cycle 4 and then work with them to develop the metrics by which we'll measure their activities and report that out through the quarterly and annual report.

BOARD MEMBER VARGAS: So I guess my suggestion would be, and I -- and, you know, I understand that this is the question period, but maybe trying to identify those spaces where, you know, using the data of where the -- what we have underinvested in communities where you can -- you can tell that it's important for us to work with those organizations, that understand those communities, and the communities that are going to be mostly impacted. It seems like that would be a good direction to be able to reach out to, you know, those that are in need.

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ROBERT BARROSA: Okay. We'll take that. CHAIR RANDOLPH: Supervisor Perez.

Chair and colleagues. And you know, once again, a lot of great questions, a lot of great points. And this might have been already stated out loud, but I'm just wondering about timelines. As far as reliability is concerned, how soon can we start seeing these changes for example? And then as well, mapping, if you will, of what exists already and what potentially is going to exist in the future, especially in communities of color, because I think those one-pagers, if you will, or that information in which people might not have access to over a website or over technology, that's where I think our non-profits that supervisor Vargas is discussing could share with folks on

the ground. So it's just a couple points that I'm not sure I heard about -- if I heard anyone express those or those were answered, but I just wanted to put that out there. Thank you.

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ROBERT BARROSA: Yeah, certainly. So all our stations are all online. We feed that through a variety of channels so it gets out into the public sphere. The DOE has the alternative fuels database that we publish there. Other third-party entities like PlugShare, A Better Route Planner, they pull feeds from the alternative fuels database. We actually provide a lot of direct feeds to the automakers, so it goes right into their telematics on the vehicle itself. So we try to get that information out as broadly as possible.

In terms of where we're putting the next stations and our selections, right, we start with zones and then we start coming down. And then once we get to a place where, you know, in coordination with local officials, utilities, really trying to figure out is there power, can we build on a site, right? Then once we get to that stage, then we identify the exact location where we would be building.

CHAIR RANDOLPH: Okay. Thank you very much, Mr. Barrosa for that lengthy Q&A period. It is now time for public comment. Board clerk, will you please call the public commenters?

BOARD CLERK GARCIA: Yes. We'll start with our in-person commenters for this item. I believe we have seven. The first commenter will be Kyle Williams.

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KYLE WILLIAMS: A bit of a walk up. Sorry.

Good morning, CARB Board members and staff.

Thank you for the opportunity to speak today on the Electrify America cycle 4 ZEV investment plan. My name is Kyle Williams. I represent Pearce Renewables as the senior leader of our EV Services Division, the maintenance guy. I wish I had more than two minutes to talk to you all.

Pearce is a California-based field services company and the largest independent service provider of nationwide services for mission critical energy infrastructure including EV charging, battery energy storage, wind and solar. Specifically, regarding our EV services, my organization has partnered with Electrify America to provide maintenance and repair services throughout the state of California and nationwide.

CARB's commitments to programs like this from Electrify America have created significant employment opportunities and allowed Pearce to build a diverse, local, and highly skilled workforce. At Pearce alone, we have 616 employees residing in the state of California, including myself, which has created opportunities for 367

employees who live in California's low-income and disadvantaged communities. I'd love to note additionally of the 616, 227 of our employees are made up of veterans who have proudly served the U.S. military, including myself.

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Given my Organization's over 12 years of efforts in the ZEV industry totaling hundreds of thousands of touchpoints across all major brands, makes, and models of chargers, coupled with my personal nearly three years of experience as a senior leader within Tesla's Energy Division, I believe I can offer this Board a unique perspective on just how challenging our collective mission is to ensure the swift and successful transition to our state's infrastructure to renewable energy sources.

Simply put, the challenges discussed here today are not unique to Electrify America. And all major charge point operators are dealing with the same problems, past, present, or future. And while our work is far from over, I strongly believe that the Electrify America team has been a critically important leader in driving the evolution of higher quality of hardware, technology, and training standards that are undoubtedly benefiting the entire EV industry as a whole.

Is that a fire alarm or me? Okay.

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I'll wrap it up. Mostly notably among these benefits, our collaborative partnership Electrify America has enabled us to develop a training and workforce career development program --

CHAIR RANDOLPH: Mr. Williams, sorry, your time is up, so --

KYLE WILLIAMS: Oh, okay.

CHAIR RANDOLPH: Yeah. Feel free to submit a written comment.

10 KYLE WILLIAMS: Will do. Thank you. Appreciate
11 it.

12 CHAIR RANDOLPH: Thank you.

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BOARD CLERK GARCIA: Thank you.

Next, we'll hear from David Silberfarb. And I apologize in advance is mispronounce anyone's name.

DAVID SILBERFARB: My name is --

CHAIR RANDOLPH: Mic. Turn on the mic.

DAVID SILBERFARB: All right. Yes. You pronounced it perfect. Thank you. And thank you to the board for allowing me to come here and speak. I am David Silberfarb from BTC Power. I'm our EVP of Operations focusing on our field service and repair of our charging stations. So it's been a big topic of today and I wanted to give you my perspective on things.

We've been a partner with Electrify America since

cycle 1. We've been to several of these meetings and, you know, we've been making hardware with them since the beginning. And they've been really key to our growth and supporting us when we were a small company, like Mr. Barrosa spoke about. They've been instrumental to our growth and really supported us. We're headquartered in Santa Ana, California. We have -- most of our employees are California-based employees. And, you know, it's just been a great partnership with Electrify America.

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They've been really key to our new hardware, when a lot has been discussed about, that is driving toward 98 percent uptime is what we're -- our goal is. We want to exceed the 97 percent. We call this our gen 4 hardware. And Electrify America has been instrumental in supporting us in developing this hardware, their investment in us, their labs. We're really worked closely together to get this hardware in and installed. They've helped us set up training facilities. We've trained over 50 companies and over 300 technicians, most of them based in California, to help keep the uptime of the machine working. They've worked with us to make our new hardware more serviceable, so that it can be fixed easier, so that we can really meet some of the timelines that we're discussing and fixing it, just so a tech can roll in, swap a part, and move on. I'm just here to ask you to please approve their proposal.

And I thank you for your time.

BOARD CLERK GARCIA: Thank you.

Tom Knox.

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TOM KNOX: Good morning, Chair and Board members. I'm Tom Knox Valley Clean Air Now speaking in support of the cycle 4 proposal. Valley CAN has been working closely with Electrify America since 2018 on both their ZEV outreach and education program as well as their STEM Education Grant Program.

Electrify America funding for ZEV outreach in disadvantaged communities has been a critical part of the growth and success of Clean Cars 4 All in San Joaquin Valley. Their funding and collaboration enabled the two most effective elements of our outreach program, namely right and drive events hosted by Charge Across Town, featuring affordable used ZEVs and community clinics held up to four nights per week throughout the valley where low-income drivers get face-to-face help in qualifying for Clean Cars 4 All.

Within weeks of adding ride and drives and community clinics in late 2018, our application completion rate tripled, while our demographic Remained very disadvantaged. Since then, we've hosted hundreds of ride and drives and community clinics, which has resulted in an organic awareness throughout the valley that used ZEVs are

a real solution for low-income drivers. That organic awareness is a key factor in thousands of valley residents switching to ZEV.

In addition, Electrify America was an early supporter of our collaboration of community college automotive programs to develop ZEV maintenance training, which has now expanded to EVSE maintenance training. We believe that expanding all types of ZEV maintenance training to all community college automotive programs statewide is an important part of an equitable ZEV transition.

Valley CAN respectfully requests that the Board approve the cycle 4 plan, which will continue the strong results they've accomplished for ZEV awareness and workforce development in cycles 1 through 3.

Thank you.

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BOARD CLERK GARCIA: Thank you.

Frank Meza.

FRANK MEZA: Hi. My name is Frank Meza. I'm the CEO and founder of BTC Power. We've grown from a basically a minority business enterprise and we've been in electrification for over 20 years. And today, we are now one of the main suppliers for Electrify America. So this topic about reliability is a -- really, you know, it goes to the core of what we're -- what we're doing, you know.

We've been with EA since cycle 1, cycle 2, and cycle 3, hopefully now into cycle 4. Yes, when we initially started, our uptime availability was hovering in the 90 percent range. But today, yes, our goal is to reach 98 percent. And typically with our new product, our generation 4 product, that was in essence funded by the production orders that Electrify America gave us, now it's consistently above 97 percent, but our internal goal is 98 percent.

And so when we talk about reliability and maintenance, the ultimate way for -- you know, to achieve the maintenance that we need is never have the charger break. And that's what we're trying actually to do. And we live, eat and, breathe this. We deal with the -- all the echelons of management at Electrify America. They're all deeply involved in the day-to-day maintenance of the chargers. And I'm here to request approval for the last cycle, cycle 4.

Thank you.

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BOARD CLERK GARCIA: Thank you.

Ricardo Alvarado.

RICARDO ALVARADO: Good morning. My wife and I are EV drivers and I just wanted to be here and listen to everything that's going on with Electrify America. I just wanted to thank you all. It's been very educational. And

I can just say that you guys can't put them out there fast enough, so if the Board would approve this.

The complaints that my neighbors and I have is that there's not enough chargers to go around. We have a level 2 in our home, but, you know, sometimes that takes too long and we have to get to our workplace and be able to get to a charger that can get us out there in 20 minutes. That would be great. Thank you.

BOARD CLERK GARCIA: Thank you.

Amy Lilly.

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AMY LILLY: Hello. Thank you for the opportunity to speak today. My name is Amy Lilly and I'm speaking on behalf of Mercedes-Benz U.S.A.

We support Electrify America's cycle 4 California ZEV plan and its approval by the Board today, so that investment can begin as soon as possible. Mercedes-Benz continues to pursue a path towards emission-free driving. And today, we offer five electric vehicles for sale in the U.S., two of which are produced in the United States. Soon our electric Sprinter will be available and we have many more to come in the near future. As we expand our product offerings and as consumer adoption increases, one thing remains clear, chargers must keep pace with the ongoing interaction of ZEV vehicles.

Indeed, Mercedes-Benz is rolling out our own

charging network, but Electrify America's plans are critical to complement our efforts. Chargers also need to be strategically placed. Furthermore, we believe that charger reliability, charger upgrades, and charger maintenance are also very important. Electrify America's plan addresses these three critical areas.

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Like most of the industry, Mercedes-Benz is moving to adopt the North American Charging Standard, or NACS for our BEV vehicles. We embrace of Electrify America's plans to continue to support the CCS-1 plug standard and to offer NACS connectors at both new and legacy stations

In summary, Mercedes-Benz U.S.A. is firmly committed to bringing EVs to market, but we need charging in every community in California in order to enable and expedite EV adoption. Therefore, we ask that the Board approve Electrify America's cycle 4 investment plan.

I want to go off my script though and say this has been such a great conversation today. You brought up so many important topics. Thank you all for raising them. And we need reliable stations. And thank you, Electrify America, for all your work. Thank you for considering my comments.

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BOARD CLERK GARCIA: Thank you. Carleen Cullen.

CARLEEN CULLEN: Thank you. My name is Carleen Cullen. I'm the founder and the Executive Director of the Cool the Earth. A 2018 campaign policy advisor for Governor Newsom and on the ChargeX Consortium.

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I urge CARB to reject Electrify America's plan due to widespread evidence of station failures and customer dissatisfaction, particularly impacting those in our equity communities who rely most on public charging.

Recommendations. Reject the plan.

Number two, prioritize station replacement and maintenance. From the \$80 million allocated for existing sites, note that only 25 million is for station replacements with the rest for operations, maintenance, and demand fees. CARB should work with Electrify America to remove the \$25 million cap, prioritizing replacement of stations from all cycles with gen 4 models, although these also have real reliability issues. New stations and demand sheets -- fees should follow using any remaining funds.

Three, develop specific metrics. EA should use -- EA should submit detailed metrics in the selection methodology with CARB staff ensuring these metrics identify all performing station -- all underperforming stations. Excuse me.

Fourth, enforce penalties. Implement consent

decrease penalties from the time underperforming stations are decommissioned to the ones that are now operational. The focus should be on reliability. The expected increase in stations fueled by Tesla, State, and federal investments will expand availability.

Other issues that contribute to station congestion are EA's broken stations, slow power delivery, and possibly their business practice of offering free charging to drivers who -- with select popular vehicles from Ford, Kia, Hyundai, and three companies from the Volkswagen Group itself, including the ID4, Audi, and Porsche.

I urge the Board to match investment in Clean Cars 4 All with reliable charging stations.

Thank you.

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BOARD CLERK GARCIA: Thank you.

That concludes our in-person commenters. I'll turn it over to our Zoom commenters. We currently have 21 hands raised. If you would like to speak on this item, please virtually raise your hand.

So the first few commenters will be Munni Krishna, Sara Baumann, Wendy Chou, Maureen Blanc, Ralph Megna, and Susannah Saunders.

So Munni, I have activated your microphone.

Please unmute and begin.

MUNNI KRISHNA: Thank you. Good morning, Chair Randolph, members of the Board, and staff. My name is Munni Krishna and I'm speaking today in my capacity as Veloz's Senior Director of Business Development. Veloz is a California based 501(c)(3) non-profit based in Sacramento that is driving towards 100 percent zero-emission vehicles here in California and nationwide. Electrify America, along with 39 other organizations in the ZEV industry, is a member of Veloz and their President and CEO, Rob Barrosa, serves on our leadership board.

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Veloz is pleased today to support Electrify
America's cycle 4 ZEV investment plan. I'd like to speak
briefly about the value to California and its people.
This cycle 4 investment plan proposes to invest \$172
million in charging infrastructure, which will augment
\$384 million in NEVI funding, as well as funding being
made available by the California Energy Commission and
local governments. These efforts, in tandem, will play a
critical role in California's efforts to reach its
ambitious climate and air quality goals by removing a lack
of reliable public charging infrastructure as one of the
main barriers to EV adoption.

In addition, and as described Electrify America's cycle 4 plan, public education and marketing will be critical to informing consumers of new vehicle launches,

incentives, and available infrastructure. The \$8 million allocation for this education and marketing activities includes a commitment to continue funding Veloz's brand neutral Electric For All consumer campaigns which focus on priority communities as defined by the state.

Electrify America has fund -- has provided funding for the past three iterations of these consumer campaigns, which have achieved the following key performance indicates statewide, 400 million impressions and an associated two million plus visits to the brand neutral and free to use electric for all.org website, which hosts a zip code based vehicle and incentive finder.

As Electrify America's cycle 4 investment plan builds on their previous plans, we are in support today.

Thank you.

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BOARD CLERK GARCIA: Thank you.

Next, we'll hear from Sara Baumann. Sara, I have activated your microphone. Please unmute and begin.

SARA BAUMANN: Thank you. Good morning, Madam Chair and members of the Board. My name is Sara Baumann, speaking on behalf of the Port of Long Beach.

The Port of Long Beach is supportive of the Electrify America cycle 4 ZEV investment plan. The port is committed to improving the environment, air quality, and implementing decarbonization strategies. We have

established aggressive zero-emission goals for terminal equipment by 2030 and on-road trucks by 2035. To support this transition to zero emissions, we need immediate investment in charging infrastructure for heavy-duty equipment and trucks.

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The plan proposes new stations and more chargers that will facilitate the transition to zero-emission trucks, including those operating at the Port of Long Beach. We therefore ask the Board to approve the plan. Thank you so much.

BOARD CLERK GARCIA: Thank you.

Next, we'll hear from Wendy Chou. Wendy, I have activated your microphone. Please unmute and begin.

WENDY CHOU: Hello. Thank you so much for this wonderful discussion and opportunity to comment. My name is Wendy Chou and I'm an EV driver since 2018. I am a Senior Manager with the 501(c)(3) non-profit organization Acterra: Action for a Healthy Planet based in the Bay Area. My comments are from the perspective of community-based organization Acterra, which has partnered with Electrify America for years, most recently with another organization Ignite Ed to implement STEM-related programming for students and to provide outreach and education about EVs. I ask the Air Resources Board to approve the Electrify America cycle 4 ZEV investment plan.

What's extremely important to us as an organization committed to a just and equitable transition to a clean energy society is that the plan continues much needed support for education and outreach for underserved communities, including by sponsoring ZEV education, STEM programming, and workforce development training.

These investments are vitally important to

Acterra as we work to lower the barriers to residents in

underserved communities knowing about and trusting that

EVs are a workable solution for their needs. As we switch

sway from fossil fuels, we appreciate that this plan

invests in supporting education, outreach, and training on

EVs and electrification so a wider audience can reap the

benefits of this technology.

On behalf of Acterra, I request the Board's approval of the cycle 4 ZEV investment plan.

Thank you very much.

BOARD CLERK GARCIA: Thank you.

Maureen, I have activated your microphone.

20 Please unmute and begin.

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MAUREEN BLANC: Good morning. Chair Randolph and Board members, my name is Maureen Blanc and I'm with Charge Across Town. We're a non-profit organization speaking in support of Electrify America's cycle 4 proposal. Charge Across Town works very closely with

Valley CAN as a partner on the Electrify America ZEV outreach and education program in the San Joaquin Valley.

As you have heard from Tom NOx, the Electrify
America funding for ZEV outreach in disadvantaged
communities has been critical to the growth and success of
the Clean Cars 4 All Program in the San Joaquin Valley.

Electrify America's funding from cycles 1 through 3 have allowed Charge Across Town to plan and support their efforts in the valley resulting in thousands of residents in these communities adopting new and used electric vehicles. Specifically, our efforts have focused on ride and drive events featuring affordable and used electric vehicles, educational workshops to share introductory videos on cars, State and regional incentives in charging, and community clinics held up to four nights per week with qualified EVs, as well as test drives where drivers get behind the wheel of the car, take a test drive, and in many cases visit an EV charging station to learn how to use it. Again, this program has been tremendously successful and welcomed by communities across the valley.

Charge Across Town respectfully requests that the Board approve the cycle 4 plan, which will continue the strong results they've accomplished in cycles 1 through 3.

Thank you.

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BOARD CLERK GARCIA: Thank you.

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Ralph, I have activated your microphone. Please unmute and you can begin.

RALPH MEGNA: Thank you. Madam Chair and members of the Board, my name is Ralph Megna and I live in (inaudible), California. I'm and Electrify America Pass+ member who has used EA for 95 billed DC fast charging sessions in just the last 12 months spread out over eight different states. That number does not include dozens of failed sessions, two of which occurred just yesterday at EA's flagship station in Baker, California. In short, I am a very experienced and very frustrated customer of Electrify America.

Today, I wish to reiterate the point I made back in August, when I provided both oral and written comments related to the cycle 4 plan. It doesn't matter if EA has opened hundreds of stations in California if they don't work. Surveys and studies by industry professionals, academics, and analytical EV enthusiasts agree that, first, charging station reliability not their number of locations, is now the single most troubling obstacle to EV adoption. Second, Electrify America is, by a wide margin, the worst EV charging network in the United States with quality of experience scores that are just a fraction of Tesla's. It is not hyperbole to say that EA is

single-handedly undermining the transition to EVs with its miserable operational performance.

Today, you have a chance to start fixing this disaster. As an EV driver who must use public DC fast charging on long trips, I beg you, I beg you to reject EA's comic book parody of a plan along with this staff review and demand that they return with a roadmap that includes hard data on EA current performance levels, transparent methodology and metrics for judging future performance, and a detailed budget that makes reliability, speed, and quality of experience the priorities, and not the sheer number of new stations.

Thank you.

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BOARD CLERK GARCIA: Thank you.

After Susannah, we're going to hear from Maria
Perez, Mary Matteson Bryan, Brenna Rivett, Leslie Austin,
Jim O'Leary, and Eric Way.

So Susannah, I have activated your microphone. Please unmute and begin.

SUSANNAH SAUNDERS: Good morning. Sue Saunders from the Bay Area. My life has been devoted to the care of children. I was a stay-at-home parent and then a special education instructor. Climate change has taken a wrecking ball to their mental health. It's causing great emotional distress for all of us, but especially for young

people who have inherited our failure to stop it.

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I volunteered to become the lead tester for the Cool the Earth UC Berkeley study, because during my electric vehicle advocacy work, I knew many EV drivers were frustrated. During my testing, I was shocked by the magnitude of the problem and the number of dismayed and regretful EV drivers I encountered. I am angry that the work done by many of us, including this Board, has been hindered by the inadequate effort by Electrify America. This plan must be rejected.

They consistently ranked last in consumer satisfaction. They have repeatedly made promises to improve, but follow-up testing has shown it has not happened. Driver education is not the problem. Like CEO Barrosa, last month I too stopped at Kettleman City on my way to LA, and four out of the six chargers were not working. At the next EA station in Los Angeles in 100 degree weather two people were on the phone with EA because all three chargers were down.

They will not improve without strict oversight.

If you give them another 200 million without specific metrics, enforcement, and the threat of fines, we're going to see more people choose gas cars. That would be a tragedy, because every time a person drives that gas car, it releases carbon into the atmosphere that stays there

for hundreds of years.

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Please reject this plan. And if you don't, then we simply failing our young people who need EV adoption to have a chance of a bright future. Please do not enable this company to continue to derail EV adoption.

Thank you.

BOARD CLERK GARCIA: Thank you.

Maria, I have activated your microphone. Please unmute and begin.

MARIA PEREZ: Good morning. My name is Maria

Perez. I'm the community organizer with Regeneración

-Pajaro Valley Climate Action, located in Watsonville,

Santa Cruz County. We work alongside with Ecology Action
in supporting residents in both English and Spanish to
consider and to learn about all the grants and rebates
available for buying EVs in low-income and disadvantaged
neighborhoods.

I'm here to speak in support of Electrify America to ask the Board to approve the plan to provide more widespread and equitable adoption of zero-emission vehicles through the deployment of public EV charging infrastructure. And I do hope to see more chargers in Watsonville.

Thank you.

BOARD CLERK GARCIA: Thank you.

Mary, I have activated your microphone. Please unmute and begin.

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MARY MATTESON BRYAN: Thank you. My name is Mary Matteson Bryan. I'm an energy engineer with over 30 years of experience in energy efficiency and renewables, and have provided technical consulting services to the CEC, California utilities, and Department of Energy labs. I'm also a board member of Cool the Earth, and was one of the authors of the 2022 Fast Charger Reliability Study led by UC Berkeley.

We tested every open system DC fast charger in the Bay Area, 655 chargers total. Of the those, nearly 60 percent were Electrify America chargers. We found that 21 percent of the EA chargers were not functional, and four percent had cables that were too short to reach a Chevy Bolt. We shared the details with Electrify America and CARB staff. Upon retesting the same chargers in Alameda and San Mateo counties four months later little had changed, indicating a lack of timely maintenance.

There have been similar findings from large surveys of EV drivers. A recent 2023 study by JD Power found a 20 percent failure rate in charging attempts industry-wide. Additionally, they reported customer satisfaction is at an all-time low, with Electrify America receiving a satisfaction score of only a 538 out of 1,000.

We appreciate that Electrify America has promised to prioritize reliability going forward. However, with out specific metrics and enforcement mechanisms, these promises may not materialize. These cycle 4 investments are in critical to the ZEV transition and we look forward to them being spent. But as such, we urge CARB to reject Electrify America's current plan. It is imperative that the plan is modified first to mandate explicit metrics to improve functionality and include enforcement mechanisms.

Thank you.

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BOARD CLERK GARCIA: Thank you.

Brenna, I have activated your microphone. Please unmute and begin.

BRENNA RIVETT: Good afternoon CARB Board members and staff. Thank you for the opportunity to speak today on the Electrify America cycle 4 ZEV investment plan. My name is Brenna Rivett and I represent ray EVHybridNoire, a national e-mobility advocacy non-profit organization and the nation's largest network of diverse EV drivers and enthusiasts.

We work with the highest levels of the federal government advising on clean transportation, climate policy, and the Justice 40 Initiative. My organization has partnered with Electrify America on crucial research to help understand Black consumer attitudes toward EVs,

barriers to adoption, and engagement strategies. I'm here today to speak in support of Electrify America and to ask the Board to approve the plan which proposes important investments in California to support widespread and equitable adoption of zero-emission vehicles through the deployment of public EV charging infrastructure.

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Electrify America's network is the largest network of ultrafast charging stations that is available to any EV driver that wants to drive up and get a charge. This network has supported California's rapid transition to EVs over the last several years in integral ways. The plan outlines 200 million in investments in California starting in 2024 that tackles some of the biggest challenges in the state, the need for more chargers, the need for reliable chargers, and the imperative of enuring all Californians can participate equitably in the transition to ZEVs.

EVHybridNoire envisions a world where all communities are free of air pollution from cars and trucks and everyone can reap the benefits electric vehicles in multi-modal e-mobility solutions.

We believe that the cycle 4 California investment plan will not only create a better and clean California, but also help to lead the way toward zero-emission future for the nation. Electrify America's work supports

California in reaching its goal of a hundred percent new car sales being electric by 2035. EVHybridNoire works to ensure that all Americans regardless of race, ethnicity, gender, income, ability, or location can access the benefits of clean vehicle technology. And we believe this plan is crucial to realizing these goals.

For these reasons, I request CARB's approval of the Electrify America cycle 4 ZEV investment plan. Thank you for your time and consideration.

BOARD CLERK GARCIA: Thank you.

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And just a reminder the sign-ups for this item close at 12 p.m., so oh if you would like to comment, please virtually raise your hand now.

Leslie, I have activated your microphone. Please unmute and begin.

LESLIE AUSTIN: Yes. Thank you. Good morning, Chair Randolph, CARB Board, and staff. My name is Leslie Austin. I'm the Director of Let's Green CA! in Santa Cruz calling to strongly support the Electrify America cycle 4 investment plan.

Today, I'm here not just representing a community-based organization, but to offer a voice in support of the low-income communities I personally serve across San Benito, Monterey, and Santa Cruz counties. At Let's Green CA!, our focus is on more than just the

environment. We're passionate about spreading ZEV education and awareness within low-income areas across our tri-county region. We've engaged thousands of Spanish speaking parish communities, people who are the heart of our region, ensuring that they are informed about clean transportation, along with an understanding of personal savings their families can achieve reduced fuel and maintenance costs. And we've been able to do this outreach and education with funding from Electrify America.

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Electrify America's proposed cycle 4 investment plan will continue to increase the awareness of the use and availability of ZEVs, charging infrastructure. And that, coupled with purchase guidance, a robust secondary EV market, increased federal and State rebates and incentives will help boost ZEV adoption across California in the low-income communities we serve.

We strongly support Electrify America's C4 investment plan and urge CARB to approve it. This is about both environmental justice and economic empowerment for all low-income Californians. Thank you.

BOARD CLERK GARCIA: Thank you.

Jim, I have activated your microphone. Please unmute and begin.

JIM O'LEARY: Good morning, CARB Board members

and staff, and thank you for the opportunity to speak today on Electrify America's cycle 4 investment plan. My name is Jim O'Leary, Vice President of fleet services at NFI.

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I am here today to speak in support of Electrify America and ask the Board to approve the plan, which proposes important investments in California to support widespread adoption of zero-emission vehicles through the deployment of public EV charging infrastructure. As some you may know, my organization has partnered with Electrify America in cycle 3 of Green Cities Investment 2 on the project that is known as JETSI, the Joint Electric Truck Scaling Initiative.

For those that are not familiar with the project, it's one of the most progressive and envelope-pushing EV infrastructure deployments to date. NFI, with the support of our project partner such as a Electrify America who is managing all aspects of the micro-grid technology being deployed, is the deploying 38 350-kilowatt DC fast chargers, one megawatt of solar, and four megawatt hours of battery storage at one of our fleet terminals in Ontario, California.

This site will allows us to charge at least 50 class 8 zero-emission battery electric vehicles and offset approximately 4,400 metric tons of greenhouse gas

emissions yearly by displacing over 350,000 gallons of diesel fuel every year in some of Southern California's most overburdened and disadvantaged communities. are results that could not be possible without EA and the cycle 3 investment.

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The success and commitment to this project, along with many others EA has completed, not only underscores Electrify America's ability to deliver an innovative and robust fleet charging solution that helps support the widespread adoption of zero-emission vehicles, but also their commitment to ensure an equitable and sustainable future for all Californians. For these reasons --

> BOARD CLERK GARCIA: Thank you.

JIM O'LEARY: -- I request CARB's approval.

BOARD CLERK GARCIA: Thank you. That concludes 16 your time.

After Eric, we will hear from Kaia Robinson, Jerome Mayfield, Kevin Morrison, Vanessa Rodriguez.

So Eric, I have activated your microphone. Please unmute and begin

> ERIC WAY: Thank you. Can you hear me? BOARD CLERK GARCIA: Yes. Yes, we can.

ERIC WAY: Okay. Perfect. Yeah. I am Eric Way with News Coulomb, an electric vehicle news column online.

25 I just wanted to start by saying I first purchased a ZEV in California eight years ago. And within a hundred miles of my location, there were only five public charging stations and actually two of them were Tesla superchargers that are still not open to the public to this day. And the other three were 24 kilowatt plug stations. And since that time, you know, to give Electrify America a lot of credit, there are at least a half dozen now high-powered charging stations within that same geographical area.

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Electrify America has been the reason that electrification has been able to accelerate the way that it has within California. And now that being said though, I really do agree with Board Member Florez, where I look at \$800 million being spent in California and I have to ask myself how is it there are still a number of counties within the state that have zero public fast charging and zero Electrify America charging stations. In particular, we have about 200 to 250 mile gap on a scenic highway, 395, north of Reno that has zero public charging. I've requested a number of charging providers to install stations there and no one has been willing to do that.

I really do feel like this is something that should be in Electrify America's responsibility to do.

Counties like Colusa, Tehama, Lake also do not have Electrify America stations. So I would request that CARB does not approve this until that's addressed.

BOARD CLERK GARCIA: Thank awe.

Kaia, I have activated your microphone. Please unmute and begin.

KAIA ROBINSON: Can you hear me?

BOARD CLERK GARCIA: Yes.

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KAIA ROBINSON: Chair Randolph, CARB Board members and staff. Thank you for the opportunity to speak today on Electrify America's cycle 4 ZEV investment plan. My name is Kaia Robinson and I am representing the Los Angeles Cleantech Incubator, also known as LACI. LACI convenes a transportation and electrification partnership, which is public-private partnership that has set forth goals to rapidly advance transportation electrification in the LA region by the time of the 2028 Olympics in Los Angeles.

Electrify America is one of the key members in this partnership to help drive these goals. The \$200 million in investments will tackle some of the biggest challenges in the state, the need for more chargers, the need for more reliable chargers, and the imperative of ensuring all Californians can participate equitably in the transition of zero-emission vehicles, and it continues to support education and awareness efforts for underserved communities, including sponsoring ZEV Education, STEM programming, and workforce training.

As a part of LACI's partnership, we aim to install 129,000 public and workplace chargers, have 30 percent of vehicles on the road be battery electric vehicles, and 80 percent of all vehicles sold be EVs by 2028.

Approving this investment plan will help us achieve these goals and ensure a better future for all Californians. For this reason, I request CARB's approval of the plan.

Thank you.

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BOARD CLERK GARCIA: Thank you.

Jerome, I have activated your microphone. Please unmute and begin.

JEROME MAYFIELD: Hello

BOARD CLERK GARCIA: Yes, we can hear you.

Mayfield. And I'm here to speak for Electrify America. I live in a disadvantaged community, so I am a part of the people that you guys are really talking about. And what I want -- what I want to speak about is how the clean air Valley CAN, with Tom Knox leading the program, along with Natalie, and Veronica, Jackie, and Victoria, they're in the trenches with us to try to get us into these EVs. And we're in need of having more charging stations in our area. So that's what I'm here to speak on today.

And then also, I don't really go to the charging stations, but I have seen them, and there are cars parked at them. And I would like to see that they get the money, because it's needed to keep all the programs like to Valley CAN and stuff like that to keep them going strong to get the EVs out to us.

And that's what I'd like to say today. Thank you for having me, Madam Chair and the Board. I spoke before in front of you guys some years back. And I had a stroke since then, and I haven't bought gas. I haven't bought oil, transmission fluid. I haven't had to get it smogged. You're saving may a whole lot of money. I'm so grateful for this program.

Thank you.

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BOARD CLERK GARCIA: Thank you.

Kevin, I have activated your microphone. Please unmute and begin.

Kevin Morrison.

Okay. Let's move on to Vanessa Rodriguez.

Oh, I'm sorry. It looks like Kevin. It looks like you're there now.

KEVIN MORRISON: Sorry. Yeah. I'm slow on the unmute. Thank you. As a professional communications consultant, I really applaud the presentation you saw from Mr. Barrosa. It cleverly uses disinformation to distort

the story. For instance, when Mr. Barrosa says EA has many stations patronized at high capacity, about half of those vehicles are charging, because it's free there, because of sweetheart, possibly illegal, deals with manufacturers.

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Also, when Mr. Barrosa said EA has provided five million sessions, that means about one million sessions have failed, according to their own metrics. I bought my first EV four years ago. I've had my share of those million failed sessions. By 2022, EA's failure was widely known. It was in the New York Times, the Washington Post, the Wall Street Journal, Newsweek, Wired, Car and Driver, the list goes on. By 2023, JD Power summed it up by saying of the four DC fast charging networks, Electrify America is ranked last for customer satisfaction.

EA was purpose built with public settlement funds to help increase enthusiasm for EVs. They have done the opposite. So please don't buy in to their disinformation. Please don't rubber stamp their plan for what essentially amounts to more of the same, whether it's using your statutory power or through the courts, I look forward to your urgent and necessary action starting with the rejection of this plan, developing specific metrics, and enforcing penalties, then release the funding, which will support all the providers and partners of EA that you've

heard from today, but not before.

Thank you.

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BOARD CLERK GARCIA: Thank you.

After Vanessa, we will hear from Emily Dilger, Piet Canin, Elena Engel, and Cameron Lind.

So Vanessa, I have activated your microphone. Please unmute and you can begin.

Vanessa Rodriguez, please unmute and you can begin.

VANESSA RODRIGUEZ: Hi. Can you hear me?

BOARD CLERK GARCIA: Yes, we can.

VANESSA RODRIGUEZ: Hi. My name is Vanessa
Rodriguez and I'm in support of Electrify America, because of the Valley CAN program. Without the Valley CAN program, I would not have been able to get a vehicle and would not have been able to afford payments for gas and things like that.

Through the program, I was able to get a plug-in vehicle. And without that program, I would not have been able to get one. And it was very helpful because of the in-person workshops that they would come out to disadvantaged communities like here in San Joaquin Valley, and specifically in Stockton. They come here and explain the program to us and give us all the answers that are needed. And with out Electrify America and their support

of Valley CAN, people like me and people like us in these disadvantaged and low-income communities wouldn't be able to get the vehicles, wouldn't be unable -- and I -- every single time I went to a charge to charge my vehicle, I've never had any problems with charging it. I've always been able to charge it with as much time as I do have and I always see cars parked at the charge. So I've never had any problems in that regard.

But I'm grateful for Valley CAN, the Valley CAN program, and for Electrify America supporting this program, because without it, people like myself and those of us that do live in disadvantaged communities and low-income communities wouldn't have a fighting chance to get to work and to be able to, you know, travel, I mean, in our communities.

So thank you.

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BOARD CLERK GARCIA: Thank you.

Emily, I have activated your microphone. Please unmute and begin.

EMILY DILGER: Hi. My name is Emily Dilger and I'm the CEO of Ignited. I'm calling in support of Electrify America.

Ignited is a nonprofit partnering with Electrify
America. We are on a mission to empower educators with
industry connections, so that they can create cutting edge

curriculum that transforms their students' career trajectories. We have existed since 1985 and we are seen as a trusted source of professional development for teachers in the Bay Area for almost 40 years. In our history, we have worked with thousands of teachers and impacted four million students, 60 percent of whom are in underserved schools.

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We see awareness of electric vehicles and careers in electric transportation as a growing opportunity that our future workforce needs to prepare for to meet tomorrow's industry reeds. Our goal is to arm our teachers with models and practices that they need to best equip students, especially those in underserved communities for future success.

Our work helps to support a future diverse, local, and highly skilled workforce who are aware and supportive of electric vehicles. As a non-profit, Ignited is always interested in collaborating with other leaders in key technology areas to direct funds towards STEM education and our future workforce readiness. It is essential for us to prepare our students with the skill sets that they will need to prepare for and choose the dynamically changing career needs that the future requires.

Thank you for your time.

BOARD CLERK GARCIA: Thank you.

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Piet, I have activated your microphone. Please unmute and begin.

PIET CANIN: Good afternoon CARB Board members and staff. My name is Piet Canin with Ecology Action. Ecology Action was founded in 1970. It is a community-based non-profit implementing equitable climate solutions.

I am calling in today in support of Electrify
America's cycle 4 investment plan. My organization hs
partnered with Electrify America as a recipient of their
cycle 2 and cycle 3 ZEV equity education and awareness,
and STEM program. Electrify America's funding has been
foundational support for Ecology Action's central coast
led EV equity consumer campaign, since late 2019. Ecology
Action developed a regional CBO partnership of six local
groups spanning six counties from Santa Cruz County to
Ventura, directly assisting priority populations in such
communities as Watsonville, Salinas, Santa Maria, and
Oxnard, for example.

Are these -- our EVs pal told us EVs For Everyone is a program offered in Spanish and English with bilingual and bicultural outreach staff working with consumers in largely Hispanic, farm worker, and service industry LIC and DAC neighborhoods.

I just wanted to quickly address the evaluation part of our program. We work with community-based social marketing consultants and UC Davis to dig deeper into our work to -- through focus group and surveys to be able to improve our programs to make sure that we're meeting the goals set out in the Electrify America program plans. So we're continually evaluating and improving our services.

Thank you for taking the time to hear all the public comment.

BOARD CLERK GARCIA: Thank you.

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Elena I have activated your microphone. Please unmute and begin.

ELENA ENGEL: Elena Engel, San Francisco. I have been an EV driver for the past eight years. Recently, I drove from San Francisco to the central coast and back. My experience charging, or attempting to charge, at EA chargers was awful. One of seven chargers worked the first time. With the six others, they either didn't work at all or only worked after lengthy calls to customer service. One out of seven, 14 percent is a failing grade.

We should not stand for this. It was a scary experience. I was driving alone. I really did not know if I'd get stuck on the highway as I watched my range diminish mile after mile, hoping to be able to reach the next charger, hoping that it worked. For drivers who do

not have a place to charge at home, which mostly means lower income people, this is an even worse disaster for those everyday drivers who have no other options.

Presumably me you, CARB, have credited EA based upon the quantity of chargers installed, but apparently without regard to the quality. Installed chargers means nothing if they do not work reliably. You should require EA to fix these chargers on their own dime and verify to CARB that they work properly. Show CARB, the public -- and the public the actual reliability numbers and force consequences for not achieving reliability targets.

We the people of California should not have to give up settlement money to fix the poor job done by EA. That would be cheating us once again. Do not approve this final portion of settlement money to fix shoddy work. EA should have to do this themselves. Settlement money should be used for additional chargers, verifiably reliable chargers that work every time.

Thank you.

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BOARD CLERK GARCIA: Thank you.

Cameron, I have activated your microphone. Please unmute and begin.

CAMERON LIND: Hi, everyone. Thanks for the time today. Good evening. My name is Cameron Lind. I've been interested in this topic for years now, EV enthusiasts,

also general car enthusiasts. I recently graduated from USC in LA, live in Santa Monica.

I think the main thing that differentiates me -differentiates me from everyone else here is I'm 23 years
old. So I represent my generation and how EVs are adopted
in the future. And to say the least, I've had my fair
share of run-ins with charging in EA systems.

When coming from San Francisco to LA with my dad who has an EV, we stopped at Harris Ranch to only find five to ten percent of the chargers online and available to use. It took us around 12 hours, which is usually a six to six and a half hour trip in a normal gas vehicle. To say the least, I'm also in the car market for an EV. But where I live, there's also no readily available chargers in my building or the nearby areas.

So why make the switch? And I think it really just comes down to the charging infrastructure network that doesn't work. So if this is something you guys really care about, you will decline the approval of Electrify America's plan, because it simply won't be adopted by my peers due to its inability just to work. That's all that has to happen. I appreciate the time today and everyone's comments, and hopefully this is resolved in the future.

Thank you.

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BOARD CLERK GARCIA: Thank you.

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Our last three commenters for this item will be William Forsythe, Michele Robinson, and Stephen Israel.

William, I have activated your microphone. Please unmute and you can begin.

WILLIAM FORSYTHE: Hi. Thank you. I want to thank the Board for having this opportunity to speak. And I just want to say, you know, the plan, and what I'm concerned is this demanding of the 35 percent of the new chargers that's going to support the disadvantaged communities, kind of undermines the Board's ability to support the Advanced Clean Fleets Regulation providing any path for fleets to comply.

Just based on today's testimony and concerns stated from the Board, it's obviously right now that technology and the infrastructure is not reliable or going to be available to support this new regulation. I would like CARB to reject the plan and to spend that \$400 million towards the national infrastructure to help support the long-haul trucks or just abandon the Clean Fleets Regulation until a national highway infrastructure is in place where 98 percent of working chargers are in a five mile radius, and match the current time to fill a Class 8 truck.

Otherwise, contributing to the regulation will

just increase the cost of all interstate trucking industries due to the loss of the production and availability. And these costs will ultimately be passed over, mostly to the disadvantaged or the low-income communities that cannot already afford any higher cost of living in California.

Thank you.

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BOARD CLERK GARCIA: Thank you.

Michele, I have activated your microphone. Please unmute and begin.

MICHELE ROBINSON: Hi. My name is Michele Rob -- can you hear me?

BOARD CLERK GARCIA: Yes, we can.

MICHELE ROBINSON: Oh, thank you. Okay. My name is Michele Robinson. And I fall in the category of low income community. I'm giving my kudos to Valley CAN, the staff that runs Valley CAN, and what it brings to me as a foster parent traveling back and forth with my kids to this event, that event, this gaming thing, school. And it takes the dollars out of -- keeps the dollars in my pocket. It keeps -- the maintenance on it is very low. The -- there's barely -- there's no gas at all charges. I appreciate the rebate from PG&E. I love my little -- my low monthly payments, my savings, because of the low monthly payments.

They do have to work a little bit on chose charging stations, but kudos to Electrify America. Kudos to Valley CAN. And I appreciate everything you guys are doing to clean up the air and the environment on my planet. Thank you.

BOARD CLERK GARCIA: Thank you.

Stephen, I have activated your microphone. Please unmute and begin.

Stephen Israel.

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STEPHEN ISRAEL: Sorry. Can you hear me now? BOARD CLERK GARCIA: Yes, we can.

STEPHEN ISRAEL: Thank you. CARB Board members and staff, thank you for allowing me to speak in support of Electrify America's cycle 4 investment. My name is Stephen Israel, Senior Director of Product Management at BTC Power.

This plan highlights the critical investment needed for reliable EV charging in California. Electrify America, with partners such as BTC, have pushed the innovation and investment in critical technologies that are widely seen today in the EV charging ecosystem, technologies like high voltage charging, high power charging at rates up to 350 kilowatts, liquid cool charging, plug in charge using ISO 15118. All of these would be available without EA's investment, but would

likely have taken far longer to take hold. Many of these technologies that we discussed are now part of the FHWA NEVI requirements. This is because EA and other partners have proven that these are possible.

Through our collaboration, we have achieved significant strides in technology development, particularly in scalability, reliability, and customer experience. The latest iteration of gen 4 technology also has market-leading availability, which was described and is proven in cycle 3 investment. For these reasons, I request CARB's approval for Electrify America's cycle 4 investment plan.

Thank you.

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BOARD CLERK GARCIA: Thank you.

And that concludes the commenters for this item.

CHAIR RANDOLPH: Okay. Thank you very much.

Now, I think we are ready for Board discussion, even though we've had a lot of discussion already.

Dr. Shaheen.

BOARD MEMBER SHAHEEN: Thanks so much, Chair Randolph. I really appreciated today's discussion and learned so much from the conversation among our Board members, the emphasis on disadvantaged communities and reliability, and response time, I think, are so deeply important. I really would like to support the plan, but

feel a need to ask staff to work with Electrify America on modifying the maintenance plan requirements of this cycle 4 initiative in three core -- three key areas, including explicit reliability metrics for the chargers, so striving isn't quite enough.

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We've heard a commitment to achieving a 97 percent NEVI uptime standard for new chargers and actually legacy chargers. So I'm intrigued by that. I'd like to know whether or not that stands true for all of the 700 legacy chargers that will not be upgraded.

Second, improving response time for key component parts, so that we can get a handle on what the appropriate metrics are and data are to resolve these issues in a timely fashion. Expanding reporting to the staff on these specific explicit metrics and supporting data at the appropriate levels of disaggregation, which is very important in achieving metrics. I'd like to see that on a quarterly and an annual basis.

And I'd like to underscore the importance of transparency in data. I understand this is a private business and it's a competitive business space, but I think we need to think carefully about how to preserve and protect business information and keep it confidential, but also get the level -- to the right levels of data and disaggregate data, so that we can monitor performance on

that quarterly basis and that annual basis.

 $\hbox{So I hope $--$ I hope staff will be able to work } \\ \\ \hbox{with Electrify America on that.}$

Thank you.

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CHAIR RANDOLPH: Can I ask staff to respond to that, because as we talked about earlier, you know, several Board members have asked about, you know, can we make the maintenance plan a little more robust, but also wanting to move forward, get the money out the door, approve the plan. So do we have -- as you all have been listening to this discussion, do you have suggested solutions to those problems we've articulated? And I also want to hear a follow-up on requests that Member Florez and Takvorian made around more information as it relates to deployment of chargers in disadvantaged communities.

EXECUTIVE OFFICER CLIFF: Yes, Chair. So we've been busily working since we've heard all these -
CHAIR RANDOLPH: I've been watching you huddle over there.

(Laughter).

EXECUTIVE OFFICER CLIFF: Yes. As you can see, lots of activity over here. And we have some language that we would suggest to add to the draft resolution that was posted on the website.

So I will read that and it includes both items,

both the information that Dr. Shaheen just mentioned with those three particular things - I think we've captured that - as well as the language that Dean and Diane were working on and had read that into the record. So I think we've captured both of those. But let me go ahead and read this and then we'll see how you respond.

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So at the end of the current draft resolution, we would add -- and I should say, we will also delete earlier this "strive for" language. There's a paragraph about a page up that says, you know, "strive for these NEVI standards." So we would strike that and add, "Be it further resolved, that the Board directs the Executive Officer to work with Electrify America to build upon the maintenance requirements of section 5.8 of the cycle 4 plan as publicly released on October 20, 2023 to further address station reliability challenges. This work shall include the addition of reliability metrics, including station uptime performance, repair response time to resolve issues, and expanded reporting to CARB staff on the additional reliability metrics in the quarterly and annual reports.

"Station uptime performance metrics for new stations specifically shall be consistent with the state of the industry, such as those defined by the port uptime performance threshold in the National Electric Vehicle

Infrastructure, NEVI, Program. CARB staff shall work with Electrify America to include reliability metrics for existing stations as appropriate and then approve and publicly release the enhanced maintenance requirements of the cycle 4 plan."

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And then finally, "Be it further resolved, that the Board directs the Executive Officer to include information on CARB's website concerning the Electrify America charging stations located in low-income and disadvantaged communities as defined by the State of California. This information should provide specific details on the number of stations in these areas accompanied by maps illustrating their locations.

CHAIR RANDOLPH: So to summarize the direction in the resolution would be that staff would work with Electrify America to address in the maintenance plan station reliability challenges. And that would include reliability metrics, response time, expanded reporting, and then separately adding the detailed information regarding charging locations in disadvantaged and low-income communities.

EXECUTIVE OFFICER CLIFF: That's correct.

CHAIR RANDOLPH: Okay. Thank you.

Any comments from other Board members?

Board Member Kracov.

BOARD MEMBER KRACOV: I'm hopeful that that addresses the concerns from the other Board members today. And I really want to thank particularly all of you, but the Chair, Dr. Shaheen, and Board Member Florez for your comments today in helping to shape what we're going to be considering here. And to me, it sounds like a good -- a good way forward, Chair.

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I just wanted to speak maybe a little more broadly than just the Electrify America piece. You know, I think that there are things that we're learning more broadly for the zero-emissions, you know, project that we're all embarked on. And, you know, we as a Board have done so much work in trying to push forward that project, push forward that mission over the past few years. And what we do is we pass regulations and the regulations have certain milestones and timelines. And a lot of it does depend on industry and depends on our partners in State government, the Energy Commission, the Public Utilities Commission for the infrastructure, which is so important to really making all of this work.

And I want to thank all the stakeholders who spoke today about the challenges that we have on infrastructure. You know, it truly is the work of our lifetimes. So we as a Board, you know, adopt these regulations and sort of send it out into the ether. What

I'm curious about is something to think about. I know Dr. Cliff is going to present his 2024 priorities. But for Analisa Bevan and our Board and our executive team to think about, you know, what is the Board's role as we switch now to execution, as we switch to implementation of these rules that we've spent so much time and so much deliberation trying to get right?

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You know, we are not the agency that tracks the installation of all the infrastructure. We don't set the rates for the utilities. What is the Board's role? And I mean that in the Big B way, but of course working with our staff, in tracking how we're doing? Is there a role for us, you know, beyond just -- beyond just adopting the regulations. But as we now transition to this very important phase of implementation and execution, I think what is the Board's role, if any, in monitoring, in evaluating, in making recommendations to ensure that we get this project right?

And so I want us to sort of think about that really more broadly than this EA issue, which we spent so much time on directly today and which does come back to us as a Board, but the other stuff doesn't come back to us in the same way. So just something for us to think about, if there's a constructive way for the Board to continue to participate in this. It's the work over many, many years,

and decade perhaps, and wanted us to think about that, not only the lessons we learned from Electrify America today, but the lessons we can learn for our overall project that is core to this Board's mission.

CHAIR RANDOLPH: Okay. That's a great point. Thank you.

Dr. Pacheco-Werner.

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And I -- and I do want to -- I haven't forgotten Mr. Eisenhut's question. So maybe as you guys respond to some of the lessons learned, you could also add some thoughts about implementation going forward and the Board's role in that.

Wanted to learn a little bit more about what the implications would be given the language about posting the number of stations on the website that are in disadvantaged communities. I mean, I think information is important, but I mean what's the -- then what? Are we asking also or does it need to be in the language that we're also asking that those stations be at parity with the rest of the charging network in terms of, you know, workability? I just would hate to leave it just like put something on the website because --

CHAIR RANDOLPH: Right. Yeah. And I mean I think -- I think this goes along with all of the other

guidance we've discussed about, you know, working more with CBOs, working more with communities. And, you know, the members who proposed that language might also want to make suggestions. But I think the goal was to provide some clear, easy-to-identify transparency that would then help communities know where to engage and kind of say, oh, you know, we're not seeing chargers here, reaching out, and working with Electrify America and their partners to more effectively deploy chargers. So staff, I don't know if you want to add anything to that?

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STCD CHIEF GRESS: So to the question about the implications of the reporting, you know, stations, I think the main thing is really public transparency in holding — in holding Electrify America accountable for its commitment. That's the main thing. I think we do want to do some additional analysis of that data and make sure we really understand kind of what parts of the community are being affected versus — you know, per another Board Member Takvorian's comment. But I think that's the real impact here is just being clear with the public about what these investments are and where they're located.

BOARD MEMBER PACHECO-WERNER: So if not in the language, which is fine, I mean, I really wanted to feel -- you know, for me voting for this and this additional language, I really want there to be that

attention to the parity of the functionality of these chargers, that that's the intent in terms of that transparency from the staff when you're looking at these reports and when you're looking at this data.

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EXECUTIVE OFFICER CLIFF: Yes, absolutely.

CHAIR RANDOLPH: Okay. Board Member De La Torre.

BOARD MEMBER DE LA TORRE: Thank you. It's been a long time that we've been doing this, not just today, over the years. I was here when we started this whole exercise. And in the early years, we were a little more experimental. We were -- nothing like this had ever happened. It was a nascent industry. So we were just kind of open to lots of ideas. I know I pushed some. Probably forgot half the things I asked for in the beginning.

But here we are at the end, the last tranche of money, and it really is about legacy at this point. What is the legacy of these four tranches over it feels like a decade? And so this batch is the simplest batch we've ever done, because it's about that charging infrastructure going forward. We don't have bells and whistles like we've had in other cycles.

I loved some of the stuff that we've done in the past. You know, I would have liked to have Seen some of it here, but I get where we are, right? Some of that

early technology isn't today's technology. The reliability issues that my colleagues have raised absolutely vital, that this system on it's way out the door -- or, you know, at the end of this process, is as good as it can be to support the vehicles that are out there. And we're now getting those sales figures, right? We're now getting that volume of vehicles that need the charging that we could only dream of a few years ago. So we're there. And so our obligation now is to make sure that this infrastructure is as good as it can be going forward. And that's what -- that's the gist of what everyone is saying and I'm absolutely supportive of it.

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For us, for the Board, beyond EA, there is another issue, another question, and I've raised it before. We need to be the consumer protection for all charging infrastructure. Obviously, we have this unique dynamic, but it goes beyond EA. And, you know, when I'm getting calls from Congress members who have EVs complaining about the reliability of this infrastructure - again, I'm not saying EA - that's a problem. You know, and I jokingly responded if only you had some authority and power, Mr. Congressman.

So here we are. We know it's needed. We're the ones who are pushing this technology on a myriad of programs, a myriad of funding mechanisms. We're the ones

pushing it, so we need to make sure it works. That's on us. I know we have partners in government that we need to collaborate with, but -- we've done it in other areas, in other sectors, and I think we need to do it in this one.

So my takeaway here is going -- on the going-forward basis, how does CARB engage to protect the consumers with this infrastructure, because it is bigger than the EA, and we need to make sure that as this is growing, it is as robust and effective as it can be. That's my bottom line.

So I'm going to be supportive today, again because it's at the end of the road and we are doing what we need to do in this cycle. But going forward, we have some homework to do and some talking to do with some of our partner agencies to make sure that function is being carried out.

Thank you.

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CHAIR RANDOLPH: I'm going to kick it over to staff to kind of respond to a few of the big picture things, you know, lessons learned, implementation, how our role in helping to protect consumers.

EXECUTIVE OFFICER CLIFF: Thank you, Chair.

And I'm going to -- I will turn it to staff in a minute, but I will offer a few high level thoughts here.

First of all, to Board Member Eisenhut's question

about what have we learned, I will just offer that I think one thing we've learned is that it's not simply enough to get the infrastructure out there. That's an important part of it and more is certainly going to be better. Part of the uptime and frustration that consumers feel is that they're waiting in line. And especially if one of four chargers is down, then they're waiting even longer. And so having more infrastructure is actually going to help alleviate that problem. And I know that's something that the State is really actively working on, the Feds are actively working on as well. So that additional infrastructure is really critical.

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There were sort of multiple questions around the Board's role in continuing to protect consumers and how we ensure that going forward that we're making our rules and policies that we put in place successful. And in large part, the State has -- you know, there are always silos. We have different agencies that are working on different pieces of this. But we do have a really close working relationship with our partners at the Energy Commission and the -- and the PUC.

And the Energy Commission in particular is really actively working on those types of metrics that will ensure that consumers are experiencing the -- what they expect, which is chargers to work when they show up and

that they can fuel this vehicle that they spent hard earned money on. So that is something that the federal government through NEVI, which we've already talked about, as well as the State is working on. So we have a role in working really closely with our partners, sharing information to the extent that we have it, and trying to help devise those right kinds of policies so that consumers are encouraged to continue to drive electric vehicles and that we see the growth in that market.

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But I'd like to turn it to Dr. Jen Gress to maybe offer a little bit more from her and her staff's perspective on what they've learned in working with Electrify America and implementing this appendix C over all these years. I'm sure there's many thoughts there and I'm interested to hear what they have to say.

STCD CHIEF GRESS: Thanks, Dr. Cliff.

Well, I love those questions those -- sort of those big thought questions. You know, I think lesson number one, as we were briefing the Board members in preparation for this Board hearing, is simply that you can't predict the future or that it's difficult to predict the future. We got a lot of questions about why weren't reliability metrics in the consent decree? You know, eight years ago when the consent decree was being crafted, relia -- the industry was really new and it wasn't the

number one thing we were all worried about. Certainly, we did anticipate the need for maintenance and upgrades. But at the time, we were a little bit more focused on utilization. Would the stations even be utilized?

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And I think that the fact that it is hard to predict the future, means that when you craft your own work and you craft agreements, you have to build in some flexibility for change. I think that that also speaks to the importance of metrics, so that you are able to track change over time, knowing that there's going to be change and instituting those early.

I think a third lesson is just how important relationships are. Throughout this investment, we've learned a lot working with Electrify America. And we have developed a trusting relationship, where they do share a lot of information with us that they do not share with the public. And that's important for us, because we learn as we go as well and we're able to kind of have a forthcoming dialogue. This is also true with the auto manufacturers and our car regs, it's really important that you have those trusting relationship, so that you -- both government, and industry, and other stakeholders can learn, and grow, and innovate together.

I think, you know, the -- I think that the -- sort of this fourth lesson is really there's always going

to be technological innovation. Early technology is never going to be as good as later technology. And I think that actually speaks to the importance of metrics. And we see that it -- Rob Barrosa of Electrify America spoke to that, right, that, you know, the early industry wasn't so great. The suppliers were new. The technology was not as robust. I think that's always going to be try no matter what the issue is. And so being patient and making sure that you have kind of both the metrics, the flexibility, and place to kind of track that and guide it over time is important. So those are some of the lessons learned that came to mind when Board Member Eisenhut raised the question.

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To Board Member Kracov's question about the role of the Board, I think Dr. Cliff addressed it well. I would just add a little specificity and also one perspective from where I sit, which is I think the great thing about the State of California is that we really have a whole-of-government approach when it comes to advancing zero-emission vehicles. And that is also true on infrastructure. There are a lot of agencies that work on this and we do work pretty closely. This is not a big B, a big Board -- a big B Board issue is like behind the scenes staff talking a lot of the times. But the State of California has put a lot of effort over the years into making sure that there are processes in place for State

agencies to coordinate and work together on all kinds of issues related to ZEVs, but on charging infrastructure in particular.

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Some of the things that we do at CARB are we do some work on education and outreach, especially on kind of vehicles that are, you know, like teaching folks about like what the benefit of ZEVs can be and what the models are that are available. Certainly, we're partnering with agencies like CEC on their reliability work, because that is so important as we've been hearing about.

And one thing we're going to be working on in the future here and we'll see a -- you'll see a proposed rule up in 2025 time frame as we amend ACC II, but one of the issue we're going to be working on is interoperability between the vehicles and the chargers. And that's really kind of more where some of the Board's work is focused on is like the vehicle side. And I think there is more work that we can do on the vehicle side to improve the communication between vehicles and chargers. And that will have an impact on reliability and the consumer experience across the board.

CHAIR RANDOLPH: Thank you. Appreciate that.

Okay. I need to close the record on this agenda item, so I am closing the record.

Board members, do you have any other questions or

comments?

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I will call for a motion, but I just want to be really clear about what the motion is. It's to approve Resolution number 24-7 with the language changes as identified by Dr. Cliff. If the details of the revisions to the maintenance plan are not completed, as with any Board action, staff can bring it back to the Board and say, hey, you know, this is -- this is an issue. We need some more Board guidance. So recognizing that, I will ask for a motion and a second.

BOARD MEMBER GUERRA: So moved.

BOARD MEMBER DE LA TORRE: Second.

CHAIR RANDOLPH: All right. Board Clerk, please call the roll.

BOARD CLERK GARCIA: Dr. Balmes?

BOARD MEMBER BALMES: Yes.

BOARD CLERK GARCIA: Mr. De La Torre?

BOARD MEMBER DE LA TORRE: Yes.

BOARD MEMBER GARCIA: Mr. Eisenhut?

BOARD MEMBER EISENHUT: Yes.

21 BOARD CLERK GARCIA: Senator Florez?

BOARD MEMBER FLOREZ: Yes.

BOARD CLERK GARCIA: Mr. Guerra?

BOARD MEMBER GUERRA: Aye.

BOARD CLERK GARCIA: Ms. Hurt?

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BOARD MEMBER HURT: Aye.
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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:
                                  Mr. Perez?
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             BOARD MEMBER PEREZ: Aye.
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             BOARD CLERK GARCIA: Mr. Rechtschaffen?
             BOARD MEMBER RECHTSCHAFFEN: Yes.
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             BOARD CLERK GARCIA: Dr. Shaheen?
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             BOARD MEMBER SHAHEEN: Aye.
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             BOARD CLERK GARCIA: Ms. Takvorian?
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             BOARD MEMBER TAKVORIAN:
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                                      Aye.
             BOARD CLERK GARCIA: Supervisor Vargas?
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             BOARD MEMBER VARGAS: Vargas yes.
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             BOARD CLERK GARCIA: Chair Randolph?
             CHAIR RANDOLPH: Yes.
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                                    And I also neglected to
   note that once the maintenance plan is revised, it will be
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   posted publicly so folks know.
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             Sorry.
             BOARD CLERK GARCIA: Okay. Madam Chair, the
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   motion passes.
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             CHAIR RANDOLPH: Thank you very much.
             Okay. We are now going to break for closed
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   session, as indicated in the public notice for today's
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meeting. And so in about 45 minutes after closed session,
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    we'll be reconvening for our next open agenda item.
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              So we will be back in about 45 minutes.
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              (Off record: 12:49 p.m.)
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              (Thereupon the meeting recessed
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              into closed session.)
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              (Thereupon a lunch break was taken.)
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AFTERNOON SESSION

(Thereupon the meeting reconvened open session.)

(On record: 1:33 p.m.)

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CHAIR RANDOLPH: Okay. Please come to order. The Board met in closed session and no reportable action was taken by the Board.

We will now move on to our next agenda item and I will turn to the correct page in my binder to introduce said item. Hold on. This is what happens when you focus on your cookie after lunch and not your agenda.

Okay. The last item on the agenda is item number 24-1-3, a report on the California Air Resources Board's established and expected priorities for 2024. If you are here with us in the room and wish to comment on this item, please fill out a request-to-speak card as soon as possible and submit it to a Board assistant. If you are joining us remotely and wish to comment on this item, please click the raise-hand button or dial star nine now. We will first call on in-person commenters followed by any remote commenters when we get to the public comment portion of this item.

So when we think about all that CARB and California have accomplished in the last year, we have made significant progress towards reducing harmful air

pollution and climate warming emissions from the combustion of fossil fuels and protecting public health in all the communities across our state. This progress is born from tremendous staff work and Board actions across our many programs.

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We know there's more to be done. We have to continue to ensure that the many programs that the Board administer align with our unprecedented plans and directives to clean the air and address climate change, and importantly, with our Board resolution on social justice and racial equity. We will lead -- need to leave no stone unturned in looking for ways to ensure alignment of our programs with these principles. And this will require rigorous, consistent, equity-focused work that we know that we can deliver here at CARB.

We also know we will continue to need to work with a wide range of partners, not only within the administration, but within our communities, industry, the academic community, as well as our federal and regional partners. This is absolutely an all-hands-on-deck effort now and through the years to come.

So with that, I am please to turn this over to Dr. Steven Cliff for an overview of what this year holds for CARB and the people of California

Dr. Cliff, would you please present the item.

(Thereupon a slide presentation).

EXECUTIVE OFFICER CLIFF: Thank you, Chair Randolph.

I'm glad to have the chance to share and discuss CARB's priorities for the year ahead. As Chair Randolph remarked, CARB achieved some major milestones last year. I'd like to share a short video looking back on what we accomplished in 2023 and then share a short presentation of high level priorities for 2024, including actions that will come before you, CARB's key efforts to implement clean air and climate policy, and our internal efforts to make CARB an equitable, inclusive, and rewarding place to work for all employees.

Let's look back on 2023.

(Thereupon a video was played.)

(Applause).

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EXECUTIVE OFFICER CLIFF: Yeah. What a great video, huh?

Exactly.

As we start to think about our priorities for this year, we're driven by achieving CARB's mission and the design -- desire for a clean air future.

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EXECUTIVE OFFICER CLIFF: But what does achieving a clean air future look like for people of California? It

means that we're working to ensure that no matter your income, race, or zip code, you are breathing clean air.

Meeting our carbon neutrality and greenhouse gas emission reduction mandates means better health, reduced health care costs, and fewer missed days of work or school for people across the state.

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Achieving these targets also means new jobs and career paths that support a clean energy economy, and puts California on the leading edge of technological innovation. Achieving a clean air future means creating more vibrant communities where everyone has access to a variety of sustainable transportation options like walking, biking, and public transit, and where people can travel easily from their home to key destinations without having to depend on cars.

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EXECUTIVE OFFICER CLIFF: It means that we can take pride that in the face of an existential threat like climate change, we can come together to develop solutions to provide a cleaner more sustainable environment and a thriving economy for future generations.

We have made substantial progress towards our greenhouse gas reduction goals. The GHG inventory data show that emissions significantly decreased in 2020 when the global pandemic slowed economic activity. They

increased in 2021 as the economy recovered, but are projected to decrease again in 2022. Achieving a clean air future will require consistent and diligent implementation of our existing programs, creativity and innovation, equitable investments in communities, and a commitment to continually improve internal operations at CARB.

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EXECUTIVE OFFICER CLIFF: As you heard in the video and know from your own experience, CARB made great strides last year to adopt new regulations and policies and we continue implementation of many existing efforts to support the goals laid out in our guiding policy documents, such as the Scoping Plan, the Mobile Source Strategy, the Blueprint 2.0, and the State Implementation Plans.

This year, implementation will be an even greater focus. Staff will also propose several regulatory and program updates to implement our climate and clean air plans and will take action to implement newly adopted legislation.

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EXECUTIVE OFFICER CLIFF: In 2024, we will continue development of the next phase of light-duty vehicle greenhouse gas standards along with amendments to

Advanced Clean Cars II. We will also update Advanced Clean Trucks to address issues raised during early implementation.

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The Low Carbon Fuel Standard is a key part of a comprehensive set of programs in California to cut greenhouse gas emissions and other smog-forming and toxic air pollutants by improving vehicle technology, reducing fuel consumption, and increasing transportation and mobility options. It is designed to decrease the carbon intensity of California's transportation fuels and provide an increasing range of low carbon and renewable alternatives, which reduce petroleum dependency and achieve air quality benefits.

The Board will also hear proposed updates to the Cap-and-Trade Program later this year. The Cap-and-Trade regulation establishes a declining limit on major sources of greenhouse gas emissions throughout California and creates a powerful economic incentive for significant investments in cleaner, more efficient technologies. CARB is making stringency updates to align the program with new GHG emission reduction targets of 85 percent by 2045.

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EXECUTIVE OFFICER CLIFF: CARB will continue to forge relationships with community partners to more fully understand the unique challenges faced by communities

across the state and work collaboratively with those communities to develop solutions. For example, CARB will continue to work alongside community members and air districts in both AB 617 communities and consistently nominated communities to reduce exposure to those most impacted by air pollution.

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CARB has been developing a community engagement model through our partnerships with communities to develop a consistent and more equitable approach to our outreach and engagement. It is imperative that this model is built on the knowledge and expertise of communities throughout the state. Our goal is to ensure more equitable outcomes through a more equitable process.

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EXECUTIVE OFFICER CLIFF: We will also continue our efforts to build partnerships with other states. As of December 2023, 17 states have adopted at least one of California's light- or heavy-duty motor vehicle regulations. Twelve of these states have already adopted Advanced Clean Cars II and 10 states have adopted Advanced Clean Trucks. To achieve our clean air and climate goals, we must also ask our federal partners to help address emissions generated from new interstate trucks, locomotives, and ocean-going vessels. We will continue to urge our federal partners to coordinate with us and take

action to limit emissions from these sources.

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EXECUTIVE OFFICER CLIFF: Our work will also continue beyond California's borders. CARB and CalEPA entered into a critical memorandum of understanding with our border region partners, including the Government of the State of Baja California, and Secretariat for the Environment and Sustainable Development of Baja California to enhance cooperation on environmental protection. We will also continue our efforts to engage on a global scale. Last month at COP28, Chair Randolph kicked off our international climate initiative to reduce methane emissions with commitments from 15 signatories.

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EXECUTIVE OFFICER CLIFF: This year, CARB will continue to innovate and build on the momentum we have already achieved to explore new frontiers through programs, regulations, and policies to better protect California communities.

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EXECUTIVE OFFICER CLIFF: We will continue to push for pollution reductions from the off-road sector with development of programs to encourage cleaner equipment and technologies throughout the sector.

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EXECUTIVE OFFICER CLIFF: We will also continue the momentum we have built to reduce emissions from freight to ensure cleaner air in communities near freight facilities and reduce the effect of climate -- effects of climate change.

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EXECUTIVE OFFICER CLIFF: We will look at the buildings in which we live, work, and play to explore ways to reduce sources of emissions, including greenhouse gas emissions within buildings that impact our ambient air to ensure consumer products and appliances are not adversely impacting our health or our climate goals. Following the direction of recent legislation, CARB will work to develop the nation's first mandatory program to measure and reduce the embodied carbon in building materials and new buildings.

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EXECUTIVE OFFICER CLIFF: As you know, transportation is the largest source of emissions in the state and even with the Advanced Clean Cars II Regulation, we are not yet on track to achieve carbon neutrality by 2045. With zero-emission technologies -- excuse me, with zero-emission technologies alone.

We also need reductions in vehicle miles traveled to reduce emissions associated with transportation to get

us there. We will continue to work with State, local, and regional government partners to develop the creative and innovative land use and transportation strategies needed to support sustainable, equitable communities that reduce VMT in ways that meet the needs of historically marginalized communities and align with California's climate goals.

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EXECUTIVE OFFICER CLIFF: We will continue pioneering our innovate research programs. This year, we plan to launch phase one of our methane satellites through public-private partnerships, providing CARB with plume images detected from space and working with program to find and fix potential leaks.

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EXECUTIVE OFFICER CLIFF: CARB has been investing in clean air and zero-emissions technologies for quite some time now. CARB's first incentive program, the Carl Moyer Memorial Air Quality Standards Attainment Program, is celebrating its 25th anniversary this year. And as we celebrate that milestone by modernizing the program, we are also exploring new ways CARB's incentive programs can prioritize funding for low-income individuals and families, and support communities' zero-emission and VMT reduction goals, while continuing to promote innovation.

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EXECUTIVE OFFICER CLIFF: Given the State deficit, the Governor recently -- recent budget proposal delays additional funding for many of our zero-emission vehicle and equipment incentive programs. However, we will still expect to receive funding for several of our programs, including the Carl Moyer Program that I just mentioned, the Community Air Protection Program, the Air Quality Improvement Program, and for zero-emission school buses. While we will likely see limited new funding coming this year, several of our other existing programs still have funds available that can support the deployment of zero-emission vehicles and equipment and community mobility projects.

This year, we will also begin distributing funds for the new F-Gas Reduction Program, which offers \$65 million to increase adoption of climate-friendly refrigerant technologies.

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investments continues to support our transition to a carbon neutral economy by funding projects that build transit-oriented affordable housing, increasing mobility through transit, advanced zero-emission technologies, and much, much more. In the nearly 10 years since the first

appropriations to California climate investments programs were made in 2014, over half a million projects supported by \$9.8 billion of Cap-and-Trade auction proceeds are expected to reduce an estimated 98 million metric tons of CO2 equivalent with 74 percent of project funds benefiting priority populations.

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EXECUTIVE OFFICER CLIFF: Are we off by a slide, I think we are.

Sorry.

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CARB will continue looking for opportunities to leverage federal funding programs and utilize private partnerships to reduce costs to Californians. Last year, California was awarded 1.2 billion from the Department of Energy to advance our hydrogen roadmap through the Alliance for Renewable Clean Hydrogen Energy Systems public-private partnership. We expect to submit multiple applications for federal funding this year and will continue to explore all available opportunities as we seek to increase the impact of California's investments.

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EXECUTIVE OFFICER CLIFF: Given the magnitude of the work needed to achieve a clean air future, we must ensure that CARB is operating as a highly efficient organization and improve internal operations to support

our organizational needs. This year, we will continue efforts to streamline our organization wherever possible, seeking improvements to better support our HR needs, as well as processing grants. We will continue to conduct the research and monitoring needed to guide future policy development and prepare for future regulations.

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We will also explore ways to harness big data to better target and streamline enforcement efforts and refine our emissions inventories.

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EXECUTIVE OFFICER CLIFF: Finally, we will continue to focus on equity, both internally and at our organization, as well as how we operationalize equity within our programs, policies, regulations, and actions.

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EXECUTIVE OFFICER CLIFF: Embedding equity throughout CARB will be critical to build and inclusive, supportive, and diverse workforce that mirror's the diversity in the communities we serve and ensures we address long-standing inequities.

This year, through our Office of Racial Equity, we will conduct an entity inventory of all of CARB's programs, policies, and regulations. This inventory will provide valuable data to help us better understand how equity is currently being operationalized in our programs,

policies, regulations, and actions. We're also planning on sharing the findings from the pilot use of our racial equity lens, which will be an invaluable tool to ensure we embed racial equity in all that we do. We will continue to work to establish improved procedures for hiring and recruitment, with an eye towards building diversity throughout all levels of CARB. And our Diversity and Racial Equity Task Force known as DaER will continue to organize high quality trainings and activities to normalize conversations and actions that advance diversity, equity, and inclusion and belonging across the agency.

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EXECUTIVE OFFICER CLIFF: There is substantial work to be done, but I'm confident that we will be able to rise to the challenge. The work that we have already done is paving the way for a healthier more equitable California. We will continue to build on that progress and make strides toward achieving California's clean air future in 2024 and beyond.

Thank you.

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CHAIR RANDOLPH: All right. Thank you.

And a special shout-out to Margaret Sanchez and our amazing communications team who put together that lovely video.

So lets hear from the public who signed up to speak on this item and then we will have Board discussion.

BOARD CLERK LEVRINI: Thank you, Chair. We have

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one in-person commenter today. That is Julia Levin.

JULIA LEVIN: There we go. Try again.

Good afternoon, Board members and Chair Randolph.

We -- Julia Levin with the Bioenergy Association of

California.

We strongly support all of the 2024 priorities that Dr. Cliff presented, but the presentation omitted one really critical priority for both the climate an public health. And that is the reduction of short-live climate pollutants. Climate scientists around the world agree that that is the most urgent thing that we can do for the climate. It's is also the only measure that begins to cool the climate off right away or even for the next several decades, and it is required by State law. So we urge the staff and the Board to reprioritize the reduction of short-lived climate pollutants for 2024 and beyond.

On two related notes, we also urge the Air Board to move forward on implementation of the Advanced Clean Fleet resolution that you adopted last year, specifically the last paragraph that recognized the need and directed staff to come back to you, the Board, by 2025 with proposals for creating new multiple reliable markets for

biomethane, which is a critical part of the State's short-lived climate pollutant reduction strategy. And so we also urge you to include follow-up on that resolution as part of your 2024 priorities. This really needs to be done quickly, because it is slowing progress on the reduction of methane and other short-lived climate pollutants.

And finally, on the Low Carbon Fuel Standard, we were very happy to see the staff proposals and the workshops presented last year that would phase out undelivered biomethane, also known as book and claim, but the 45-day language that is out for public comment now does not do that. It never phases out undelivered biomethane for projects built before 2030. And for projects build after 2030, it doesn't phase it out until 2040 or later and not very effectively with a lot of vagueness even then. This puts in-state projects at a severe disadvantage. It is also impeding our efforts to reduce short-lived climate pollutants.

Thank you.

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BOARD CLERK GARCIA: Thank you. That concludes our in-person commenters. It looks like we have four people with their hands up in Zoom. So we'll hear from Sarah Deslauriers, David Rothbart, Steve Jepsen, and Susan Smith.

So Sarah, I have activated your microphone. Please unmute and you can begin.

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SARAH DESLAURIERS: Excellent. Thank you. Can you hear me okay?

BOARD CLERK GARCIA: Yes, we can.

SARAH DESLAURIERS: Excellent. Thank you.

Good afternoon, Chair Randolph, Board, and staff.

This is Sarah Deslauriers. I'm Climate Change Program

Manager for the California Association of Sanitation

Agencies and we represent over 90 percent of the sewered population of California.

We appreciate the opportunity to comment today on staff's 2024 priorities and support the State in its efforts to mitigate climate change. We also support, or I support, the comments that will by made by members today following me, as well as Julia Levin has made.

We note recognition of the need to focus on implementation of previously adopted programs to mitigate climate change, but also note the little mention of efforts toward short-lived climate pollutants or methane reduction in the priorities for 2024. During workshops and public hearings for the development of the 2022 Scoping Plan update and the -- most recently the Advanced Clean Fleets regulations, our members expressed our sector does not have a long-term viable home for renewable

non-fossil fuel biogas generated from the sewage we all flush.

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Even more so, when considering Senate Bill 1383, it requires food waste be diverted from landfills to waste water treatment plants. The addition of food waste could exponentially increase the amount of renewable fuel generated. And not all of this renewable fuel can be injected into a pipeline. Therefore, we need a variety of sustainable options for utilizing this by-product treatment process. Without options, wastewater treatment plants cannot accept the food waste and Senate Bill 1383 will not be achieved, and we'll see landfill methane continue to be emitted.

So as part of the -- adopting the ACF Regulation in the response to our concerns, the Board adopted its Resolution 23-13. And the last paragraph requests coordination of meetings with various State agencies and stakeholders including CASA. We respectfully request the last paragraph for the resolution be included in your 2024 priorities. Thank you again for your time and consideration and we look forward to working together.

BOARD CLERK GARCIA: Thank you.

David, I've activated your microphone. Please unmute and begin.

DAVID ROTHBART: Good afternoon. I'm David

Rothbart and I'm the Air Quality Committee Chair for Clean Water SoCal. We represent the public wastewater treatment sector in Southern California and we are members of CASA and support the comments provided by Sarah Deslauriers and Julia Levin. As our members expressed during the Advanced Clean Fleets hearings, we have a problem. When people flush their toilets, the treatment process generates a renewable non-fossil fuel. The problem is we don't have a long-term viable home for this renewable fuel, especially when SB 1383 requires food waste to be diverted from landfills to wastewater treatment plants.

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SB 1383 could exponentially increase the amount of renewable fuel generated from our treatment plants. It is important to remember that all of this renewable fuel cannot go into the natural gas pipeline. We need a variety of reliable options for managing this by-product of the wastewater treatment process. Without such options, SB 1383 will not achieve the landfill methane emission reductions needed to address climate change.

Based upon these concerns, the Board adopted the last paragraph in Resolution 23-13 to coordinate meetings between various State agencies and stakeholders, such as CASA, to find a reliable home for this renewable resource. A significant amount of work is needed to resolve roadblocks for the use of this non-fossil renewable fuel.

Thus far, no meetings have been scheduled with our stakeholders as specified in the resolution. We respectfully request that the last paragraph in the resolution 23-13 be included in your 2024 -- excuse me -- 2024 priorities.

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Thank you very much for your consideration.

BOARD CLERK GARCIA: Thank you.

Steve, I have activated your microphone. Please unmute and begin.

Members. This is Steve Jepsen, Executive Director for Clean Water SoCal. We are a non-profit organization representing 80 public water, wastewater agencies in Southern California. My comments are focused on the need for follow through on the Advanced Clean Fleet Resolution 23-13. I support the comments from Sarah Deslauriers with CASA, and David Rothbart, and Julia Levin with BAC.

The public wastewater sector is uniquely positioned to provide infrastructure and operations beyond our core wastewater treatment activities on greenhouse gas reduction projects, such as food waste diversion in support of SB 1383. Unfortunately, without multiple reliable pathways for our biogas, which cannot be turned off, it will be challenging for our agencies to help. This reality was the driver for the last paragraph in

Resolution 23-13, which has not been acted on.

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SB 1440 can help some wastewater agencies, but pipeline injection is not a possible solution for all wastewater treatment plants, and pipeline injection does not provide all important resiliency. This is not a one-size-fits-all solution.

We heard about reliability issues with EV chargers earlier today. While not being able to charge your vehicle is certainly an inconvenience, imagine what happens when sewage cannot be collected and treated 100 percent of the time. That's our requirement in all communities. When our sector communicates with CARB about the challenges, it is important to remember our interest is also to protect public health and the environment using public funds.

Based on the importance of maintaining reliable public services, we respectfully request prompt action on the last paragraph of Resolution 23-13 in year 2024.

Thanks for the opportunity to comment today.

BOARD CLERK GARCIA: Thank you.

Susan I have activated your microphone. Please unmute and begin.

SUSAN SMITH: Good afternoon.

BOARD CLERK GARCIA: We can hear you.

SUSAN SMITH: Oh, sorry. Good afternoon,

Chairman and Board members. My name is Sue Smith and I'm with SeaHold, LLC. SeaHold is a strategic business development firm. Our focus is on renewable energy, specifically the conversion of organics to biomethane. We have been working in this arena for the last 25 years. We have seen many policy developments and the acceptance of biomethane into the larger state energy structures.

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The 2024 priorities of the California Air
Resources Board do not address short-term climate
pollutants and how renewable biomethane will help reduce
these. Biomass based renewable biomethane provides
readily available fuels, which augment the existing fossil
fuel contributions to the transportation sector.
Renewable biomethane addresses reducing short-lived
climate pollutants and greenhouse gas reductions and
enables meeting the aggressive and doable goals the State
has set forth via Senate Bill 1383.

We ask that the Board consider making clear and transparent policy decisions to implement solid market pathways for biomethane that do not make the producers guess where the fuels will be going.

Thank you for time and consideration.

BOARD CLERK GARCIA: Thank you.

And lastly, we have a phone number ending in 528.

25 Oh, I believe they have disconnected, so that concludes

our commenters for this item.

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CHAIR RANDOLPH: Okay. Thank you.

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

EXECUTIVE OFFICER CLIFF: No, but I wonder if I could take this opportunity to just thank a couple of the staff that helped me with the presentation. So as you see here, Caitlin Greenway and Andrea Morgan were instrumental in pulling together the presentation and script. And you already noted Margaret Sanchez who isn't here today - she's heading out on a much deserved vacation soon - who was the narrator for the video and helped pull that video together. So I just wanted to note them and thank them for their hard work. And, of course, all the staff that helped produce the material that ultimately goes into these presentations.

CHAIR RANDOLPH: Okay. Great. And I appreciate the comments on the resolution language and I will circle back with staff and see where we are in that process.

Okay. Now, it is -- we -- this is an informational item, so we don't have a record to close. So let's bring it to the Board for discussion.

Board Member De La Torre, I think raised his hand first.

BOARD MEMBER DE LA TORRE: It's not really about

2024, but it is about what we do here. Since this is our first meeting since COP, I wanted to highlight that nations at COP28 in Dubai a couple months ago -- last month, whenever it was, they approved a roadmap for transitioning away from fossil fuels. We did that in the Scoping Plan in the end of 2022. And so I just wanted to -- when I saw that headline, I thought they're running behind us as usual, and that that work is underway. I get questions about it a lot. The CEC is doing some baseline work, as I understand it, and then we will weigh in after they're done with whatever baseline work they're doing.

But it is underway. We are having the discussions about what does this transition look like. And again, we're way ahead of everybody else. And, you know, I think that that's something we should talk about more as we let people know what we do around here.

Thank you.

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CHAIR RANDOLPH: Yeah. That's a great point. We are working with our sister agencies to kick off that working your process for the next step in that work.

Board Member Guerra.

BOARD MEMBER GUERRA: Thank you. Thank you, Madam Chair.

First, I wanted to just thank the staff for just an enormous amount of work that's being done. It's very

laudable, and exciting, and innovative. And I think to Board Member De La Torre's comments, we're leading the pack here and it's exciting to be part of that.

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One area though where I'd like to engage much more and would like to follow up with the staff is from the comments on both wastewater treatment and also when it relates to other biomethane and biomass projects. And so I'd like to, you know, at least -- Chair, I don't know the appropriate way to do it, but I bring some attention to that point. And I know in the City of Sacramento, the region here, we have our bi-county regional solid waste authorities already looking at a hydrogen project with biomethane. And we'd like to figure out how we support that, so that those efforts -- so that there is a true market, there is a true approach of looking at how do we maximize this.

Along with that, the neighboring industry in agriculture here -- most of the Sacramento River basin is primarily agriculture, is also looking at bioresources as a way for the future. And I'd like to make sure that we take some staff time this year to really address those points, particularly for those -- as we see the federal government reducing the and tightening the PM numbers that are going to be out there. So it will impact burning for -- when it comes to -- you know, at least after the

harvest and all the pruning is done, that's going to impact it. We have to have an alternative to that. And I think this -- there's an -- there's an opportunity here for success in that.

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So it's building on the work we've been doing and it's all, I think, connected towards the last paragraph of that resolution that we had, but it does mean multiple agencies have to be involved in this. And so I'd like to take that approach here, Madam Chair. And I'm not sure how best to do it, but I'd like to highlight that effort.

CHAIR RANDOLPH: Okay. Staff, did you want to respond at all or -- because it wasn't a specific question. I think it was just kind of highlighting an important issue.

EXECUTIVE OFFICER CLIFF: Yeah. Absolutely. And I'll just note I know we have an upcoming chance to sit down and chat. And so I look forward to learning more and seeing how we can help.

CHAIR RANDOLPH: Great. Okay.

Commissioner Rechtschaffen.

BOARD MEMBER RECHTSCHAFFEN: I have a question about the equity inventory. Who's going to conduct it, what will it consist of, and then what are the action items that will result from it? And maybe that's premature, but is it being done by our internal folks or

are we hiring some outside person, and do we have a template for that? Could you give us some more details, Steve.

EXECUTIVE OFFICER CLIFF: I'm wondering if Chanell is on, if you can speak more to the equity inventory question.

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DEPUTY EXECUTIVE OFFICER FLETCHER: Sure. Happy to speak more to this. And Apologies that I couldn't be there in person. At this point, we are all sick, so that is why my camera is off. So for the equity inventory, we are in the middle of the process for this. So what I will say is that this is not something that I think we at CARB are going to be doing internally. We're actually con -- hoping to contract with somebody externally to do this for us.

I think it will be -- honestly, it will be like a -- you know, a three-year, four-year process, because what we want to do with them is make sure that we do it right by really kind of making sure that they have time to gather information and data on who we are, really help us think about what kind of frameworks and rubrics that we want to set up, start doing some pilot programs to really think about like what does this look like, how do we try this out and see, and then I think actually kind of go forward in terms of looking at and doing that kind of full

assessment.

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Once we're kind of in the place where we actually are kind of like entering into the contract and doing some of those things, we will be coming back to the Board through a memo to share more information on this effort, as well as other equity efforts that we talked about. But I'm always happy to kind of meet offline if folks want to hear a little bit more detail on this.

So hopefully that was helpful and that answered any questions, and happy to answer any other ones as well.

BOARD MEMBER RECHTSCHAFFEN: Thank you. I think it would be helpful -- (coughing) excuse me -- when you have more details in terms of what you're doing to come back and brief the Board on it. I think that -- we'd welcome that.

CHAIR RANDOLPH: Dr. Shaheen.

BOARD MEMBER SHAHEEN: Thanks so much for the really inspiring video - that was great - and the presentation. I was really excited to hear that, you know, these satellites are coming on board. And I just was curious what the plan might be to start to integrate data coming from the satellites, particularly in the area of methane tracking and plumes?

EXECUTIVE OFFICER CLIFF: Yeah. So one regulation that the Board heard last year -- it was

actually the first that will actually include methane data as a way to understand whether leaks need to be addressed and then including in the regu -- included in that regulation, this is our oil and gas reg that we updated last year was a requirement that if data had been identified via remote sensing, including satellites, that that -- there would then be a requirement for the operator to address those leaks, so that's one opportunity.

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We're really looking forward to having this, because once you have the data, then you can go out and fix it, so it will actually help operators as well, but it will be a good transparency opportunity for us.

CHAIR RANDOLPH: Board Member Kracov.

BOARD MEMBER KRACOV: Yeah. Just following up on Board Member Rechtschaffen's comments. I also note that the -- that we're preparing a strategic plan for the DaRE operations, the internal operations, at the agency, and that that was circulated to the Board members recently. And I think as well as, you know, external efforts and internal efforts on these equity pieces. I know the Board is interested in the internal equity work. And when -- if there's opportunities for the Board to participate in the DaER strategic plan, or when it's finalized, but would love to see the results of that, and again find ways for the Board to keep tabs on that and support that work.

EXECUTIVE OFFICER CLIFF: Thank you. Appreciate that.

CHAIR RANDOLPH: All right.

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Any other questions or comments?

Well, thank you Steve and team. It's going to be another busy year, so appreciate all that work.

And then I think the last item on our agenda is open public comment. So this is open comment for those who wish to provide a comment regarding an item of interest within the jurisdiction of the Board that is not on today's agenda.

The clerk will call on those who have submitted a request-to-speak card. And if you are joining us remotely and wish to comment, please click the raise-hand button or dial star nine now.

Clerk, will you please call the commenters?

BOARD CLERK GARCIA: Yes. It looks like we have two remote commenters, a phone number ending 528 and then Sean Edgar.

So for the phone number ending in 528, you will hear a prompt when I activate your microphone, and please state your name for the record and you can go ahead and begin.

You can probably pushing star six, phone number ending in 528.

Okay. We'll try again, but let's move on to Sean Edgar. Sean, I have activated your microphone. Please unmute and begin.

SEAN EDGAR: Hi. Good afternoon. How is my volume?

BOARD CLERK GARCIA: Sounds good.

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SEAN EDGAR: Great. Thank you. Good afternoon. This is Sean Edgar with Cleanfleets.net.

Before you today for a time-sensitive request, for an Advanced Clean Fleet reporting extension for high priority fleets. The data is due next week into the state TRUCRS system. And the request that I'm asking for is consistent with the extension that the Board granted in the initial reporting phase of the Truck and Bus Regulation. The reason I mention that is that based on the 2021 large entity reports that were summarized by Board staff when you -- when the Board adopted Advanced Clean Fleets, there are over 386,000 vehicles operated by more than 1,800 fleets, many of whom that were never previously required to report into the TRUCRS system.

Today there are thousands of vehicle records that are owned by hundreds of fleets that are already in the TRUCRS system that need manual updating in the next week, unless an extension is granted. There are hundreds of fleets that need to report from the -- for the first time.

And there are upload problems that staff has been troubleshooting nad been very accessible, but have not been resolved to date.

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The December 28th enforcement notice that came out on Advanced Clean Fleets may give some relief to some fleet owners, but it really doesn't fix the problem. And what I mean by that is that both cities/counties, big box retailers that commonly ask our clients for reporting information each January in the form of a TRUCRS certificate, that can only be obtained through accurate reporting, which is impeded by the ongoing TRUCRS data receiving problems.

So staff has been very accessible, but not able to troubleshoot the issues for the successful reporting by affected fleets. For high priority fleets only, we're asking that you delay the initial reporting to April 1st to align with the State and local fleets deadline, and notice that those fleets also have to have an upload system that's operating flawlessly.

Dr. Vergis, has a much more detailed submittal, and we would ask that you look to give an extension, because there are only four more days until the reporting deadline. Thank you.

BOARD CLERK GARCIA: Thank you.

So we'll try the phone number ending in 528 one

more time. I've activated your microphone. You should be able to push star six.

Oh, it looks like you were unmuted for a second. It looks like you're back on mute, but if you could push star six.

There you go.

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LAURA ROSENBERGER HAIDER: This is Laura Rosenberger Haider. Can you hear me?

BOARD CLERK GARCIA: Yes, we can.

LAURA ROSENBERGER HAIDER: I think that the bicycle idea was a really great idea. Bicycles for everybody. Some -- a lot of people don't have money for cars at all and they have to get to work. And second of all, I think the -- you can't store carbon dioxide in the ground, because it will eventually leak like everything else, like all the methane gas leaks that we're having, because it actually brings -- when you put carbon dioxide into like oil wells -- abandoned oil wells into the ground -- I heard in New York State some company was going to use it as -- carbon dioxide storage underground as like a means of squeezing out methane gas. So that would just make more leaks and it won't store. The carbon dioxide would probably come out too.

All right. Thanks.

BOARD CLERK GARCIA: Thank you.

And that concludes the commenters for this item. CHAIR RANDOLPH: All right. Thank you. This meeting is adjourned. Thank you so much. (Thereupon the Air Resources Board meeting adjourned at 2:24 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 4th day of February, 2024.

James 4 Patter

JAMES F. PETERS, CSR

Certified Shorthand Reporter

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