Response to Comments

on the

Draft Environmental Analysis

for the

Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation

And

California's Compliance Plan for the Federal Clean Power Plan

California Environmental Protection Agency
AIR RESOURCES BOARD

Released July 17, 2017

to be considered at the

July 27, 2017 Board Hearing

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1. INTRODUCTION

The California Air Resources Board (CARB) staff prepared and circulated for public review a Draft Environmental Analysis (EA) for the Proposed 2016 Cap-and-Trade Amendments and Clean Power Plan (CPP) Compliance Plan (Proposed Project). The draft regulations and EA were released for public review on August 2, 2016. The public comment period for all documents concluded on September 19, 2016. Two separate 15-day change revisions to the regulatory language for the Proposed Project were released for public review. The first commenced on December 21, 2016, and ended on January 20, 2017, and the second commenced on April 13, 2017 and ended on April 28, 2017.

CARB received a total of 225 comment letters through the two comment dockets opened for the 2016 Cap-and-Trade Amendments and CPP during that time, 17 of which addressed the Draft EA or an environmental issue. Comments are available on the CARB website at: https://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=capandtrade16 and https://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=cpp2016. Pursuant to CARB's certified regulatory program, staff carefully reviewed all the comment letters received to determine which ones raised significant environmental issues related to the EA requiring a written response.

This document presents those comments and CARB staff's written responses for the Board to consider for approval prior to taking final action on the Proposed Project. Although this document includes written responses only to those comments related to the EA, all the public comments were considered by staff and provided to the Board members for their consideration. The full comment letters are reproduced as Attachment A to this document. For reference purposes, this document includes a summary of each comment followed by the written response. Attachments and appendices to these comment letters can be found at the link provided above.

Following consideration of the comments received on the EA and during the preparation of the responses to those comments, CARB revised the EA to prepare the Final EA released July 17, 2017. To facilitate identifying modifications to the document, modified text is presented in the Final EA with strike-through for deletions and underline for additions. None of the modifications alter any of the conclusions reached in the EA or provide new information of substantial importance relative to the EA. As a result, these minor revisions do not require recirculation of the document pursuant to the California Environmental Quality Act (CEQA) Guidelines, California Code of Regulations, title 14, section 15088.5, before consideration by the Board.

A. Requirements for Responses to Comments

These written responses to public comments on the EA are prepared in accordance with CARB's certified regulatory program to comply with the California Environmental Quality Act (CEQA). CARB's certified regulations state:

> *California Code of Regulations, title 17 section 60007. Response to Environmental Assessment*
>
> *(a) If comments are received during the evaluation process which raise significant environmental issues associated with the proposed action, the staff shall summarize and respond to the comments either orally or in a supplemental written report. Prior to taking final action on any proposal for which significant environmental issues have been raised, the decision maker shall approve a written response to each such issue.*

Public Resources Code section 21091 also provides direction regarding the consideration and response to public comments in CEQA. While the provisions refer to environmental impact reports, proposed negative declarations, and mitigated negative declarations, rather than an EA, this section of CEQA contains useful guidance for preparation of a thorough and meaningful response to comments.

Public Resources Code section 21091, subdivision (d) states:

> *(1) The lead agency shall consider comments it receives … if those comments are received within the public review period.*
>
> *(2) (A) With respect to the consideration of comments received …, the lead agency shall evaluate comments on environmental issues that are received from persons who have reviewed the draft and shall prepare a written response pursuant to subparagraph (B). The lead agency may also respond to comments that are received after the close of the public review period.*
>
> *(B) The written response shall describe the disposition of each significant environmental issue that is raised by commenters. The responses shall be prepared consistent with section 15088 of Title 14 of the California Code of Regulations, as those regulations existed on June 1, 1993.*

California Code of Regulations, title 14, section 15088 (CEQA Guidelines) also include useful information and guidance for the preparation of a thorough and meaningful response to comments. It states, in relevant part, that specific comments and suggestions about the environmental analysis that are at variance from the lead agency's position must be addressed in detail with

reasons why specific comments and suggestions were not accepted. Responses must reflect a good faith, reasoned analysis of the comments.

California Code of Regulations, title 14, section 15088 (a – c) states:

(a) The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response. The Lead Agency shall respond to comments received during the noticed comment period and any extensions and may respond to late comments.

(b) The lead agency shall provide a written proposed response to a public agency on comments made by that public agency at least 10 days prior to certifying an environmental impact report.

(c) The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, the major environmental issues raised when the Lead Agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice.

B. Comments Requiring Substantive Responses

CARB is required to prepare substantive responses only to those comments that raise "significant environmental issues" associated with the proposed action as required by California Code of Regulations, title 17, section 60007(a). As stated above, of the total 225 comment letters submitted on the two comment dockets for the Proposed Project, staff determined that thirteen (13) of the letters mentioned or raised an issue related to the EA or an environmental issue related to the EA. Staff was conservatively inclusive in determining which letters warranted a written response.

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2. RESPONSES TO COMMENTS

The comment letters were coded by the order in which they were received and if the comment was on the Cap-and-Trade Regulatory Amendments (noted as CT) or California's Compliance Plan for the Federal Clean Power Plan (noted as CPP).

CARB received seventeen (17) comment letters that relate to the Environmental Analysis (EA) or an environmental issue (Table 2-1). Comment letters have been reproduced and bracketed to demarcate specific issues and to allow for thorough responses. Responses are limited to comments that raise substantial environmental points, as required by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15132[d]). That is, responses to comments that do not pertain to the content of the Draft EA are not provided in this document. All comment letters received on the proposed Cap-and-Trade Amendments and California's Compliance Plan for the Federal CPP (Proposed Project) are available for review at www.arb.ca.gov.

Table 2-1. List of Commenters

Comment Letter Code	Commenter	Comment Period	Affiliation
CPP 12 SIERRACLUB	Elena Saxonhouse, Alejandra Núñez	Non-Reg	Sierra Club Environmental Law Program
CPP 13 CBE	Shana Lazerow, Brent Newell, Monica Wilson	Non-Reg	Communities for a Better Environment, Center on Race, Poverty, & the Environment, GAIA
CPP 14 GAIA	Monica Wilson	Non-Reg	GAIA
CPP 1/CT 1 EJAC	N/A	45-Day	AB 32 Environmental Justice Advisory Committee
CT 5 PANOCHE	N/A	45-Day	Panoche Energy Center
CT 52 PACIFICORP	Mary Wiencke	45-Day	PacificCorp
CT 59 JOINTENVJUSTICE	Various	45-Day	Center on Race, Poverty & the Environment Communities for a Better Environment Food & Water Watch Association of Irritated Residents

Table 2-1. List of Commenters

Comment Letter Code	Commenter	Comment Period	Affiliation
			Friends of the Earth – US Coalition for a Safe Environment Greenaction for Health and Environmental Justice Leadership Counsel for Justice & Accountability Comité ROSAS Greenfield Walking Group Committee for a Better Shafter Committee for a Better Arvin Lamont Parent Partners Delano Guardians Desert Protection Society Occupy SF Environmental Justice Working Group Food Empowerment Project Central California Environmental Justice Network
CT 69 SCPPA	Tanya DeRivi, Sarah Taheri	45-Day	Southern California Public Power Authority
CT 78 CBD	Brian Nowicki	45-Day	Center for Biological Diversity
CT 81 EDF	Erica Morehouse	45-Day	Environmental Defense Fund
CT 92 CEJA	Amy Vanderwarker	45-Day	California Environmental Justice Alliance
CT H8 CALBIO	Neil Black	45-Day	California Bioenergy
CT FF 2 EJAC	N/A	15 Day (First)	AB 32 Environmental Justice Advisory Committee
CT FF 30 SCPPA	Tanya DeRivi and Sarah Taheri	15 Day (First)	Southern California Public Power Authority
CT FF 54 PANOCHE	N/A	15 Day (First)	Panoche Energy Center
CT SF 3 EJAC	N/A	15 Day (Second)	AB 32 Environmental Justice Advisory Committee

Table 2-1. List of Commenters

Comment Letter Code	Commenter	Comment Period	Affiliation
CT SF 21 PANOCHE	N/A	15 Day (Second)	Panoche Energy Center

Table 2-2. List of Emission Leakage Commenters

Comment Letter Code	Commenter	Comment Period	Affiliation
CT 3 NWF	Barbara Bramble	45-Day	National Wildlife Federation
CT 4 POWEREX	Nico Van Aelstyn	45-Day	Powerex Corp.
CT 9 EPUC	Evelyn Kahl	45-Day	Energy Producers and Users Coalition
CT 13 GPI	Bill Buchan	45-Day	Graphic Packaging International Inc.
CT 15 GPI	Bill Buchan	45-Day	Graphic Packaging International Inc.
CT 26 SDGE	Adrianna Kripke	45-Day	San Diego Gas & Electric Company
CT 29 CAISO	Andrew Ulmer	45-Day	California ISO
CT 31 CSCME	John Bloom	45-Day	Coalition for Sustainable Cement Manufacturing and Environment
CT 33 NAIMA	Angus Crane	45-Day	North American Insulation Manufacturers Association
CT 41 LADWP	Jodean Giese	45-Day	Los Angeles Department of Water & Power
CT 45 WPA	Melissa Pool	45-Day	Wonderful Pistachio and Almonds
CT 50 PG&E	Nathan Bengtsson	45-Day	Pacific Gas & Electric
CT 71 AGCOUNSEL and AECA	Rachael O'Brien	45-Day	Agricultural Council of California and Agricultural Energy Consumers Association
CT 73 CEM	Jeffrey Adkins	45-Day	California Ethanol Manufacturers
CT FF 4 NAIMA	Angus Crane	15 Day (First)	North American Insulation Manufacturers Association
CT FF 8 GSPC	Jessica Nelson	15 Day (First)	Golden State Power Cooperative
CT FF 12 UPI	Suzy Hong	15 Day (First)	USS-POSCO Industries
CT FF 17 WPA	Melissa Pool	15 Day (First)	Wonderful Pistachio and Almonds
CT FF 25 CSI	Brett Guge	15 Day (First)	California Steel Industries
CT FF 34 LADWP	Jodean Giese	15 Day (First)	Los Angeles Department of Water & Power

CT FF 37 CCPC	Shelly Sullivan	15 Day (First)	Climate Change Policy Coalition
CT FF 41 CALCHAMBER	Amy Mmagu	15 Day (First)	California Chamber of Commerce
CT FF 43 PSE	Tom Flynn	15 Day (First)	Puget Sound Energy
CT FF 44 GALLO	John Nagle	15 Day (First)	E&J Gallo Winery
CT FF 46 GPI	Lyn Bragg	15 Day (First)	Glass Packing Institute
CT FF 49 POWEREX	Nico Van Aelstyn	15 Day (First)	Powerex Corp
CT FF 50 MID	Brock Costalupes	15 Day (First)	Modesto Irrigation District
CT FF 52 CSCME	John Bloom	15 Day (First)	Coalition for Sustainable Cement Manufacturing and Environment
CT FF 53 PG&E	Nathan Bengtsson	15 Day (First)	Pacific Gas & Electric
CT FF 54 PEC	Robin Shropshire	15 Day (First)	Panoche Energy Center
CT FF 57 CMUA	Justin Wynne	15 Day (First)	California Municipal Utilities Association
CT FF 58 MSRPPA	Martin Hopper	15 Day (First)	M-S-R Public Power Agency
CT FF 61 SMUD	William Westerfield	15 Day (First)	Sacramento Municipal Utility District
CT FF 63 CALFP	John Larrea	15 Day (First)	California League of Food Processors
CT FF 64 CCEEB	Jerry Secundy	15 Day (First)	California Council for Environmental and Economic Balance
CT FF 68 CMTA	Michael Shaw	15 Day (First)	California Manufacturers & Technology Association
CT FF 69 WSPA	Catherine Reheis-Boyd	15 Day (First)	Western State Petroleum Association

Master Response 1: Response to Comments Raising Environmental Justice Concerns

Comment:

Certain commenters state that the Cap-and-Trade Program has the potential to adversely impact disadvantaged communities. The commenters claim the Cap-and-Trade Program can cause localized air pollution increases at individual facilities covered under the Cap-and-Trade regulation. Commenters object to certain aspects of the Cap-and-Trade Program (e.g., out-of-state offsets) as well as the very nature of the Cap-and-Trade Program.

The following response is crafted as a "master response" to these concerns, since several commenters have similar concerns. Furthermore, given the issues raised by these commenters involve a complex intersection of many factors, CARB believes a comprehensive response will more effectively address these concerns than addressing each comment individually.

Response:

Background

Unlike criteria and toxic pollutants, greenhouse gases (GHGs) are global pollutants that are not generally directly harmful when inhaled, although they pose a serious risk to public health via their effects on climate change, including via increasing the risk of regional air pollution events affected by air temperature and other climatic conditions. Programs to reduce GHGs may operate differently than those focused on criteria and toxic pollutants that affect public health via different mechanisms.

CARB agrees that further reducing emissions and exposure to criteria and toxic air pollutant emissions is necessary to protect residents in disadvantaged communities, and is accounting for this need across its full range of programs. These communities have historically been located close to large stationary and mobile sources of high concentrations of emissions. The Cap-and-Trade Program, as part of the suite of CARB programs, is only part of the State's response to air pollution. It is an economy-wide mechanism for limiting climate change-causing pollutants. It does not impact where people live, or where facilities are sited. The program promotes reductions in GHG emissions. It does not establish facility specific reduction requirements, but constrains emissions in the aggregate while providing compliance flexibility to achieve GHG reductions in a cost-effective manner. Other state programs focus more directly upon criteria and toxic pollutant reductions.

CARB takes the complex concerns raised by commenters seriously, and has given much consideration to these potential issues, as explained in greater detail in the

following paragraphs. The commenters touch upon several concerns, some of which are the result of complex factors not directly related to this rulemaking. In developing this rulemaking, CARB had to balance the specific factors indicated in AB 32 (i.e., Health and Safety Code § 38562(b)) in promulgating regulations to reduce GHG emissions, including, among other things, ensuring that activities undertaken to comply with the regulations do not disproportionately impact low-income communities, considering cost-effectiveness of these regulations, and minimizing emissions leakage. (See Health & Safety Code § 38562(b).) CARB analyses have shown the Cap-and-Trade Program offers the best option, when paired with other complementary measures, for achieving GHG emissions reductions pursuant to AB 32.[1]

Likelihood of localized emission increases

Several commenters contend that the Cap-and-Trade Program has the potential to cause localized emissions increases in criteria and toxic pollutants that impact disadvantaged communities. In support of this contention, these commenters primarily refer to a September 2016 Research Brief entitled "A Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program" (referred to herein as the "Research Brief").[2]

In the EA, CARB took a conservative approach in disclosing the potential for localized emissions increases in criteria and toxics pollutants due to facility modifications, new construction, or ground disturbance was possible, as well as increases from changes in operation in response to the Cap-and-Trade Program. Staff analyses demonstrate that these impacts are very unlikely; nonetheless, staff cannot definitively dismiss the possibility that these impacts may occur at a subset of the many facilities in the Cap-and-Trade Program, given that there is inherent uncertainty in the degree of mitigation ultimately implemented to reduce the potentially significant impacts because the authority to determine project-level impacts and require project-level mitigation lies with the permitting agency for individual projects. Therefore, the EA took the very conservative approach of disclosing this impact as potentially significant and unavoidable. The EA also identified potentially significant air quality impacts related to activities that disturb the ground, such as construction projects or site preparation for

[1] See Proposed 2017 Climate Change Scoping Plan Update, at 31-53 (January 20, 2017), https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf; First Update to the Climate Change Scoping Plan, at 86-88 (May 2014), https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf; Climate Change Scoping Plan (December 2008), at 15-23, https://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf.

[2] Lara J. Cushing, Madeline Wander, Rachel Morello-Frosch, Manuel Pastor, Allen Zhu, and James Sadd, Research Brief: A Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program (September 2016), available at http://dornsife.usc.edu/assets/sites/242/docs/Climate_Equity_Brief_CA_Cap_and_Trade_Sept2016_FINAL2.pdf.

tree planting to establish offset credits. Such impacts are likely to be mitigated during project development, but are nonetheless possible. Nonetheless, based on analysis to date, as set forth here, CARB strongly disagrees with commenters' contentions regarding the likelihood of localized emissions increases in criteria and toxic pollutants due to the implementation of the Cap-and-Trade Program. Indeed, the opposite effect is far more likely. As explained in greater detail in the EA, the proposed amendments would continue the Cap-and-Trade Program after 2020. This, in turn, involves significantly more ambitious emissions reduction mandates, which are expected to produce dramatic reductions in GHG emissions and likely criteria pollutant[3] emissions across all sectors covered by the Cap-and-Trade Program.

Before considering how the commenters' contentions seek to rely on the Research Brief, it is important to consider the context under which the Research Brief was developed and the purposes for which it is designed. In the "Overview" section on page 1, the Research Brief disclaims that "[f]urther research is needed before firm policy conclusions can be drawn from this preliminary analysis." The Research Brief also notes that "[a]s regulated industries adapt to future reductions in the emissions cap, California is likely to see more reductions in localized GHG and co-pollutant emissions." (Research Brief at 10.) Therefore, the Research Brief does not identify adverse environmental impacts resulting from the Cap-and-Trade Program.

Moreover, and contrary to several commenters' contentions, the Research Brief *does not* conclude that localized emissions in disadvantaged communities are increasing *due to the Cap-and-Trade Program*. The overall thrust of the Research Brief is that more can be done through modifications to the Cap-and-Trade Program to *enhance benefits* to EJ communities. A CEQA analysis must identify and focus on the "significant environmental effects" of the proposed project. (Pub. Resources Code § 21100(b)(1); 14 CCR § 15126(a), 15143.) A significant effect on the environment is defined as "a substantial, or potentially substantial, *adverse* change in the environment." (Pub. Resources Code § 21068 [italics added].) By contrast, an action that simply foregoes some hypothetical benefits, as opposed to causing an increase above the environmental baseline, is not a CEQA impact because it does nothing to adversely change the existing environmental conditions that form the baseline. This distinction is critical to understand in considering commenters' contentions and the CEQA implications.

With regard to the initial conclusions of the Research Brief, it is important to note that the Research Brief states that it is a preliminary research effort only, the research brief does not consider more direct drivers of change in production activity that result in increases in criteria and toxic pollutants.

[3] "Criteria pollutants" refers to the pollutants for which U.S. EPA has established national ambient air quality standards, which are ground-level ozone, carbon monoxide (CO), particulate matter (PM), lead, sulfur dioxide (SOx), and nitrogen dioxide (NOx).

First, while noting some preliminary indications regarding increased emissions in certain industrial sectors and sources for the 2013-2014 period compared to the 2011-2012 period, the Research Brief does not account for several important macroeconomic and electricity sector causal factors that can help explain any increase in emissions. In this regard, commenters' contention that the Research Brief shows that the Cap-and-Trade Program exacerbates localized pollution burdens reflects a misconception: commenters assume that, because emissions may have increased at some sources after promulgation of the Cap-and-Trade Regulation, then the Cap-and-Trade Regulation must have caused such emissions increase. However, the sequence of these events does not indicate causality.

Most importantly, the economy was still significantly affected by the Great Recession in 2011-2012. Depressed demand for goods and services, as well as labor market slack, meant that production was lower in the 2011-2012 period compared to the 2013-2014 period, regardless of the Cap-and-Trade Program. As a result, to the extent emissions increased on both facility and sector levels over the entire 2011 to 2014 period, such emissions increases were likely due to production returning to pre-recession levels, not the Cap-and-Trade Program. Additionally, electricity sector emissions may have increased in 2013-2014, compared to 2011-2012, because of increased dispatch of natural gas-fired power plants due to (1) decreased hydroelectricity production as a result of California's historic drought, which started after 2011 and (2) the closure of the San Onofre Nuclear Generating Station (SONGS) in 2012.

Other commenters have referenced these economic factors to help explain emissions changes in various sectors, and in fact, have presented documentation showing that GHG emissions reductions have been slightly greater in disadvantaged areas (though the difference in emissions reductions between disadvantaged areas and other areas is not statistically significant).[4] Therefore, although it is too early to draw conclusions regarding the effect of the Cap-and-Trade Program on criteria pollutant emissions at any specific regulated emissions source, it is important to note that there is disagreement among the commenters in this proceeding regarding what the data shows to date.

Second, the Research Brief is based on limited data, which is inadequate to support a conclusion that the Cap-and-Trade Program has the potential to cause significant localized emissions increases. As recognized by the Office of Environmental Health and Hazard Assessment (OEHHA) in its February 2017 Initial Report on Tracking and

[4] Maximilian Auffhammer, Severin Borenstein, James Bushnell, Meredith Fowlie, and Kyle Meng, Comments on the California Cap on Greenhouse Gas Emissions and Market Based Compliance Measures (August 2017), *available at* https://www.arb.ca.gov/lists/com-attach/214-capandtrade16-BmdWIgNgUmIEbQVo.pdf (citing to Kyle Meng, "Is cap-and-trade causing more greenhouse gas emissions in disadvantaged communities" (April 2017), *available at* https://www.dropbox.com/s/ka0a884oxkotxhj/Meng_CT_EJ.pdf?dl=1).

Evaluation of Benefits and Impacts of Greenhouse Gas Limits in Disadvantaged Communities[5] (referred to herein as the "OEHHA Initial Report") discussed further below, limited data is available from which to draw conclusions at this point. The Cap-and-Trade Program is a relatively new program, with the first auction of emissions instruments occurring in 2012. In 2013-2014, the program covered large industrial sources and electricity generation. In 2015, the program expanded to cover emissions from combustion of gasoline and diesel, as well as natural gas use in commercial and residential applications. The OEHHA Initial Report also notes there are complexities in trying to correlate GHGs with criteria and toxics emissions across industry and within sectors, although preliminary data review shows there may be some poor to moderate correlations in specific instances. Further, OEHHA observed that "[t]he key challenge in analyzing the benefits and impacts of climate-change programs on disadvantaged communities is acquiring adequate data. As discussed in this report, data on emissions of GHGs, criteria air pollutants and toxic air pollutants are collected by multiple entities under different programs and statutory mandates. Differences in reporting requirements across regulatory programs can complicate data analysis. In addition, toxic emissions data for many facilities are only updated every four years, further limiting conclusions that can be reached."[6] Some specific challenges include matching facility identification numbers, coordinating data submittal requirements and methods, harmonizing reporting deadlines and frequency, and inconsistent quality assurance/quality control methods.[7] In summary, sufficient data is not available yet to fully analyze the correlation between GHG and criteria emissions from these types of facilities. As discussed throughout this response, CARB is continuing to work on filling these data gaps to more accurately analyze this potential issue as new data becomes available. See below for more information on current efforts to gather the necessary data.

In summary, as disclosed in the Draft EA for this project, CARB staff has concluded that localized air impacts are unlikely. CARB agrees with the OEHHA Initial Report and the Research Brief on the need for better integration of criteria, toxics, and GHG emissions databases. This would further support transparency and the ability to conduct analyses to monitor and track how these pollutants change over time at large stationary sources, especially near disadvantaged communities. Further, the OEHHA Initial report and the Research Brief do not provide evidence that implementation of the Cap-and-Trade Program is contributing to increasing local air pollution, but they underscore the need to use all of the tools (e.g., enhanced planning, monitoring, and enforcement, new regulations, tighter permit limits) available to the State and local agencies to achieve further emissions reductions of toxic and criteria pollutants that are impacting communities.

[5] Available at https://oehha.ca.gov/environmental-justice/report/ab32-benefits.
[6] OEHHA, Initial Report: Tracking and Evaluation of Benefits and Impacts of Greenhouse Gas Limits in Disadvantaged Communities (February 2017) at 49.
[7] ARB Staff Presentation: Informational Update on California's Emission Inventories for Criteria Pollutants, Toxic Air Contaminants, and Greenhouse Gas Air Pollution, January 27, 2017. Available at https://www.arb.ca.gov/board/books/2017/012717/17-1-3pres.pdf.

Accordingly, CARB has worked, and continues to work, to develop processes and mechanisms for protecting communities against localized emissions increases, regardless of their cause, as described in the sections below.

Role of local air quality regulation

In addressing the commenters' concerns, it is also critical to understand how air pollution and climate regulation are implemented in California. The Cap-and-Trade Program is an economy-wide mechanism for limiting climate change causing pollutants. It is neither the intent of the Cap-and-Trade Program nor the authorization of the underlying statute (i.e., AB 32) to regulate criteria pollutant and toxic emissions from specific stationary sources, although program effects on these emissions were considered during the design of the Regulation.[8] In general, CARB's statutory authority is limited to regulating mobile sources; CARB has direct authority to develop stationary source rules for GHG emissions, but it is not a permitting agency. CARB does not have the authority to permit local stationary sources nor directly regulate their emissions of toxic air contaminants and criteria air pollutants. The primary authority to regulate toxic air contaminants and criteria air pollutants at stationary source emissions, including the criteria pollutant and toxics emissions of concern to the commenters, is vested in the local air districts and U.S. EPA. (See Health & Safety Code § 39002.) The air districts and U.S. EPA have the power to require stationary sources to obtain air quality permits, and to establish the specific emissions limitations applicable to each facility. CARB does consider matters of toxic risk through separate programs, and has endeavored to reduce toxic risk from industrial facilities throughout the State. As to criteria pollutants, CARB works with districts on air quality planning, and has approved district plans that will lead to attainment of state and federal air quality standards. As described elsewhere in this response, new legislation has also provided mechanisms for improving reporting, monitoring, and planning to address criteria pollutant and toxics emissions in high priority communities across the state.

In this context, Cap-and-Trade covered facilities of apparent interest to commenters have their construction, modification, and operation permitted by the air districts consistent with state and federal criteria and toxic pollution standards. These permit limits, which must also be consistent with attainment planning, are designed to ensure that sources cannot emit above levels protective of public health.

[8] AB 32 requires ARB to satisfy several requirements in adopting regulations under AB 32, including ensuring that activities undertaken to comply with the regulations do not disproportionately impact low-income communities; ensuring that activities undertaken pursuant to the regulations complement, and do not interfere with, efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions; and considering overall societal benefits, including reductions in other air pollutants, diversification of energy sources, and other benefits to the economy, environment, and public health. (See Health & Safety Code § 38562(b).)

It is, thus, important to be aware that any emissions increases of concern to the commenters would need to be authorized under the permits issued by the local air districts. Otherwise, the facilities would be in violation of their permit requirements. CARB cannot permit higher emissions at any facility, and cannot cause emissions to exceed permit limits; nor does CARB revise these permits as a general matter to decrease emissions of toxics and criteria pollutants. As noted above, the air districts have primary permitting authority over these facilities. Permitted emissions levels are set after permit review, in accordance with district regulation and statute. Major stationary sources, of the sort covered by the Cap-and-Trade Regulation, generally must control permitted levels of criteria pollutant emissions consistent with at least the Best Available Control Technology (BACT), as defined in permitting regulations. This BACT analysis, and related analyses, are designed to ensure continued public health protection, and Cap-and-Trade cannot legally cause sources to exceed these limits. CEQA review also may pertain, and the air districts may require certain high priority facilities to prepare health risk assessments with respect to hazardous substances. If a health risk assessment indicates a significant risk associated with the facility's emissions, the facility must conduct an airborne toxic risk reduction audit and develop a plan to implement airborne toxic risk reduction measures that will result in the reduction of emissions from the facility to a level below the significant risk level within five years.

Finally, recently enacted AB 617 also requires districts, via a public process, to adopt an expedited schedule for implementing best available retrofit control technology (BARCT) for sources subject to the Cap-and-Trade Program by January 1, 2019. This schedule will give the highest priority to those emission units that have not had the emissions-related conditions in their permits modified for the greatest period of time.

Efforts to evaluate and understand emission impacts of Cap-and-Trade

As noted above, the Cap-and-Trade Program is a highly effective way to achieve economy-wide GHG reductions. The Cap-and-Trade Program is not a focused tool to reduce criteria pollutant and toxics emissions at specific facilities, nor was CARB authorized to require facility-specific criteria pollutant and toxic emissions reductions by AB 32. Criteria pollutant emissions, and many toxics emissions, are regulated at the local (air district) level. Nevertheless, CARB and other state agencies have undertaken substantial efforts to analyze the potential for adverse localized air quality impacts, which have informed CARB's proposed amendments. These efforts include:

- OEHHA analysis regarding potential localized impacts. In December 2015, the Governor issued a directive that OEHHA prepare a report analyzing the benefits and impacts of the GHG emissions limits adopted by CARB within disadvantaged communities, and directed OEHHA to continue updating that report every three years. In February 2017, OEHHA issued its Initial Report in response to this directive. This report concluded there are not enough emissions data available yet to allow for a comprehensive and conclusive analysis. (OEHHA Initial Report

at 48.) However, OEHHA's preliminary findings confirm that a disproportionate number of large industrial facilities are located in or very close to disadvantaged communities, and it identified paths forward to acquire a range of data needed to identify and track any emissions increases that could be attributable to the Cap-and-Trade Program. While the OEHHA Initial Report focused on the Cap-and-Trade Program, future reports will focus on the impacts of other climate programs on disadvantaged communities. (OEHHA Initial Report at 48-49.)

- CARB efforts to analyze criteria pollutants and toxic air contaminants with respect to greenhouse gas reduction measures. In 2011, as part of the original Cap-and-Trade Program rulemaking, CARB adopted an Adaptive Management Plan to help assess and address unlikely but potential localized air quality impacts resulting from the Cap-and-Trade Program. CARB has convened a Technical Workgroup consisting of industry, environmental justice, and academic representatives to evaluate the appropriate methodology to assess the impact of the Cap-and-Trade Program. CARB staff have also analyzed compliance period data from covered facilities and found similar data concerns to OEHHA. With the advent of Assembly Bill 197 (described more fully below), CARB will continue to assess greenhouse gas reduction measures, including the Cap-and-Trade Program, and any potential impact on criteria pollutants or toxic air contaminant emissions.

- Integrated emissions data is now available. CARB has developed the CARB Pollution Mapping Tool[9] to help the public quickly and easily visualize the emission changes over time at facilities subject to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions; 17 California Code of Regulations (CCR) § 95100 et seq.) (MRR). This tool offers a highly customizable and user-friendly interface for visualizing data from 2008 to the most recent year for which data has been processed (currently 2015). The CARB Pollution Mapping Tool integrates pre-existing criteria pollutant data from the California Emissions Inventory Development and Reporting System (CEIDARS) and GHG emissions from mandatory reporting facilities. The GHG data is reported annually and uses statewide reporting methodologies, while the criteria pollutant emissions data is reported by air districts. CARB staff is working closely with air district staff regarding the criteria pollutant emissions data to identify facility emissions data trends across the time series (2008-2015). Additionally, pursuant to Assembly Bill 197 (discussed below), this tool will incorporate air toxics emissions data by the beginning of 2018.

In 2016, the California legislature passed Assembly Bill (AB) 197 (2016). This bill, passed in conjunction with Senate Bill (SB) 32, requires an array of changes to how CARB is governed and overseen by the Legislature, how CARB considers and communicates emissions data (both at facility and regional levels), and adding

[9] **Available at** https://www.arb.ca.gov/ei/tools/pollution_map/**.**

transparency regarding the expected emissions benefits of new CARB measures. The elements of AB 197 include:

- A requirement that CARB make available, and update at least annually, on its Internet Web site the emissions of greenhouse gases, criteria pollutants, and toxic air contaminants throughout the state broken down to a local and subcounty level for stationary sources and to at least a county level for mobile sources, and conduct monitoring in cooperation with other agencies to fulfill this requirement. (Health & Safety Code § 39607.)

- A requirement that CARB make available, and update at least annually, on its Internet Web site the emissions of greenhouse gases, criteria pollutants, and toxic air contaminants for each facility that reports to the state board and air districts. CARB is also required, at least once a year at a hearing of the Joint Legislative Committee on Climate Change Policies, to present an informational report on the reported emissions of greenhouse gases, criteria pollutants, and toxic air contaminants from all sectors covered by the scoping plan, including an evaluation of emission trends and a discussion of the factors that influence those trends. (Health & Safety Code § 38531.)

- A directive that CARB, when adopting rules and regulations to achieve greenhouse gas emissions reductions beyond the statewide greenhouse gas emissions limit, must follow the requirements of Health & Safety Code § 38562(b), consider the social costs of GHG emissions, and prioritize regulations that result in direct emission reductions at large stationary sources of GHG emissions, from mobile sources, and from other sources. (Health & Safety Code § 38562.5.)

- Measures to increase transparency regarding the effectiveness of new Scoping Plan measures, by requiring CARB to identify specified information for each proposed emissions reduction measure, including both the range of projected GHG emissions reductions and the range of traditional air pollution reductions that would result from the measure. (Health & Safety Code § 38562.7.)

In addition to the actions discussed above, other mechanisms are in place to address criteria pollutant and toxics emissions. These other actions will address both mobile and industrial sources, and will require coordination across multiple agencies:

- Achieve better integration of emissions and program data for GHGs, criteria pollutants, and toxics. CARB is working to enhance its Pollution Mapping Tool to include toxics data, and to display multi-pollutant data for all sources at the county and sub-county level. CARB is also working to create an integrated inventory database system, and is investigating ways to harmonize the timing of data submittals and make data methodologies for criteria and toxic pollutants

more consistent.[10]

- Continued analysis by OEHHA. Pursuant to the Governor's directive, OEHHA will continue to analyze the benefits and impacts of the GHG emissions limits adopted by CARB within disadvantaged communities with respect to programs adopted pursuant to AB 32. This analysis will include potential benefits and impacts in disadvantaged communities for other AB 32 programs outside of the Cap-and-Trade Program.

- CARB recently adopted the State SIP Strategy, which lists a suite of measures CARB has committed to develop in the coming years. CARB's Mobile Source Strategy and Sustainable Freight Strategy give further information and context regarding CARB's proposed upcoming statewide measures to transform the mobile source and freight sectors.

- The new Industrial Source Action Committee established by CAPCOA and CARB will consider options for community monitoring and prioritize and develop industrial control strategies focused on reducing community exposures to criteria and toxics air pollutants that adversely impact public health. The Committee will first focus on refineries.

Additionally, newly-enacted AB 617 directs and authorizes CARB to take several actions to improve data reporting from facilities, air quality monitoring, and pollution reduction planning for communities affected by a high cumulative exposure burden. With regard to reporting, it requires CARB to develop a uniform statewide annual reporting system of criteria pollutants and toxic air contaminants for certain categories of stationary sources. As for monitoring, it requires CARB to prepare a monitoring plan by October 1, 2018. Via a public process, this plan would identify the highest priority locations around the state to deploy community air monitoring systems. By July 1, 2019, any district containing a high priority location would need to deploy a community air monitoring system for that location or locations. The districts would also have authority to require nearby facilities to deploy a fenceline monitoring system under certain conditions. These efforts will help better understand the complex emissions interrelations between the Cap-and-Trade Program and air district criteria and toxics programs.

Finally, with regard to planning, AB 617 also requires CARB to prepare, in consultation with numerous stakeholders (including environmental justice organizations), a statewide strategy to reduce emissions of toxic air contaminants and criteria air pollutants in communities affected by a high cumulative exposure burden. This strategy must be prepared by October 1, 2018. The strategy would select locations around the state for

[10] See ARB Staff Presentation: Informational Update on California's Emission Inventories for Criteria Pollutants, Toxic Air Contaminants, and Greenhouse Gas Air Pollution, January 27, 2017. Available at https://www.arb.ca.gov/board/books/2017/012717/17-1-3pres.pdf.

preparation of community emissions reduction programs, which would then be adopted by the air districts and implemented after CARB review.

Efforts to reduce criteria pollutant and toxics emissions

As noted previously, commenters' concern regarding criteria and toxic emissions have more to do with traditional air pollution regulation than CARB's climate programs. As discussed above, local air districts, rather than CARB, have direct authority to regulate criteria pollutant and toxic emissions from stationary sources. Nevertheless, for many decades, the State has implemented many policies and programs to address and reduce criteria and toxic air pollutants. As a result of these efforts, significant progress has been made in reducing diesel particulate matter (PM) and many other hazardous air pollutants. For example, and based on the most current CEPAM inventory (2016 SIP inventory tool V. 1.05), statewide NOx emissions have been reduced by 26 percent between 2012 and 2017, and diesel PM has been reduced by 50 percent over the same period.

CARB partners with air districts to address stationary emissions sources and adopts and implements State-level regulations to address sources of criteria and toxic air pollution, including mobile sources. The key air quality strategies being implemented by CARB include:

- **State Implementation Plans.** As referenced in the ISOR, the 2016 State Strategy for the State Implementation Plan sets forth a comprehensive array of proposed control measures designed to achieve the emission reductions from mobile sources, fuels, stationary sources, and consumer products necessary to meet ozone and fine PM attainment deadlines established by the Clean Air Act.

- **Diesel Risk Reduction Plan.** As referenced in the 2010 ISOR to the Cap-and-Trade Regulation and the functional equivalent document incorporated by reference in the EA, California's Diesel Risk Reduction Plan recommends many control measures to reduce the risks associated with diesel PM and achieve a goal of 85 percent PM reduction by 2020. Diesel PM accounts for the majority of California's ambient air cancer risk.

- **Sustainable Freight Action Plan.** As referenced in the EA, Executive Order B-32-15 required the development of an integrated Sustainable Freight Action Plan, which seeks to improve freight efficiency, transition to zero emission technologies, and increase competitiveness of California's freight system. This Action Plan was released in July 2016.

- **AB 32 Scoping Plan.** As referenced in the ISOR and in the EA, the original (2008), first update (2014), and ongoing 2017 Scoping Plan Update (2017)[11] contain the main proposed strategies California will use to reduce the GHGs that cause climate change and achieve the State's climate goals. Following new legislative direction in AB 197 (discussed above), the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan Update) currently under development estimates the toxic and criteria emissions reductions co-benefits expected of proposed scoping plan measures.

- **AB 1807.** As referenced in the EA, AB 1807 requires CARB to use certain criteria in prioritizing the identification and control of air toxics.

- **AB 2588 Air Toxics "Hot Spots" Program.** As referenced in the EA, AB 2588 imposes air quality requirements on the state. The goals of the program are to collect emission data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels.

- **SB 605 Short-Lived Climate Pollutant Plan.** In March 2017, CARB adopted a comprehensive short-lived climate pollutant strategy, which involves coordination with other state agencies and local air quality management and air pollution control districts to reduce emissions of short-lived climate pollutants. This strategy offers many localized air quality benefits, including reductions in volatile organic compound (VOC) emissions from oil and gas operations and livestock operations, as well as particulate matter reductions from incentives to replace woodstoves.

To support efforts to advance the State's toxics program, OEHHA finalized a new health risk assessment methodology on March 6, 2015.[12] In light of this, CARB is collaborating with air districts in the review of the existing toxics program under AB 2588 to strengthen the program.

Responses to commenters' other concerns regarding potential impacts to disadvantaged communities

The commenters state that there are foregone benefits in reducing criteria and toxics air pollutants by deploying the Cap-and-Trade Program. As noted above, the Cap-and-Trade Program is designed to primarily address GHGs, not criteria and toxics air

[11] See Proposed 2017 Climate Change Scoping Plan Update (January 20, 2017) https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf

[12] See OEHHA Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments 2015, https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0.

pollutants. However, to the extent actions are taken to improve onsite efficiency and reduce the combustion of fossil fuels, the Cap-and-Trade Program will likely drive GHG as well as criteria and toxic emission reductions co-benefits. The Research Brief discussed above and cited by the commenters states, "As regulated industries adapt to future reductions in the emissions cap, California is likely to see more reductions in localized GHG and co-pollutant emissions." Indeed, the post-2020 annual emissions caps require deeper annual emissions reductions than what the Cap-and-Trade Program requires leading up to and including 2020.

At the same time, there are only three years of data available for the Cap-and-Trade Program. Again, the authors for the Research Brief state, "Further research is needed before firm policy conclusions can be drawn from this preliminary analysis." It is premature to draw conclusions that there are, or will be, no co-benefits associated with the Cap-and-Trade Program at this time, as more data is needed to inform this type of analysis. To ensure transparency in how emissions are changing among covered entities, CARB makes available annually reported and verified GHG emissions data, issuance data for offsets that includes location and offset type, and how entities comply with the program with allowances and the use of offsets. This data will continue to be made publicly available as the program continues, fostering more informed analysis regarding emissions changes at both facility and regional levels.

A commenter also claims GHG emissions in certain sectors have increased from a "baseline period." It is unclear what "baseline" the commenter references. The Cap-and-Trade Program tracks progress relative to the statewide target rather than against a baseline period. In general, GHG emissions declined sharply during the Great Recession and slowly increased as the economy grew over the years immediately following the recession. It is important to note that the GHG emissions per capita and per dollar of Gross Domestic Product have declined over this same period of time—meaning the State's economy is decarbonizing. Therefore, any GHG emissions increases at either the facility or sector-wide level have most likely resulted from the economic recovery (and are therefore properly viewed as part of the existing conditions), rather than from the Cap-and-Trade Program. Moreover, as indicated in the annually reported and verified GHG emissions data, GHG emissions have been declining statewide since the adoption of the Cap-and-Trade Program.[13]

The commenters claim that emissions reductions under the program are mostly from out-of-state offsets. It is unclear how the location from which offset credits are generated relates to criteria pollutant reductions, since commenters do not identify the nature of any foregone criteria pollutant benefits from offset projects located outside California. Moreover, and importantly, the CARB GHG Inventory, which is the critical tool used to track reductions that meet the statewide GHG target, includes instate smokestack, tailpipe, and emissions associated with imported power to serve California

[13] *See* California Air Resources Board Web page, Mandatory GHG Reporting – Reported Emissions, https://www.arb.ca.gov/cc/reporting/ghg-rep/reported-data/ghg-reports.htm.

load. Use of out–of-state offsets in the Cap-and-Trade Program is not used to track the State's progress towards achieving its statewide GHG target. When comparing the actual GHG emissions that are covered under the program, without any adjustments for offsets, covered entity emissions are under the caps in the program. And, as the Cap-and-Trade Program covers 85 percent of the GHG emissions in the State and given that the caps decline annually, there will be direct emissions reductions from those sources. These covered sources include large stationary facilities (manufacturing, refineries, power plants, and cement plants), mobile sources, and emissions associated with imported electricity to serve California load. Additionally, recently enacted AB 398 is pertinent to the concerns raised by commenters. AB 398 would require CARB to develop regulations reducing the quantitative usage limit for offsets, and would require one half of offsets within that limit to confer direct environmental benefits to the state, from the period of January 1, 2021 to December 31, 2030. AB 398 would also establish a Compliance Offsets Protocol Task Force to provide guidance to CARB in approving new offset protocols for the purpose of increasing offset projects with direct environmental benefits in the state while prioritizing disadvantaged communities, Native American or tribal lands, and rural and agricultural regions.

The commenters also assert that offsets are "questionable" and cannot accomplish the objective of being permanent and real. Under AB 32, all offsets utilized as part of the Cap-and-Trade Program must be real, additional, permanent, verifiable, quantifiable, and enforceable. CARB has developed rigorous offset quantification methods that incorporate the AB 32 criteria and ensure any offset issued and used in the Program meets these criteria. CARB's method of implementing the statute with respect to offsets was upheld by the First District Court of Appeals in *Our Children's Earth Foundation v. ARB* (2015) 234 Cal. App. 4th 870.

Master Response 2: Response to Comments Raising Emission Leakage Concerns

Comment:

During the 45-Day and first 15-Day comment periods, several commenters raised concerns about emission leakage related to the proposed post-2020 assistance factors. Table 2-2 lists the commenters who raised emission leakage concerns.

Response:

In the second 15-day package, post-2020 assistance factors were removed from the proposed regulatory text in response to stakeholder concerns about the leakage studies performed under contract to CARB and CARB staff's proposed methodology for developing assistance factors using these studies. These deletions have the effect of removing all post-2020 industrial allocation from the Regulation. Staff intends to continue assessment of appropriate calculations of emissions leakage risk for the post-2020 period, and to propose post-2020 assistance factors and industrial assistance in a future rulemaking that will be initiated after the current rulemaking concludes but before vintage 2021 allocation will occur. Staff remains committed to continuing to provide industrial allowance allocation post-2020 at levels sufficient to minimize emissions leakage (per the AB 32 requirement). This industrial allocation will continue to be in the form of output-based updating allocation based on emissions intensity product benchmarks where feasible and allocation based on energy benchmarks where not. Recently enacted AB 398 provides specific direction to CARB on what the post-2020 assistance factors will be. Specifically, the bill directs CARB to set industry assistance factors for allowance allocation commencing in 2021 at the levels applicable in the compliance period of 2015 to 2017, inclusive, with a declining cap adjustment factor to the industry allocation equivalent to the overall statewide emissions declining cap using the methodology from the compliance period of 2015 to 2017, inclusive. No further response to the commenters' assertions about emission leakage is required as it is no longer relevant given the second 15-Day changes and changes to enact the direction in AB 398 would be brought forward through a future rulemaking.

Master Response 3: Response to Comments Suggesting Alternatives to the Cap-and-Trade Regulation or Refinements Thereto

Comment:

Multiple commenters suggested other options for regulating carbon emissions, or refinements to the Cap-and-Trade Regulation, to address claimed potential impacts to disadvantaged communities.

The following response is crafted as a "master response" to these concerns, since several commenters have similar concerns. Furthermore, given the issues raised by these commenters involve a complex intersection of many factors, CARB believes a comprehensive response will more effectively address these concerns than addressing each comment individually.

The alternatives suggested by commenters include:

1. Adopt a carbon fee regulation.
2. Adopt a carbon fee and dividend, or cap and dividend, regulation.
3. Adopt a command and control regulation, or direct regulation.
4. Fully analyze all four scenarios from the 2017 Scoping Plan Update.
5. Change certain aspects of the existing Cap-and-Trade Program, including: eliminate allowances, implement specific reduction targets in certain sectors, changes to auction floor price and price of certain allowances, implement various approaches for returning revenue to disadvantaged communities, limit creation and use of offsets, and incorporate additional considerations into the cost of carbon.

Response:

See Master Response 1, above, for general discussion regarding the potential for adverse localized air quality impacts to disadvantaged communities.

With regard to the suggested alternatives and project design changes, as explained in more detail on page 159 of the Draft EA, while CARB, by virtue of its certified program, is exempt from Chapters 3 and 4 of CEQA and corresponding sections of the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et. seq.), the Guidelines nevertheless provide useful information for preparation of a thorough and meaningful alternatives analysis. The Guidelines specify that "[a]n EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation." (Cal. Code Regs., tit. 14, § 15126.6(a).) An EIR need not consider multiple variations of alternatives, nor must it consider alternatives to components of the project; rather, it

should focus on alternatives to the project as a whole. (See Cal. Code Regs., tit. 14, § 15126.6(a).)

With regard to the comments proposing a carbon tax, CARB responds as follows: the EA contains several meaningful alternatives, including facility-specific emissions limits and a carbon fee. See page 164 of the Draft EA. The CEQA alternatives analysis would be the same for a carbon fee and a carbon tax. A cap-and-trade program and a carbon fee are both carbon pricing mechanisms, but there are important differences. A cap-and-trade program sets a declining emissions cap so that the maximum allowable GHG emission level is known and covered entities will have to reduce GHG emissions. With a carbon fee, there is no mechanism to limit the actual amount of GHG emissions either at a single source or in the aggregate, and a carbon fee requires entities to pay for all of their GHG emissions directly to the State. In other words, a cap-and-trade program provides environmental certainty while a carbon fee provides some carbon price certainty. Therefore, a carbon fee would not satisfy various project objectives as well as the Proposed Project, as described at page 164-165 of the Draft EA. There is no emissions limit with a carbon fee, and commenters have presented no evidence indicating that it would be more effective in reducing co-pollutant emissions in disadvantaged communities than the Cap-and-Trade Program.

With regard to the comments proposing a carbon fee and dividend, or cap and dividend, regulation, CARB notes that this comment is outside the scope of the Proposed Amendments as it is made specifically with respect to the Scoping Plan Economic Analysis. Furthermore, the commenter does not explain what such a dividend would entail, or how adding a dividend component to the program would reduce or avoid any significant environmental impact.

With regard to the comments proposing a command and control regulation, or direct regulation, the Draft EA analyzed this alternative as Alternative 2. See page 161 of the Draft EA.

With regard to the comment requesting that CARB fully analyze all four scenarios from the 2030 Target Scoping Plan, CARB notes that this comment appears to have been made in the 2017 Scoping Plan Update process. To the extent it offers a specific comment on these amendments, CARB staff notes that the 2017 Scoping Plan Update presents a Proposed Scoping Plan Scenario and four alternatives to achieve the GHG emissions reductions required by 2030. The 2017 Scoping Plan Update itself considers and analyzes these scenarios and recommends the Proposed Scenario, which includes extending the Cap-and-Trade Program to ensure the State's 2030 emissions reduction target is achieved. Furthermore, the commenter does not describe how any of these alternatives would avoid or substantially lessen any of the significant effects of the proposed project.

With regard to the comments requesting CARB to modify various aspects of the Cap-and-Trade Regulation, CARB notes that CEQA does not require an environmental

analysis to consider multiple variations of alternatives, nor must it consider alternatives to components of the project. Rather, it should focus on alternatives to the project as a whole. (See Cal. Code Regs., tit. 14, § 15126.6(a).) Nevertheless, CARB has taken these comments into consideration. CARB is not aware of evidence showing these various proposals would avoid or substantially lessen any of the proposed project's significant effects. Furthermore, many of these suggestions could prevent CARB from meeting one or more of the project objectives, since they could reduce the effectiveness of the Cap-and-Trade Program as a whole. CARB has analyzed a reasonable range of alternatives in Section 7 of the EA.

Comment Letter CPP 12 SIERRACLUB

CPP 12-1 This comment asserts concerns related to localized air quality impacts that may affect disadvantaged communities. The comment provides recommendations related to identification of localized co-pollutant emissions increases caused by the power plants regulated under the Clean Power Plan.

Response:

See Master Response 1.

The commenter also suggested revisions to the Clean Power Plan. Please see Master Response 3.

Comment Letter CPP 13 CBE

CPP 13-1 The comment notes that CARB's CEQA-equivalent analysis covers both the Cap-and-Trade Amendments and the Compliance Plan for the Federal CPP. It asserts that the Draft EA fails to meet basic CEQA mandates, including by providing a stable project description, project objectives that are sufficiently broad, identify impacts on environmental justice communities, and fails to propose meaningful alternatives. It states that these objections are "high-level."

Response:

The claims in this introductory portion of the comment letter are addressed in more detail in the responses to comment below, which are incorporated into this response as well. The "high-level" nature of this comment limits CARB's ability, and duty, to provide a comprehensive response. However, CARB fully complied with its CEQA obligations with regard to the Clean Power Plan compliance plan and with regard to the proposed Cap-and-Trade Regulation.

CARB is proposing to use the Cap-and-Trade Regulation as the primary State measure for CPP compliance purposes. This is because the Cap-and-Trade Regulation, operating in concert with State-level complementary programs (such as renewable procurement and energy efficiency requirements), would achieve compliance with CPP targets for affected electric generating units (EGUs) (see page 4 of the Draft Environmental Analysis [EA]). Thus, it is appropriate to use the same document for both the Cap-and-Trade Amendments and compliance with the Federal CPP.

The comment states that the EA fails to propose meaningful alternatives, and that the objectives are not broad enough to be met with more than a single alternative. The "project" in this case is more circumscribed than other types of CEQA projects because it is constrained by legal mandates: the California Global Warming Solutions Act of 2006, enacted through Assembly Bill (AB) 32; California executive orders; and, in the case of the CPP, the Clean Air Act. The project objectives are derived from several sources, including the requirements of AB 32, to limit greenhouse gas (GHG) emissions in California, with continued reductions in emissions beyond 2020; Executive Order B-30-15, which set a GHG reduction target of 40 percent below 1990 levels by 2030; the proposed 2017 Scoping Plan Update, which will frame the suite of measures and regulations to comply with EO B-30-15, including continuation of

the Cap-and-Trade Program beyond 2020; AB 398 of 2017, which requires CARB to designate the market-based compliance mechanism (here, the Cap-and-Trade Program) as the rule for reducing GHG reductions from petroleum refineries and oil and gas production facilities; and from the requirements of section 111(d) of the Federal Clean Air Act (CAA) and with the Federal CPP promulgated under CAA (see Section 2.A in the EA). Nevertheless, project objectives are defined as broadly as possible, and allow for many different alternatives; the specific project objective to which the comment later appears to refer – regarding the CPP – simply states that CARB must comply with the federal regulation. It does not specify a particular compliance approach. Commenter may have confused staff's discussion of why the preferred project meets this objective (see p. 22 of the EA) with a limitation on the objective itself. Three alternatives are considered, as described in Chapter 7 of the EA. Within the limited constraints under which CARB is proposing this Project, CARB has identified two reasonable alternatives, which CARB considered in the EA. Commenter does not suggest any specific project alternatives, and therefore no further specific response is necessary. The comment states the EA fails to provide a stable project description. The draft EA describes the proposed project in a more than forty-page project description detailing each proposed amendment and aspect of the compliance plan. It is unclear why the commenter believes that the project description is not stable. No further response can be provided. See also response to comment CPP-13-2.

The comment also addresses environmental justice issues. Environmental justice concerns in themselves are not necessarily CEQA issues. However, CARB has addressed commenter's concerns regarding potential localized emission increases in Master Response 1, above. Staff also carefully and transparently described impacts on communities, including EJ communities, by providing extensive modeling details on the emissions of each power plant in the main staff report, as well as considering relevant impacts in the EA. Finally, the EA contains several meaningful alternatives, including facility-specific emissions limits and a carbon fee.

Please see response to comment 13 CPP-4 for more information related to project alternatives.

More generally, with regard to the CPP compliance strategy, commenter mistakenly asserts that the strategy itself has environmental impacts. But because the federal target California is

required to achieve is well above the level at which power plants in California would emit, even in the status quo, achieving this federal target is not reasonably likely to alter power plant behavior except in the very unlikely event of noncompliance. The modeling discussed in the report on the compliance plan demonstrates as much, and the EA emphasizes this point. As the draft EA explained:

> CPP applies only to certain existing electrical generating facilities. Therefore, compliance responses are not expected from entities that are not subject to CPP. Nearly all California entities subject to CPP are already covered entities under the Cap-and-Trade Program, and all CPP affected EGUs will ultimately be covered by the Program. For these entities, Staff does not anticipate compliance responses beyond those expected for continuation of the Cap-and-Trade Program post-2020.

Therefore, to the extent commenter is asserting that CARB failed to fully describe impacts specifically of the CPP compliance strategy, the commenter should understand that the strategy itself would not involve compliance responses beyond those expected for the Cap-and-Trade program.

CPP 13-2

The comment states that CEQA requires a statement of the objectives of the project and a project description in sufficient detail so that the impacts of the project can be assessed. The comment claims the EA fails to provide a stable project description. The comment states the EA does not include relevant details such as historic performance of EGUs under the existing cap and trade system, and states that EGUs located in environmental justice communities have increased their electrical generation, particularly in environmental justice communities, and indicates that trend will continue. The comment also states that the project objectives are defined too narrowly, and foreclose options for CPP compliance other than the use of the Cap-and-Trade program.

Response:

The Draft EA provides project objectives, a summary of compliance responses for covered entities, a summary of compliance responses under existing offset protocols, and proposed recommended actions and reasonably foreseeable compliance responses associated with the proposed project. It is unclear why the commenter believes that the project description is unstable, and no further response can be provided to this general comment.

Specific issues related to the project description are discussed as follows.

Generally, the commenter does not appear to acknowledge that the CPP itself does not require emissions reductions from California power plants in excess of those that would be achieved under the business as usual scenarios modeled and disclosed in the compliance plan and EA, or that any further reductions are only reasonably foreseeable as a result of state-level policies, including the Cap-and-Trade Program that the comment does not directly address. To the extent that the commenter is asserting that the CPP strategy itself is reasonably likely to alter power plant behavior (except as to the operation of a backstop program that the comment does not address, and whose general operations would produce impacts akin to those generally analyzed for the sector), it is mistaken, and no further response is required.

The comment states that the Draft EA should have contained more information related to historic performance of EGUs under the existing Cap-and-Trade Program. The EA provides an overview of the project and an environmental analysis that compares the proposed actions to baseline conditions. CEQA states that the baseline for determining the significance of environmental impacts will normally be the existing conditions at the time the environmental review is initiated (see Cal. Code Regs., tit.14, § 15125 (a)). Therefore, significance determinations reflected in the EA are based on a comparison of the potential environmental consequences of the proposed regulations with the regulatory setting and physical conditions in 2016. It is not necessary to discuss historic performance of EGUs, from a CEQA baseline perspective. However, in the interest of transparency, and to the extent past EGU performance may inform the Project's reasonably foreseeable emissions impacts, CARB provides the following information. CARB has publicly posted the CARB Pollution Mapping Tool,[14] which shows greenhouse gas and criteria pollutant emissions information for facilities that report to CARB under the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions; 17 California Code of Regulations (CCR) § 95100 et seq.) (MRR). As explained in greater detail in the Legal Disclaimer for the CARB Pollution Mapping Tool, this portrays only the subset

[14] Available at https://www.arb.ca.gov/ei/tools/pollution_map/

of sources covered by the Cap-and-Trade Regulation that are stationary sources located within California.[15]

The data presented in the CARB Pollution Mapping Tool are consistent with CARB expectations in developing the Proposed Project. These data do not constitute significant new information requiring recirculation because they do not reveal any new significant environmental impact or a substantial increase in the severity of an environmental impact, nor do they reveal a feasible alternative or mitigation measure which would clearly lessen any of the Project's significant impacts.

The comment states that the EA does not identify the detailed information from modeling conducted on an expanded regional balancing authority. The comment limits its claims of inadequacy and requests for further information specifically to the behavior of power plants responding to the CPP and California's proposed compliance plan. The comment also states that the project objectives are defined too narrowly, and foreclose options for CPP compliance other than the use of the Cap-and-Trade Program. Again, the CPP itself does not require emissions reductions from California power plants in excess of those that would be achieved under the business as usual scenarios modeled and disclosed in the compliance plan and EA, or that any further reductions are only reasonably foreseeable as a result of state-level policies, including the Cap-and-Trade Program that the comment does not directly address. To the extent that the commenter is asserting that the CPP strategy itself is reasonably likely to alter power plant behavior (except as to the operation of a backstop program that the comment does not address), it is mistaken, and no further response is required. Nonetheless, to the extent that the commenter asserts that CARB was obligated in the EA to further model different electric grid scenarios to somehow unearth different power plant behavior, even though the CPP is unlikely to cause this, it is also in error because CARB has already sufficiently performed this analysis.

The comment refers to a regional electricity market expansion (balancing authority) study initiated by CAISO as mandated by SB 350.[16] The commenter refers to modelling of co-pollutant emissions in environmental justice communities CAISO's study provided with

[15] See https://www.arb.ca.gov/ei/tools/ievt/doc/ievt_legal_disclaimer.pdf
[16] "Senate Bill 350 final study results" available at: http://www.caiso.com/informed/Pages/RegionalEnergyMarket.aspx

respect to the proposed electricity market regional expansion. The commenter requests CARB provide similar modelling of co-pollutant emissions for the Proposed CPP Compliance Plan.

CARB proposes to use California's Cap-and-Trade Program as the enforcement strategy for the Proposed CPP Compliance Plan. Therefore, in addition to the 2016 modelling supporting the CPP Compliance Plan,[17] the plan incorporates prior modelling supporting California's Cap-and-Trade Program. In the initial 2010 adoption of the Cap-and-Trade Program, Appendix P provides staff's analysis of co-pollutant emissions with respect to the Cap-and-Trade program.[18] Appendix P was incorporated by reference into California's Proposed Compliance Plan for the Federal Clean Power Plan Draft Environmental Assessment (DEA).[19] Moreover, the modeling conducted for the CPP Compliance Plan explicitly considers the operation of the larger western grid. Further modeling, based on speculative grid configurations, was not required.

Finally, to the extent that commenter asserts that the project objectives were too narrowly defined, commenter is mistaken. The comment cites a paragraph below objective 6, "Comply with the Federal Clean Power Plan." The paragraph – but not the objective itself – describes, by way of summary, why staff has shaped the Proposed Project to meet this objective, and why staff believes that the Cap-and-Trade Program is an appropriate way to do so. This explanatory paragraph is not the objective itself, which is broadly phrased. The alternatives analysis also evaluates how other project designs may meet this objective.

The comment also claims the modeling indicates that the Proposed Project could cause emission increases, or at least foregone emission benefits, in environmental justice communities. As discussed in Master Response 1 above, a foregone potential emissions benefit is not viewed as an environmental impact for CEQA purposes. See also Master Response 1 for analysis

[17] California's Proposed Compliance Plan for the Federal Clean Power Plan, and Appendices A through J available at: https://www.arb.ca.gov/cc/powerplants/powerplants.htm
[18] 2010 Cap-and-Trade Appendix P: Co-Pollutant Emissions Assessment" available at: https://www.arb.ca.gov/regact/2010/capandtrade10/capv6appp.pdf
[19] 2016 Appendix J California's Proposed Compliance Plan for the Federal Clean Power Plan Draft Environmental Analysis, "1.0 Introduction and Background, Section H. Incorporation of Documents By Reference" (p15): https://www.arb.ca.gov/cc/powerplants/meetings/09222016/j.pdf

regarding comments concerning potential impacts to disadvantaged communities.

Please see response to comment 13 CPP-1 for further discussion related to the project objectives and alternatives.

CPP 13-3 The comment states that a list of affected EGUs is available, and emissions can be more accurately determined than described in the EA, especially as they relate to communities with environmental justice considerations.

Response:

CARB's CPP reference and stress case analyses were supported by energy modeling conducted by the California Energy Commission (CEC). The comment states that the Draft EA does not identify EGU-specific emissions. Appendices E2a[20] and E2b[21] did provide EGU-specific operating characteristics for the reference and stress case respectively. For each of these cases, EGU-specific CO2e emissions were simulated for each year from 2020 to 2031 and are reported in the respective appendices. These emissions at the unit level allow for predictive knowledge of emissions of affected EGUs under the assumptions used by CEC sufficient for CPP modeling purposes. This satisfies any transparency requirements, and greater precision is not possible or required. Modeled emissions years into the future cannot be guaranteed with perfect accuracy, as CARB acknowledges in its description of the modeling. But the information CARB provided is more than sufficient to meet CEQA requirements.[22]

In regards to issues pertaining to effects on environmental justice communities, see Master Response 1

CPP 13-4 The comment disagrees with the assumption made under the No Project Alternative. As discussed on page 160 of the Draft EA, under the No-Project Alternative, amendments associated with the Proposed Project would not be approved. The current Cap-and-

[20] Appendix E2a to California's Proposed Compliance Plan for the Federal Clean Power Plan: Summary of Unit Operating Characteristics for the Reference Case: https://www.arb.ca.gov/cc/powerplants/meetings/09222016/e2a.pdf

[21] Appendix E2b to California's Proposed Compliance Plan for the Federal Clean Power Plan: Summary of Unit Operating Characteristics for the Stress Case: https://www.arb.ca.gov/cc/powerplants/meetings/09222016/e2b.pdf

[22] Assumptions available in Appendix E to California's Proposed Compliance Plan for the Federal Clean Power Plan: Documentation of Modelling Assumptions: https://www.arb.ca.gov/cc/powerplants/meetings/09222016/e.pdf

Trade Program would expire and conclude after it completes its third compliance period in 2020. No linkages with Ontario, Canada would occur, and linkages with Québec would also expire and conclude in 2020. Other CARB programs intended to reduce GHG emissions would continue in accordance with their statutory authorities and adopted regulations. The analysis of the No Project Alternative states that, "failure to submit a CPP Compliance Plan for California to US EPA could result in preparation of a CPP Compliance Plan by US EPA for California (3rd paragraph, page 161 of the Draft EA)." The content of a Federal plan is unknown and cannot be reasonably determined at this time. Thus, the description of the No Project Alternative is based on the best available information, and sufficiently provides decision-makers with relevant information related to what may happen if the project is not approved (see Cal. Code Regs., tit.14, § 15126.6 (e) (1)).

The comment suggests that many feasible alternatives to the Proposed Project could be considered, including: a cap-and-fee system, removal of the electricity sector and benchmark requirements.

Response:

A cap-and-fee system generally reduces compliance flexibility for covered entities and is more costly relative to the proposed Cap-and-Trade Regulation amendments. The state of Washington has adopted its Clean Air Rule that applies emissions caps to individual facilities and requires reductions at each covered entity. However, during the design phase of the rule, it became clear that not all covered entities could achieve reductions of approximately two percent per year, and offset credits and a limited trading mechanism were added to the rule to provide compliance flexibility. California needs reductions that are larger than the two percent annual reductions required in Washington; it will be similarly infeasible for every California facility to meet mandated reductions that are even greater than the emissions reductions required in Washington. In addition, a cap-and-fee alternative is not the most cost effective way to meet the State's climate goals. This alternative would introduce two costs—(1) onsite investments for reductions at a higher cost than the Cap-and-Trade Program, and (2) a carbon fee for actual emissions paid to the State—that must either be absorbed by each covered entity or passed on to consumers. Entities may be required to meet mandated facility-specific emissions caps by reducing production. The cap-and-fee alternative would not target the lowest cost reductions in the State,

thus increasing the overall cost of meeting the statewide emissions target. As such, this alternative would not satisfy the Cap-and-Trade Program objectives stated in the EA.

The removal of the electricity sector from the Cap-and-Trade program leads to greater uncertainty in meeting the State's 2030 greenhouse gas target. The performance of the commenter's proposed prescriptive measure for the electricity sector is uncertain and may not achieve the emission reductions expected. However, the Cap-and-Trade Program, due to the declining cap, serves as a backstop and is able to 'scale' up to ensure that the 2030 target is met. Since this alternative would not guarantee similar emission reduction benefits, it would not satisfy the Cap-and-Trade Program objectives stated in the EA.

Lastly, the benchmark requirements may include a suite of specific measures and regulations that would need to be designed and implemented to achieve the 2030 target without the Cap-and-Trade Program. This introduces potential technology, cost, or statutory barriers that may prevent implementation from occurring. In addition, even if implementation uncertainty is overcome, the element of performance uncertainty still exists. As such, this alternative would not meet the Cap-and-Trade Program objectives stated in the EA. See also response to comment 13 CPP-1, above.

Comment Letter CPP 14 GAIA

CPP 14-1 This comment expresses concerns related to adverse effects on low income communities and communities of color, requesting a plan that does not include trading but rather reduces emissions in environmental justice communities. Additionally, such an alternative plan would not meet project objectives, such as Objective 1 (including achieving cost-effective and technologically feasible GHG reductions), and Objective 5 (facilitating linkage with other Western Climate Initiative markets). See also analysis at page 161 of the Draft EA for Alternative 2 – Facility Specific Requirements.

Response:

See Master Response 1.

The commenter also suggested revisions to the Clean Power Plan. Please see Master Response 3.

Comment Letter CT 1 EJAC

CT 1-1 This comment addresses several issues related to the Proposed Project, including topics that pertain to: localized air quality impacts that may affect disadvantaged communities; mitigation strategies; effects to prevent sprawl; and potential environmental justice issues.

Response:

See Master Response 1. Additionally, it is unclear from the comments which mitigation methods or methods of preventing sprawl are being suggested. The Proposed Project in no way encourages sprawl.

The commenter also suggested revisions to the Cap-and-Trade Program. Please see Master Response 3.

Comment Letter CT 5 PANOCHE

CT 5-1 This comment recommends changes to the Proposed Project that would affect operations at the Panoche Energy Center to minimize potential impacts to a disadvantaged community.

Response:

See Master Response 1.

The commenter also suggested revisions to the Cap-and-Trade Program. Please see Master Response 3.

Comment Letter CT 52 PACIFICORP

CT 52-1 The comment states that the full environmental impacts of the energy imbalance market (EIM) are not addressed.

Response:

As stated in the EA, "The Proposed Project includes regulatory amendments designed to ensure these emissions are accounted for and included as a compliance obligation for those entities serving California load whose behavior results in those emissions. Not fully accounting for all the emissions associated with imports to serve California load will result in emissions leakage. AB 32 requires CARB to minimize the potential for emissions leakage to the extent feasible (see page 21 of the Draft EA)."

Critically, CARB regulations, and this project in particular, do not enable or limit the EIM. It is a separate effort of the California Independent System Operator (CAISO), and analysis of the impacts of the EIM are outside the scope of this project, because CARB is not implementing the EIM. This project, by contrast, is concerned with properly accounting for imported power for the purposes of the Cap-and-Trade program and CARB's responsibilities. Staff is charged with implementing the Cap-and-Trade program consistent with AB 32. As stated in Attachment F to the Cap-and-Trade 2016 amendments,[23] crediting potential GHG reductions associated with exported electricity to reduce the compliance obligation of emissions associated with imports to serve California load is not allowed under AB 32:

The crediting of exported electricity emissions against imported electricity emissions is not allowed under MRR or the Cap-and-Trade Program. This ensures that California is fully accounting for emissions from electricity whether generated in-state or imported to serve California load. CARB's regulations also do not allow the crediting of exports against electricity imported under EIM. CAISO posted a preliminary analysis in August 2016 to show the existing GHG compliance obligation shortfall for 2016 using a counterfactual methodology.[24] In CAISO's analysis, this shortfall was offset (via CAISO's methodology) by a quantification of the GHG benefits of

[23] 2016 Cap-and-Trade Attachment F: https://www.arb.ca.gov/regact/2016/capandtrade16/attachf.pdf
[24] Energy Imbalance Market GHG Counter-Factual Comparison (Preliminary Results: January-June 2016): http://www.caiso.com/Documents/EIMGreenhouseGasCounter-FactualComparison-PreliminaryResults_Jan-Jun_2016_.pdf

avoided non- California GHG-emitting generation by EIM renewable exports. CARB's regulations do not support this type of accounting as it would not account for emissions from electricity generated in-state which is required by AB 32.[25] Therefore, the EA fully analyzes the Proposed Project's reasonably foreseeable environmental impacts.

[25] 2016 Cap-and-Trade Attachment F pages 7-8: https://www.arb.ca.gov/regact/2016/capandtrade16/attachf.pdf

Comment Letter CT 59 JOINTENVJUSTICE

CT 59-1 This comment addresses issues related to localized air quality impacts that may adversely affect disadvantaged communities associated with the Cap-and-Trade Program.

Response:

See Master Response 1.

The commenter also suggested revisions to the Cap-and-Trade Program. Please see Master Response 3.

Comment Letter CT 69 SCPPA

CT 69-1

The comment expresses concern that 15-day amendment packages create piecemealed projects, and that the Board only acts on the CEQA responses. Commenter states that CARB's process reduces the review and comment period by two-thirds, and limits the scope of comments to only those portions of the regulation that CARB has identified as being open for review. Commenter also states that, when the Regulation is finally put together for Board consideration at its second hearing, the timing is such that the Board will normally only act on the CEQA responses, and cannot address any outstanding and potentially significant policy or technical issues.

Response:

When CARB presents proposed rules to its Board for consideration, CARB always presents them in a fully-developed form that has been analyzed under CEQA.

To the extent commenter is referring to CARB's practice of releasing an initial proposed draft of regulatory amendments, followed by subsequent related revisions to those amendments, this is expressly required by the California Administrative Procedure Act (APA). Under the APA, the initial draft of proposed regulatory language revisions is released for at least 45 days of public review and comment. (Cal. Govt. Code §§ 11346.4, 11346.5.) Further modifications may be made to this language if sufficiently related to the initial 45-day language. (Cal. Govt. Code § 11346.8(c).) This is not CEQA piecemealing; it is simply the APA process. This iterative process helps ensure that CARB is able to improve its regulatory proposals in response to stakeholder feedback. When CARB releases 15-day language pursuant to the APA, it always evaluates whether any subsequent environmental review is required. This ensures that all proposed amendments to the regulatory text, not just those included in the initial 45-day notice, are fully evaluated in the single EA for the Proposed Project.

In response to commenter's assertion that CARB's process reduces the review and comment period by two-thirds, and that CARB's process limits the scope of comments to only those portions of the regulation that CARB has identified as being open for review, CARB responds that the EA (which was released for a full 45-day comment period) covers the entire scope of regulatory amendments proposed in the EA and in the 15-day changes. Any

significant environmental issues raised in the comments, including any such issues raised in comments on a 15-day notice package, are responded to in the Final EA. Therefore, the comment period for any CEQA concerns has not been reduced, and in fact the comment period has been extended by the additional 15-day comment periods. CARB has determined that any new information included in the 15-day notice packages and comments thereon in this proceeding does not rise to the level of “new information” requiring subsequent environmental review under CEQA. Therefore, no further revisions to the EA are necessary.

In response to commenter’s assertion that CARB’s process limits the scope of comments to only those portions of the regulation that CARB has identified as being open for review, CARB responds that all aspects of the proposed regulatory amendments are processed in full accordance with APA requirements. Therefore, consistent with the APA, the initial 45-day package is subject to 45 days of public comment. Any sufficiently related subsequent modifications made to the original 45-day language are also released for at least 15 days of comment. As noted above, all significant environmental issues raised in comments (whether in response to the 45 day or 15 day notices) are addressed in the Final EA.

Commenter also states when the Proposed Regulation is finally submitted for Board consideration at its second hearing, the timing is such that the Board will normally only act on the CEQA responses, and cannot address any outstanding and potentially significant policy or technical issues. This is incorrect. The Board’s consideration at the second hearing encompasses both the CEQA analysis and the proposed project approval itself. Therefore, the Board’s consideration encompasses all aspects and issues concerning the Proposed Regulation.

Comment Letter CT 78 CBD

CT 78-1 This comment expresses concerns that the Cap-and-Trade program may adversely affect low income communities and people of color.

Response:

See Master Response 1.

The commenter also suggested revisions to the Cap-and-Trade Program. Please see Master Response 3.

CT 78-2 This comment claims that not placing a compliance obligation on biomass bioenergy facilities may cause GHG emissions to "leak" from fossil-fueled generation to biomass units.

Response:

The commenters request that CARB add a compliance obligation for biomass-fired electricity generating units. To the extent this comment raises CEQA-relevant concerns, it appears to suggest that GHG reductions may not be as great as anticipated under the combined CPP/Cap-and-Trade system because emissions may "leak" from CPP-covered units to biomass facilities. As a threshold matter, the treatment of biomass combustion emissions was not modified as part of this rulemaking, and is therefore outside the scope of the current rulemaking. The scope of the proposed amendments is to improve and continue an existing program imposing compliance obligations on direct emissions from capped entities.

Furthermore, such an impact is not reasonably foreseeable because the "leakage" possibility that commenter raises is not likely here. This is because California is well below the federal CPP targets. Even if those targets are fully enforced, covered facilities will not experience substantial increased costs as a result of the CPP, because their behavior need not change to meet the targets – instead, state policies are diminishing covered facility emissions much more significantly. Accordingly, there is no incentive to shift from CPP covered fossil facilities to biomass as a result of this aspect of the project. CARB further disagrees that any such leakage is likely because any benefit to biomass facilities of not bearing a Cap-and-Trade Program compliance obligation is outweighed by the substantial permitting, regulatory, and

environmental compliance challenges that biomass facilities face in this state. It should also be noted that SB 350 requires utilities to develop integrated resource plans to demonstrate how the utilities' power procurement strategies will achieve GHG reductions in a cost-effective manner towards achieving planning GHG targets established by CARB in consultation with energy agencies. For the past few years, the economics of biomass have not been competitive when compared to solar and wind power. As such, the economics do not favor leakage from fossil to biomass and more likely favor solar and wind power. Therefore, CARB does not believe emissions "leakage" to biomass facilities is reasonably foreseeable.

Comment Letter CT 81 EDF

CT 81-1 The comment states that the trajectory to meet caps associated with linkage agencies (i.e., Québec and Ontario) may result in significant environmental impacts.

Response:

The potential environmental impacts resulting from linkage to Ontario are described in Section 4.D of the EA. Impacts related to linkage with Québec are described in the May 9, 2012 ISOR for Amendments to the California Cap on Greenhouse Gas emissions and Market-Based Compliance Mechanisms to Allow for Use of Compliance Instruments Issued by Linked Jurisdictions, which was incorporated by reference to the Draft EA.

Comment Letter CT 92 CEJA

CT 92-1 This comment recommends against approval of the Proposed Project, in part, due to concerns associated with localized increases in GHG emissions in environmental justice communities.

Response:

See Master Response 1.

The commenter also suggested revisions to the Cap-and-Trade Program. Please see Master Response 3.

Comment Letter CT H8 CALBIO

CT H8-1 The comment states that the regulatory compliance requirements for dairy digesters are related to the CEQA process, and suggests that the fact that many digesters may themselves be deemed CEQA exempt by local permitting agencies justifies exempting them from CARB's regulatory compliance requirements.

Response:

The CEQA compliance process typically involves preparation of a public document that addresses the environmental impact of a project, as well as other procedural requirements, as appropriate for the type of project and extent of potential environmental impacts. CEQA compliance is required for discretionary actions that may result in an adverse effect on the environment (see Cal. Code Regs., tit.14, § 15378).

The commenter does not raise any environmental issues pertaining to the EA. No further response is necessary. However, it is noted that simply because a lead agency decides to approve a dairy digester project with a CEQA exemption does not mean that the dairy has no potential to incur a Notice of Violation during construction or operations due to regulatory compliance issues. CEQA review occurs during consideration of project approval and is not used for regulatory enforcement. The offset protocol and regulatory compliance requirements under the Cap-and-Trade Program include additional safeguards to ensure that both construction and implementation of offset projects would not substantially affect the environment.

Comment Letter CT FF 2 EJAC

This comment makes various recommendations relating to the 2017 Scoping Plan Update, including removing carbon capture and sequestration from consideration as a potential measure, preserving local jobs if refineries shut down, and developing policies for trading GHG credits among districts.

Response:

This comment letter appears to address a different proceeding, rather than this proceeding. Therefore, no further response is required. Nevertheless, CARB responds as follows: see Master Response 1.

The commenter also suggested revisions to the Cap-and-Trade Program. Please see Master Response 3.

Comment Letter CT FF 30 SCPPA

CT FF 30-1 The commenter is concerned that 15-day revisions are incomplete, and that the potential release of additional 15-day amendments containing potentially substantive details will not leave enough time for stakeholders to provide meaningful comment on the proposed changes, or for evaluation under CEQA. The commenter requests that CARB highlight the changes as compared to previously released versions of the regulation and present the regulation in its entirety (with clearly noted updates) for stakeholder review, including how CEQA may be implicated as California seeks to meet ambitious climate change and renewable energy goals.

Response:

The 15-day changes contain line edits that pertain to sections of the regulation. The regulation is not released in its entirety to help provide focused review. Release of the entirety of the regulation for 15-day changes would be cumbersome to a reviewer and potentially obscure the location of edited sections.

CARB has met the requirements set forth under the California Administrative Procedure Act (APA) for 15-day changes to the proposed Regulation. Additionally, recirculation of CEQA documents is only required if significant new information becomes available. “Significant new information” involves new information showing either (1) a new significant impact would result from the project or a mitigation measure, (2) a substantial increase in severity of an environmental impact would result, or (3) a feasible alternative or mitigation measure, considerably different from those considered in the EIR, would clearly lessen the significant environmental impacts of the project yet the project proponent declines to adopt it. (CEQA Guidelines § 15088.5(a).) None of these circumstances have arisen.

The 15-day changes include: changes to definitions of terminology, allowance allocation calculations, terms of auctions, offset program implementation and clarifying language. These changes do not affect the assumptions, methods or conclusions of the environmental analysis or otherwise deprive the public of meaningful information related to the potential environmental effects of the proposed amendments. The comment does not identify which aspects of the December 21, 2016 15-day change notice may implicate the CEQA analysis. Thus, recirculation of the EA is not necessary.

The APA requires State agencies to consider recommendations and objections from the public before they adopt or change regulations. After the initial public 45-day comment period, a rulemaking agency will often decide to change its initial proposal, either in response to public comments or on its own initiative. The agency must then decide whether a change is: (1) nonsubstantial, (2) substantial and sufficiently related, or (3) substantial and not sufficiently related.

The APA requires a rulemaking agency to make each substantial, sufficiently related change to its initial proposal available for public comment for at least 15 days before adopting such a change. Thus, before a rulemaking agency adopts such a change, it must provide notice of the opportunity to comment on proposed changes along with a copy of the text of the proposed changes to each person who has submitted written comments on the proposal, testified at the public hearing, or asked to receive a notice of proposed modification. The agency must also post the notice on its website. No separate public hearing is required for the sufficiently related changes. The public may comment on the proposed modifications in writing. The agency must then consider comments received during the comment period that are relevant to the proposed changes. An agency may conduct more than one 15-day opportunity to comment on a large, complicated, or sensitive rulemaking action before the final version is adopted.

CARB has met the APA requirements, and as stated above, the proposed 15-day changes do not alter the evaluations or significance conclusions regarding potential environmental impacts, and, therefore, do not require additional analysis under CEQA.

Comment Letter CT FF 54 Panoche

CT FF 54-1 This comment recommends changes to the Proposed Project that would affect operations at the Panoche Energy Center to minimize potential impacts to a disadvantaged community.

Response:

See Master Response 1.

The commenter also suggested revisions to the Cap-and-Trade Program. Please see Master Response 3.

Comment Letter CT SF 3 EJAC

This comment makes various recommendations relating to the 2017 Scoping Plan Update, including eliminating offsets, improving air monitoring, and disallowing out of state forest offsets.

Response:

This comment letter appears to address a different proceeding, rather than this proceeding. Therefore, no further response is required. Nevertheless, CARB responds as follows: see Master Response 1.

The commenter also suggested revisions to the Cap-and-Trade Program. Please see Master Response 3.

Comment Letter CT SF 21 Panoche

CT SF 21-1 This comment recommends changes to the Proposed Project that would affect operations at the Panoche Energy Center to minimize potential impacts to a disadvantaged community.

Response:

See Master Response 1.

The commenter also suggested revisions to the Cap-and-Trade Program. Please see Master Response 3.

3. REFERENCES

None.

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ATTACHMENT A

Comment Letters

Letter
CPP 12 SIERRACLUB

Sierra Club Environm
2101 Webster Street, Suite 1300
Oakland, CA 94612

September 19, 2016

Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Submitted electronically at https://www.arb.ca.gov/lispub/comm/bclist.php

Re: California's Proposed Compliance Plan for the Federal Clean Power Plan Under Clean Air Act Section 111(d)

Dear Air Resources Board Staff:

We write on behalf of the Sierra Club and its more than two million members and supporters nationwide, including more than 146,000 members living in California. We appreciate the opportunity to submit comments on California's proposed plan ("Plan") for implementing the federal Clean Power Plan ("CPP").[1] California's Plan is the first proposed CPP state implementation plan in the nation. While California is relying on its unique greenhouse gas Cap-and-Trade program to achieve compliance with federal carbon dioxide (CO2) emissions targets for existing power plants, some elements of the Plan will serve as a model for other state plans. For this reason, we have reviewed the Plan with an eye towards the example it sets for other states' compliance plans, as well as whether it strictly complies with each required component set forth in the Clean Power Plan.

We respectfully urge the California Air Resources Board ("ARB") to consider the following recommendations before finalizing the Plan. Our comments are limited because California's state laws are far more ambitious than the federal program in terms of overall carbon dioxide emissions reductions and clean energy deployment. So long as the current federal goal for CO2 emissions from California sources remains at its current level, it is the state programs that will

[1] *Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Final Rule*, 80 Fed. Reg. 64,662 (Oct. 23, 2015), *codified at* 40 C.F.R. Part 60, Subpart UUUU.

instead be driving changes in power production and related pollution in California. The public's review of those state programs is ongoing in separate processes.[2]

I. CARB Should Consider Extending the Comment Deadline to Allow Time for Evaluating Experts' Preliminary Environmental Equity Assessment of the Cap-and-Trade Program

On September 14, 2016, experts at the University of California, Berkeley, University of Southern California, San Francisco State University, and Occidental College published a preliminary environmental equity assessment of the Cap-and-Trade program that evaluates the location and greenhouse gas (GHG) and PM10 emissions of facilities regulated under the program, as well as changes in localized GHG emissions from large point sources since the advent of the program in 2013.[3] Sierra Club urges ARB to consider extending the Plan's comment deadline to allow interested stakeholders, in particular community members, ample time to evaluate the results of this study. Its findings are relevant to the Plan as ARB is proposing to use the Cap-and-Trade program as a federally enforceable emission standard on affected power plants under the Clean Power Plan and as a state measure on all other sources regulated under state law.

This study finds that regulated GHG-emitting facilities are located in neighborhoods with higher proportions of people of color and people living in poverty. It also concludes that the facilities that emit the highest levels of both GHGs and PM10 (the latter which has localized impacts) are situated in communities with higher proportions of residents of color and poor residents.[4] While GHG emissions overall have decreased, many industry sectors covered under the program have increased their in-state GHG emissions since 2013. One example of this pattern concerns the electric power industry. While the California GHG Emission Inventory shows that emissions from the electric power industry overall decreased by 1.6 percent between 2013 and 2014, the study disaggregated these emissions and found that the decreases in emissions correspond to imported electricity, while emissions from in-state electric power generation actually increased.[5] While those out-of-state reductions are beneficial for the climate because such reductions correspond to imported coal fired-power generation,

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[2] Although the public process for evaluating the Cap-and-Trade program, i.e., the 2030 Scoping Plan update is ongoing, it would be appropriate to evaluate the substance of this program in this Clean Power Plan-focused proceeding as well. Concerns regarding the Cap-and-Trade program are relevant to whether California should adopt it wholesale for Clean Power Plan compliance.

[3] L. Cushing et al., A Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program, http://dornsife.usc.edu/assets/sites/242/docs/Climate_Equity_Brief_CA_Cap_and_Trade_Sept2016_FINAL.pdf

[4] Id. at 1.

[5] Id. at 6.

evaluating emission effects based on the location of increases and decreases – and not just overall emissions reductions – could help identify appropriate measures to reduce pollution from facilities that affect vulnerable communities, and thereby improve the environmental co-benefits of the cap-and-trade program.

In addition to extending the comment deadline, we urge ARB to review this study and discuss these findings with stakeholders in light of the information available under its Adaptive Management Plan process (as further discussed below), and to address these findings in its Scoping Plan update and the Plan, as appropriate. Again, although the Cap-and-Trade program is undergoing its own review at this time, the Clean Power Plan compliance plan should not get ahead of that process if Cap-and-Trade will be the primary compliance mechanism.

II. The Plan Should Explain the Full Scope of its Environmental Justice Outreach and Respond to Input It Has Received From That Process

The Clean Power Plan requires that implementation plans "include documentation of any conducted community outreach and community involvement, including engagement with vulnerable communities." 40 C.F.R. § 60.5745(a)(12). In accordance with this requirement, the Plan provides a brief description of the agency's outreach to vulnerable communities, explaining that ARB staff has met representatives of the Environmental Justice Advisory Committee (EJAC) twice and solicited feedback on compliance options under the CPP. The Plan will also be made available to EJAC and other representatives of vulnerable communities and ARB "is exploring" public workshops accessible to members of vulnerable communities. Plan at 69.

Sierra Club believes that ARB's outreach to communities with respect to CPP compliance so far is insufficient and does not constitute *meaningful* engagement. Meaningful engagement includes not only reaching out and soliciting input from vulnerable communities, but also fostering community involvement at critical junctures in the development and implementation of state plans. This means ensuring that overburdened communities have a strong understanding of the potential benefits and potential adverse impacts that a state plan may have on them. It also involves truly considering the feedback received and using this input to shape the content of state plans, unless there is a robust justification for not doing so, which should be explained in the agency's responses to comments. EPA's *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*, which EPA has recommended states to consult as they conduct their stakeholder processes, identifies the lack of opportunities for communities of color, low-income, and tribal communities to meaningfully

participate in the development of regulations as an environmental justice concern.[6]

ARB should thus hold more than two meetings and proactively seek input and review of the Plan by community stakeholders throughout the state. In addition, while ARB notes that it has regularly offered Spanish language translation at its general workshops, we recommend that the agency provide background information on the Plan in Spanish and other languages as appropriate, as this information would allow community stakeholders to understand why it is important for them to attend such meetings and workshops. The record of public outreach listed in Appendix I should also be broken up into two categories: general outreach and outreach specific to vulnerable communities, the latter which EPA has singled out in the Clean Power Plan.

We understand that ARB has been working with EJAC to enable a very robust engagement process with communities as part of the second Scoping Plan update to reflect the GHG reduction target of 40 percent below 1990 levels by 2030 set forth in Executive Order B-30-15.[7] EJAC has held committee meetings throughout the state since December 2015, as well as 9 community meetings since July. Prior to these meetings, EJAC provided easy-to-understand flyers on the key issues involved in the Scoping Plan update in both English and Spanish.[8] Interested stakeholders have also begun submitting comments on the Scoping Plan update at the workshops that ARB has held to date.[9]

We also understand that the Cap-and-Trade program and a variety of other measures under California state law will help drive much more stringent GHG reductions in California as compared with the Clean Power Plan target for the state that EPA finalized, and that devoting resources to the Clean Power Plan process would divert funds from the agency that would be better employed in a robust Scoping Plan process. Holding two different stakeholder processes would also result in added burdens for community members, who may not have the resources or the time to get involved in both sets of discussions. Because ARB is crafting the Scoping Plan update and the Plan in parallel, the final Plan should explain that a robust stakeholder engagement process for the Scoping Plan update is ongoing and the substantive revisions to the program are being discussed as part of that process. This process should be documented

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[6] EPA, Guidance on Considering Environmental Justice During the Development of Regulatory Actions, at 10, https://www.epa.gov/sites/production/files/2015-06/documents/considering-ej-in-rulemaking-guide-final.pdf

[7] California Air Resources Board, AB32 Scoping Plan, https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm

[8] California Air Resources Board, Environmental Justice Advisory Committee, https://www.arb.ca.gov/cc/ejac/ejac.htm#ejlcm

[9] California Air Resources Board, AB32 Scoping Plan Public Workshops, https://www.arb.ca.gov/cc/scopingplan/meetings/meetings.htm

extensively in the final Plan. Failure to do this will send other states a signal that California is conducting a poor community engagement process under the Clean Power Plan.

The Scoping Plan process, however, is no perfect substitute for the required community engagement process under the Clean Power Plan. Although the Scoping Plan is of much broader scope, these two sets of regulatory measures are intertwined and the Clean Power Plan should not be ignored. EJAC itself has provided draft initial recommendations in the context of the Scoping Plan update,[10] some of which are relevant to the design of California's compliance plan under the Clean Power Plan. Most notably, the draft recommendations call for ARB to eliminate the Cap-and-Trade program and replace it with a non-trading system like a carbon tax or fee and dividend program, and specifically call for ARB to "not commit California to continuing Cap-and-Trade through the Clean Power Plan."[11] EJAC and community members must have the opportunity to provide meaningful input on the Plan in the context of the Clean Power Plan because ARB proposes to use the Cap-and-Trade program for Clean Power Plan compliance.

In its draft recommendations, EJAC has also called for the elimination of offsets and of free allowances in the event the cap-and-trade program continues.[12] In the Plan, ARB has not yet clarified that the Clean Power Plan does not allow power plants to utilize offsets for compliance and should do so.[13] The agency is also proposing to give free allowances to existing power plants under the proposed backstop program for sources that fail to meet their emission reduction requirements, while these sources currently do not receive free allowances under the Cap-and-Trade program. Plan at 31, 20. These issues must be thoroughly discussed and therefore we urge ARB to incorporate the Clean Power Plan to the stakeholder engagement process under the Scoping Plan update (instead of holding two separate engagement processes).

Finally, we note that communications to sovereign tribal governments do not amount to meaningful public engagement of tribal communities as a whole. Sierra Club agrees that the agency must seek meaningful input from federally- or state-recognized tribes, but there are

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[10] AB 32 Environmental Justice Advisory Committee (EJAC), Draft Initial Recommendations for Discussion Draft Version of 2030 Target Scoping Plan Update, August 26, 2016, https://www.arb.ca.gov/cc/ejac/meetings/08262016/draft_ejac_recommendations082616revised.pdf

[11] Id., at 4-5.

[12] Id.

[13] As we discuss below, the Clean Power Plan preamble provides that, where a state program relies on offsets and affected EGUs use those offsets to meet a portion of their obligation under the state program, no credit is applied to reported CO2 emissions from affected EGUs under the Clean Power Plan. 80 Fed. Reg, at 64,981-82, fn. 922.

tribes in California that have not been officially recognized[14] and we believe ARB should engage with them as well.

ARB should also engage members of tribal communities, not just their government representatives. We suggest that ARB follow EPA's *Policy on Consultation and Coordination with Indian Tribes* and the National Environmental Justice Advisory Council's (NEJAC) *Guide on Consultation and Collaboration with Indian Tribal Governments and the Public Participation of Indigenous Groups and Tribal Members in Environmental Decision Making* for guidance on this issue. EPA's Policy recognizes the need to be responsive to the environmental justice concerns of non-federally recognized tribes, individual tribal members, tribal community-based/grassroots organizations and other indigenous stakeholders.[15] NEJAC also recommends that agencies "seek information from tribal members in addition to persons who have been formally designated by tribal governments as contacts for consultation," because their interests (for example, those of traditional leaders and cultural authorities) do not always coincide with those of the tribal government.[16]

III. ARB Should Conduct an EJ Analysis of the Plan or at Least Incorporate the Results of Its Adaptive Management Process Under AB32

In the Clean Power Plan, EPA conducted a proximity analysis that provides detailed demographic and environmental information on the communities located within a 3-mile radius from each coal plant and gas plant covered under the rule. 80 Fed. Reg. at 64915. The analysis concludes that a higher percentage of minority and low-income communities live near power plants when compared to the national average.[17] EPA correctly noted that the impacts of power plant emissions are not limited to a 3-mile radius; however, evaluating the demographic and environmental characteristics of the communities closest to the power plants is a good starting point to understand how changes in those plants' emissions may affect air quality in those communities.[18] CPP12-1

[14] *See e.g.*, U.S. Federally Non-Recognized Tribes-Index by State, http://www.kstrom.net/isk/maps/tribesnonrec.html

[15] EPA, Policy on Consultation and Coordination with Indian Tribes, May 4, 2011, at 4, https://www.epa.gov/sites/production/files/2013-08/documents/cons-and-coord-with-indian-tribes-policy.pdf

[16] National Environmental Justice Advisory Council, Guide on Consultation and Collaboration with Indian Tribal Governments and the Public Participation of Indigenous Groups and Tribal Members in Environmental Decision Making, November 2000, at 19, https://www.epa.gov/sites/production/files/2015-03/documents/ips-consultation-guide_0.pdf

[17] Environmental Protection Agency, EJ Screening Report for the Clean Power Plan, July 2015, https://www.epa.gov/sites/production/files/2016-04/documents/ejscreencpp.pdf

[18] Id. at 3.

Because states have better information on environmental and health issues affecting their communities, EPA is encouraging states to conduct environmental justice analyses of their own as they develop their state implementation plans (SIPs). EPA has indicated that these analyses can be done in several ways. For example, in examining different state plan options, states can project likely increases in emissions affecting vulnerable communities by evaluating air quality monitoring data or information from air quality models and gather information about health impacts, such as asthma rates and access to healthcare by those communities, or they can identify the expected utilization of power plants in geographic proximity to communities. 80 Fed. Reg. at 64,916. Sierra Club strongly urges ARB to develop an EJ analysis of its Plan. Failure to undertake this analysis would create a bad precedent for other states as they develop their implementation plans for compliance with the Clean Power Plan.

In the alternative, and only because ARB is already required under AB32 to consider and address the potential for direct, indirect, and cumulative impacts and any localized emission increases from the market-based program it created to reduce GHG emissions (i.e., the Cap-and-Trade Program), ARB could incorporate into the Plan its evaluation of adverse impacts of the Cap-and-Trade program under its Adaptive Management Plan. *See* Cal. Health & Safety Code § 38570(b)(1)-(2). As part of this program, ARB is working with local air districts and has proposed a process for collecting and evaluating the data needed to track potential localized air quality impacts that may result from the Cap-and-Trade program, on which the agency sought input late last year.[19] The agency is collecting information on GHG emission increases and decreases from individual entities covered under the program, and tracking GHG emissions from multiple cap-and-trade facilities using its publicly-available Greenhouse Gas Emissions Mapping Tool to conduct community analyses of aggregate emissions.[20]

CPP12-1 cont

As ARB gathers information on EJ impacts of the proposed Plan and its reliance on the Cap-and-Trade Regulation, ARB should ensure that (in contrast to the CPP compliance modeling demonstration) its analysis includes modeling of newly adopted mandates for renewable energy and energy efficiency. Modeling that does not include these mandates could inaccurately suggest that certain fossil plants of concern to EJ communities may still be required for grid reliability and capacity needs. Modeling the full scope of California's expected transition to cleaner technologies will help to identify fossil plants that are no longer needed to support the grid.

[19] California Air Resources Board, *First Update on the Climate Change Scoping Plan: Building on the Framework Pursuant to AB32: The California Global Warming Solutions Act of 2006*, at 87, 128.
[20] California Air Resources Board, *Adaptive Management Plan for the Cap-and-Trade Regulation* https://www.arb.ca.gov/cc/capandtrade/adaptive_management/plan.pdf.

In the context of Clean Power Plan compliance, ARB should evaluate the information it has already collected in the context of AB32, and any further relevant analysis, to identify localized co-pollutant emission increases caused by the power plants regulated under the Clean Power Plan and impose federally enforceable requirements in the Plan that will ensure that the program does not cause those plants to increase co-pollutant emissions. ARB should not have to duplicate its ongoing analysis of the Cap-and-Trade program; however, the agency should allow enough time for EJAC and communities to provide meaningful feedback on this analysis before adopting both the Scoping Plan update and the Plan. In addition to other market-based alternatives, ARB should also consider proposals to address hotspots of pollutants that cause localized harm; for example, the imposition of hard CO2 emission limits or mass caps for individual sources of concern which would help to reduce their utilization. ARB must also provide an opportunity for public comment on such proposals and incorporate the input received from interested stakeholders.

CPP12-1 cont

IV. The Plan Should Maintain the Federal Enforceability of the Cap-and-Trade Program and Mandatory Reporting Regulation with Respect to the Affected EGUs[21]

The state's Cap-and-Trade Regulation and the Mandatory Reporting Regulation are included in the Plan as emission standards that are federally enforceable with respect to affected electric generating units ("EGUs") in California.[22] *See* Plan at 17. This approach to enforceability is the correct, federally mandated approach and should not be altered in the final Plan.

Section 111(d) of the Clean Air Act requires that states submit to EPA plans which establish "standards of performance" for existing sources and provide for "implementation and enforcement of such standards of performance." 42 U.S.C. § 7411(d)(1). The CPP requires states to include in their plans "an identification of all emission standards for affected EGUs," and allows "allowance systems" as an acceptable form of emission standards. 40 C.F.R. § 60.5740. These provisions thus authorize compliance through programs such as the Cap-and-

[21]Sierra Club has raised concerns about the state measures approach with EPA because it allows state plans to include elements that citizens will not have the ability to enforce. 40 C.F.R. § 60.5780(a)(5). The Clean Air Act provides that citizens may sue for violation of "an emission standard or limitation under this chapter," 42 U.S.C. § 7604(a), and defines "[e]mission standard or limitation under this chapter" to include "any requirement under section [111] or [112] of this title," *id.* § 7604(f)(3). While ARB is arguably not including "requirements" in its plan beyond the federally enforceable requirements on affected EGUs, the integrity of the Cap & Trade program as a whole depends on other actors beyond affected EGUs, and those programs are not necessarily enforceable by citizens. *See* Plan at 33 (noting that Cap & Trade as it applies to non-affected sources is a "state measure", i.e., not federally enforceable). The result is that Clean Power Plan compliance is not fully federally enforceable until EGUs have exceeded their combined state limit by 10% for a compliance period and the backstop is triggered. *See also infra* Section III.

[22]By "affected EGUs," we mean those regulated by the CPP.

Trade Regulation, so long as requirements on affected EGUs are federally enforceable. The CPP preamble specifically states that "[w]here an emission budget trading program addresses affected EGUs and other fossil fuel-fired EGUs," as is the case in California's proposed plan, "the requirements that must be included in the state plan [include] the federally enforceable emission standards in the state plan that apply specifically to affected EGUs. . . ." 80 Fed. Reg. at 64,891.

Section 111 also directs EPA to issue regulations that establish a state implementation process similar to the one applicable to the adoption of state implementation plans for criteria air pollutants under Section 110. Section 110 similarly requires that plans must include "enforceable emission limitations." 42 U.S.C. § 7410(a)(2)(A).

Based on the above authorities, California has properly indicated that its key state programs – the Cap-and-Trade Regulation and the Mandatory Reporting Regulation – so far as they apply to affected EGUs, will be federally enforceable.[23]

The concept of federal enforceability necessarily includes enforceability by EPA and citizens, in addition to the state. The Clean Air Act provides that citizens may sue for violation of "an emission standard or limitation under this chapter," 42 U.S.C. § 7604(a), and defines "[e]mission standard or limitation under this chapter" to include "any requirement under section [111] or [112] of this title," *id.* § 7604(f)(3). EPA has advised that "[a] core principle of the CAA is that by taking action to approve emission limitations into a SIP, the EPA thereby makes those emission limitations a federally enforceable component of the SIP that the state, the EPA, or citizens can thereafter enforce in the event of alleged violations."[24] A SIP's "required actions are enforceable if. . . [states] and the EPA maintain the ability to apply penalties and secure appropriate corrective actions where applicable, [and] [c]itizens can file suits against sources for violations."[25] *See also* 40 C.F.R. §60.5775(f)(5) ("An affected EGU's emission standard is enforceable if . . . [t]he Administrator, the State, and third parties maintain the ability to enforce against violations"). *See also* 42 U.S.C. §7413.

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[23]Sierra Club is aware that legal challenges to the Cap-and-Trade program have not been resolved. If a court invalidates the program, the state will of course need to issue another proposed plan for Clean Power Plan compliance with an opportunity for public notice and comment.

[24] EPA, Memorandum to Docket for Rulemaking, "State Implementation Plans: Response to Petition for Rulemaking; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown, and Malfunction" (EPA-HQ-OAR-2012-0322) at 7 (Feb. 4, 2013).

[25] EPA, Improving Air Quality with Economic Incentive Programs, at 35-36 (Jan. 2001).

To ensure the final Plan comports with this fundamental Clean Air Act requirement, the final Plan must allow for the state, EPA, and citizens to enforce violations of the relevant emissions standards against the affected EGUs in federal court.

ARB's obligation and authority to make the Cap-and-Trade Regulation and Mandatory Monitoring Regulation federally enforceable upon approval of the SIP is beyond doubt, not only based on the requirements of the Clean Air Act and its implementing regulations, but also based on states' authority to go beyond Clean Air Act requirements. *See Union Electric Co. v. EPA,* 427 U.S. 246, 262-65 (1976); *Concerned Citizens of Bridesburg v. EPA,* 836 F.2d 777, 780 (3d Cir. 1987) (states are free to include measures that are more stringent than required by the Clean Air Act). *See also* 42 USC §7416 (allowing states to adopt standards that are more stringent than federal law, including requirements under section 111).

V. The Plan Should Maintain and Strengthen the Elements of the Backstop Requirement that Ensure That the State Will Quickly Meet the Mandated Carbon Reduction Goals and Make Up For Any Shortfall in Emission Reductions

EPA requires that if reported CO2 emissions from affected EGUs in the state exceed 10% of an interim or final CPP goal, a "backstop" program is triggered to bring CO2 emissions back within federal targets and make up the overage. Sierra Club disputes whether EPA's backstop approach comports with the requirements of the Clean Air Act. It is well-settled that a SIP cannot rely on emission reductions that are not part of the SIP, *Committee for a Better Arvin v. EPA,* 786 F.3d 1169, 1175 (9th Cir. 2015), and that EPA cannot approve a SIP that puts off until tomorrow what the Clean Air Act requires today. *Sierra Club v. EPA,* 356 F.3d 296, 303 (D.C. Cir. 2004). However, we recognize that ARB is obligated to design its plan pursuant to the regulatory language in the final Clean Power Plan.

The Plan emphasizes that the state's modeling of future CO2 emissions suggests that the backstop is unlikely to be triggered. Even assuming this prediction is correct,[26] however, ARB's design of the backstop is more than a theoretical exercise. First, California's approach to allocating allowances, timing of implementation, and other aspects will set an example for other states designing mass-based plans to comply with the CPP, whether they are state measures plans or standard mass-based plans. Second, in the event that EPA tightens the CPP

[26] ARB should ensure that its assumptions are transparent and easy to follow in the supporting materials. For example, ARB should clarify whether the possibility of an expansion of the territory of the grid balancing authority – as well as the possibility that this will not occur – were taken into account. The Plan's Appendix E is not clear on this point. *See, e.g.*, Plan, App. E at 37-38.

targets in the future, it may be more likely that the backstop would be triggered.[27] Ideally, the structure that California puts in place now would not need to be amended in that scenario.

For its backstop program (described pp. 30-31), the Plan proposes to create a second trading program in addition to the state Cap-and-Trade Regulation, in which allowances are capped at levels that would bring reported CO2 emissions from affected EGUs back in line with federal targets. Trading of this separate pool of allowances would occur only among California's affected EGUs. The state would allocate allowances for this backstop trading pool based on historical generation.

In general, Sierra Club supports auctioning allowances for any type of mass-based program rather than providing free permission to pollute.[28] In California, sources will already be paying for permission to emit greenhouse gases through the state cap-and-trade program; but the fact that the backstop has been exceeded may indicate that the price of greenhouse gas allowances in the state program is not creating sufficient incentives for affected EGUs, and could benefit from additional charges. Moreover, the prospect of an auction for backstop allowances could further encourage EGUs to ensure the backstop is never triggered, particularly if the state ceases at some point to auction allowances under the Cap-and-Trade Regulation. ARB should analyze these issues and explain its decision not to hold an auction, and to forego the accompanying revenues, before finalizing the Plan's backstop. The proposed Plan does not contain any discussion of this issue.

Even if ARB allocates the backstop allowances without an additional charge, it should carefully consider the incentives created by the proposed methodology based on "historical operations" and define exactly what metrics would determine how the allowances are distributed. Plan at 31. Sierra Club has recommended to EPA, and repeats the recommendation here, that the best approach for free allocation is to allocate allowances to affected sources according to their share of total electricity generation in the prior year and to update the calculation in each following allocation.[29]

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[27] In addition to urging EPA to regularly review the stringency of the standards, Sierra Club will also continue to urge EPA to require that states adopting mass-based plans recalculate their emissions targets based on the most recent data on existing sources meeting the applicability criteria *at the time the plan is submitted* rather than a historical baseline.

[28] *See* Sierra Club Comments on Proposed Federal Plan and Model Trading Rules, Dkt. No. EPA-HQ-OAR-2015-0199, *at* https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0199-1133, at 6-7.

[29] *See* Sierra Club Comments on Proposed Federal Plan and Model Trading Rules, Dkt. No. EPA-HQ-OAR-2015-0199, *at* https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0199-1133, at 14-15. It appears that the proposed backstop plan would only require one allocation, but this should be clarified in the final Plan.

The CPP requires that the backstop-triggering shortfall in CO2 reductions "must be made up as expeditiously as practicable." 40 C.F.R. § 60.5785(d). The Plan states that the backstop is "designed" to reduce EGU emissions to the federal target level, including making up any overage from the previous compliance period, "within 18 months." ARB should clarify the timeline and deadline for each step towards making up the shortfall (the bullet-points on pp. 30-31), and explain why 18 months is the shortest timeframe that would be practical. If a shorter timeframe would be practicable, the Plan must set earlier deadlines for each step towards addressing the excess emissions, and an earlier final deadline for achieving the federal target and making up any overage. Either way, the backstop must include firm, enforceable deadlines rather than what could be interpreted as aspirations only.

VI. The Plan Should Clarify That Any Trading Linkage with Other States Would Be to Link California's State-Level Cap and Trade Program to other Similar and Equally Stringent Programs, Not to Allow for Interstate Trade of Clean Power Plan Allowances

California notes that one of its goals is to facilitate linkage with other states and jurisdictions. Plan, Appendix J, at 20; *see also* Plan at 14, 18. ARB's spokesperson has stated that the Plan is a "proof of concept for other states, to demonstrate that this is a program that can be adapted to each state and that can be set up in a way that we can form a regional association."[30] Given this stated goal, the Plan should more directly address public concerns about linkage, particularly the concern that California's sources would be allowed to trade away surplus Clean Power Plan allowances to affected sources in other states that rely on fossil fuel-fired generation.

As we understand it, the Plan will operate under its current auction of allowances through the state's Cap-and-Trade Regulation, and will not be distributing "Clean Power Plan allowances" as tradeable instruments for a nationwide or region-wide CPP system. Even in the event the backstop is triggered, the allowances would be unique to California's backstop trading pool and traded only among in-state EGUs.

Further, as ARB states in the Plan, only those jurisdictions meeting California's strict linkage requirements would be permitted to link trading programs with California. *See* Plan at 21. One of the requirements for linkage is that "[t]he linked program has adopted program requirements for greenhouse gas reductions; including, but not limited to, requirements for offsets; that are equivalent to or stricter than those required by AB 32." *Id.* The final Plan should clarify that other states' Clean Power Plan compliance plans would not satisfy this stringency requirement unless those states decided to go significantly beyond the minimum

[30] ENERGY & ENVIRONMENT DAILY, Clean Power Plan: Calif. issues first-in-U.S. compliance plan (Aug. 3, 2016).

federal standards set forth in the Clean Power Plan. ARB should detail what kinds of provisions another state's Clean Power Plan implementation plan would need to include if the state intends to link programs with California.

Crucially, ARB should clarify that offsets may *not* be used to meet CPP compliance obligations. EPA indicates that although EGUs may rely on offsets to meet state compliance obligations, no credit is applied to reported CO2 emissions from affected EGUs under the CPP. *See* 80 Fed. Reg. at 64,981-82 n.922. The state's affected EGUs must take this state/federal discrepancy into account when planning for compliance.

VII. The Plan Should Clarify That All Legal Authority to Implement the State Measures Must Be In Place in Order for the Plan Submission to EPA to Be Considered Complete.

Under Section 111(d) Implementing Regulations, state plans must show that the relevant state has legal authority to carry out the plan, including authority to: (a) adopt emission standards and compliance schedules applicable to the affected facilities; (b) enforce applicable laws, regulations, standards, and compliance schedules; (c) obtain the information necessary to determine affected sources' compliance with those legal requirements, including authority to require recordkeeping, make inspections, and conduct tests of affected sources; and (d) require owners and operators of affected facilities to install emission monitoring devices and report periodically to the state, and make this data available to the public. 40 C.F.R. § 60.26(a). Consistent with this requirement, the CPP requires plans to demonstrate that the state has legal authority "to implement and enforce each component of the State plan submittal, including federally enforceable emission standards for affected EGUs, and State measures as applicable." 40 C.F.R. § 60.5745(a)(9). The Section 111(d) Implementing Regulations require state plans to identify the specific provisions of the state laws or regulations that provide the required authority for each of the above actions, and that such legal authorities "*are available to the State at the time of plan submission*." 40 C.F.R. § 60.26(b) (emphasis added).

The Plan states that ARB intends to finalize necessary legal authority prior to EPA's deadline for final plan submission in September 2018. Given this expected timeline, we recommend that ARB remove the portions of the text that suggest that the regulations need only be finalized prior to *CPP compliance dates* as opposed to plan submission.[31] State regulations needed to

[31] Plan at 66 ("ARB staff are proposing that all regulatory measures required to implement this Proposed Plan be implemented well before the CPP compliance dates, if approved by the Air Resources Board. Accordingly, ARB staff propose a single programmatic milestone: The finalization of regulations implementing this Proposed Plan as part of the MRR and Cap-and-Trade Regulation. This milestone must be met by the CPP's implementation date, January 1, 2022, and the implementing regulations must remain in force thereafter."), and at 31 ("First, the CPP requires ARB to submit an initial progress report

implement the Plan cannot be programmatic milestones that are only completed after plan approval. While a state may work with EPA ahead of the submission deadline to obtain feedback on its plan, a plan is only complete for submission when it contains all legally required elements, including the necessary state regulations that provide ARB's legal authority to implement the Plan.

VIII. The Plan Should Clarify How Its Leakage Analysis Relates to the Clean Power Plan's Definition of "Leakage" and to EPA's Options for Demonstrating that Leakage is Not Projected to Occur.

According to the Clean Power Plan's preamble, leakage is "the potential for an alternative form of implementation of the B[est] S[ystem] of E[mission] R[eduction] (e.g., the rate-based and mass-based state goals) to create a larger incentive for affected EGUs to shift generation to new fossil fuel-fired EGUs relative to what would occur when the implementation of the BSER took the form of standards of performance incorporating the subcategory-specific emission performance rates representing the BSER." 80 Fed. at 64,823. In other words, the statewide mass-based and rate-based goals that EPA has permitted states to use in developing their plans are flexible alternatives to implementing the BSER (which takes the form of nationally uniform emission performance rates, one for coal and one for gas, or the "dual rate"). In EPA's view, where those alternative types of state plans, such as a mass-based state plan, create a greater incentive for sources to shift more generation to new fossil sources relative to what would occur under a plan implementing the dual rate, "leakage" occurs.

EPA provides several options for addressing leakage, which it intends to clarify in a model state plan for mass-based programs that is not yet finalized. The first is adoption of a "new source complement" such that the state's mass-based target is enlarged by an amount defined by EPA to include emissions from new sources that meet the applicability criteria and those new sources are regulated by the state. 80 Fed. Reg. at 64,888. Adoption of the new source complement is the simplest way for states to address leakage and to be sure they can meet EPA's leakage requirement. EPA also notes that "states may choose to regulate new non-affected fossil fuel-fired EGUs, as a matter of state law, in conjunction with federally enforceable emission standards for affected EGUs under a mass-based plan," and cites California's program as "conceptually analogous" to the new-source complement approach. *Id.*

EPA also gives states an option of "provid[ing] a demonstration in the state plan, supported by analysis, that emission leakage is unlikely to occur due to unique state characteristics or state plan design elements that address and mitigate the potential for emission leakage." *See*

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to U.S. EPA by July 1, 2021, demonstrating that the state is on track to meet any programmatic milestone steps (such as confirming that all required regulations are in place). ARB commits to submitting this report by the due date.")

40 C.F.R. § 60.5790(b)(5)(iii); 80 Fed. Reg. at 64,888. Although the Cap-and-Trade program covers new sources, California does not adopt the new source complement and instead appears to be relying on this alternative option for satisfying plan approval requirements regarding leakage. Plan at 50. ARB states, "Because the Cap-and-Trade Regulation imposes more rigorous requirements than the CPP, and imposes the essentially the same central set of carbon costs and compliance obligations on affected and non-affected EGUs, it acts as state measure (with regard to non-affected EGUs) and emission standard (with regard to affected EGUs) removing leakage incentives." *Id.* To demonstrate that leakage is not projected to occur, ARB analyzes whether implementation of the Plan will result in increased CO2 emissions from new EGUs in comparison with 2014 levels. It appears from the results that new sources will not increase emissions as a result of the Plan.[32]

Sierra Club agrees that because the Cap-and-Trade program creates the same incentives for new and existing sources, the market pressure to shift generation to new sources will not exist. However, to further assure the public and EPA that there is no need to adopt the new source complement, the state should provide a comparison of predicted emissions from both new and existing affected EGUs to the "existing plus new source complement" mass target for California set forth in the Clean Power Plan. *See* 80 Fed. Reg. at 64,888.

Exceeding EPA's requirement to consider in-state leakage to new sources, ARB also considers whether out-of-state CO2 emissions will increase as a result of the Plan's implementation. This is also a useful consideration of leakage that can provide a model for other states. To more fully explore the leakage question, ARB could also compare the expected emissions of new fossil sources under the Plan to those that would occur under a "dual rate" plan for California.

IX. ARB Should Further Explain and Seek Comment on How the Clean Energy Incentive Program Would Function in California and Consider Whether it Would Be an Effective Way to Encourage Clean Energy Investments in Low-Income Communities and Reduce Emissions

ARB states that it "continues to be interested" in the Clean Energy Incentive Program (CEIP) and "will evaluate it." Plan at 4. Before formally opting into the CEIP, ARB must issue a proposal for participating in this program and accept public comment on the proposal. If California seeks to participate, it will need to indicate its interest to EPA in its initial plan submittal and provide

[32] ARB should provide detailed supporting data and assumptions for the leakage analysis for public review and comment. Appendix E's modeling documentation appears only to document the compliance demonstration and not the leakage demonstration.

the regulatory structure to implement the CEIP in the final plan submittal.[33] 40 CFR § 60.5737. The brief mention of the CEIP in the Plan is not sufficient to solicit meaningful input from stakeholders on incorporating the CEIP into California's final Plan.

The CEIP's incentive is provided in the form of both state-granted and EPA matching allowances (in the case of mass-based plans) or "emission rate credits" (in the case of rate-based plans) that would be of value to sources seeking to meet their CPP compliance obligations. To participate in the CEIP, a state must set aside allowances from its allotted federal target for the first compliance period. It is unclear how California would do so within the proposed Plan structure because the Cap-and-Trade program's cap applies to sources beyond affected EGUs. It is also unclear whether EPA's matching allowances would be of direct compliance value to California sources under the Cap-and-Trade rule or whether the CPP allowances contemplated by the CEIP would be a trading instrument only compatible with standard (non-state-measure) CPP compliance programs. EPA has proposed that "any trigger for the backstop required by the [CPP] for a state measures plan would not need to include or account for emissions authorized per EPA-awarded matching allowances under the CEIP," but is still taking comment on this issue. 81 Fed. Reg. 42,940, 42,958 n.58 (June 30, 2016). Another question is whether California sources and other clean energy project developers could sell EPA-granted matching allowances out of state to sources that have standard (non-state-measures plan) CPP compliance obligations, even if those allowances were not of value for California sources' own compliance demonstration. Before finalizing a decision on whether or not to participate, ARB should provide a proposal for how the CEIP would function in California and solicit public comment. We recognize that ARB likely will require further clarification from EPA before developing such a proposal.

While Sierra Club supports the goal of encouraging early clean energy investments, particularly in historically underserved low-income communities, the "matching credit" structure of the CEIP serves to dilute the overall stringency of the CPP if the credits are awarded to projects that would happen without the incentive. For this reason, Sierra Club has encouraged EPA to focus the program on low-income communities, and to ensure that matching credits for other projects go only to those projects that would not occur but-for the incentive.[34] In addition to evaluating the impact of these attributes as California considers whether to join the CEIP, which carries the risk of weakening the CPP as a whole, the state

[33] ARB should clarify its apparent intent to adopt the Plan as a final state implementation plan for submission to EPA (as opposed to an "initial submittal").

[34] *See* Sierra Club Comments on Proposed Federal Plan and Model Trading Rules, Dkt. No. EPA-HQ-OAR-2015-0199, https://www.regulations.gov/document?D=EPA-HQ-OAR-2015-0199-1133, Attachment 3. (The "tracked changes" in this document were intended to clarify for EPA the alterations between Sierra Club's December 15, 2015 and January 21, 2016 CEIP comments; the comments themselves are final.)

should consider expanding other types of incentives for clean energy investments in low-income communities.

We appreciate the opportunity to comment on these important matters.

Respectfully submitted,

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Letter
CPP 13 CBE

CRPE CENTER ON RACE, POVERTY & THE ENVIRONMENT

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gaia

September 19, 2016

Via Electronic Filing

Mary Nichols, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Comments on California's Proposed Compliance Plan for the Federal Clean Power Plan under Clean Air Act Section 111(d)

Dear Board Chair Nichols:

Communities for a Better Environment, Center on Race Poverty and the Environment, and Global Alliance for Incinerator Alternatives ("Environmental Justice Advocates") submit these comments on the State Board's Proposed Compliance Plan for the Federal Clean Power Plan under Clean Air Act Section 111(d) ("Trading Plan for CPP"). We are community groups and organizations that work directly with low-income residents and residents of color who are disproportionately impacted by industrial pollution, toxic air emissions, and climate change. We do not support the Trading Plan for CPP because carbon trading places unjust burdens on low income communities and communities of color. Climate change solutions must protect all Californians, starting with those already overburdened by air pollution.

As a result of significant evidence-based advocacy, the final federal Clean Power Plan contains requirements for states to engage with potentially affected communities when developing their compliance strategies.[1] These include meaningful engagement, not merely to give communities information about state implementation plans, but to ensure that the potentially affected communities are able to have an impact on how the state plans to implement the Clean Power Plan. The Trading Plan for CPP does not satisfy these requirements. While the Trading Plan for CPP articulates a continued uniform reliance on cap and trade to reduce greenhouse gas ("GHG") emissions, the cap and trade program has

[1] For a description of the gains secured by environmental justice advocacy, see e.g. http://grist.org/climate-energy/heres-how-environmental-justice-advocates-improved-obamas-clean-power-plan/

not been affected by the years of public input from affected communities contending that trading may negatively impact their progress toward environmental justice. As described below, and in our companion comment regarding the proposed cap and trade regulation, this has proven to be a reality: the existing cap and trade program has not resulted emissions decreases in California's environmental justice communities. In particular, the greatest users of offsets in the cap and trade system are part of California's electricity sector including Calpine, Southern California Edison and NRG. Simply relying on California's existing cap and trade scheme, which sunsets before any GHG reductions are required by the Clean Power Plan, would actively thwart the environmental justice goals of the landmark federal law.

I. The Federal Clean Power Plan Includes Environmental Justice Requirements States Must Meet to Submit an Adequate Implementation Plan

In 2015, the federal government adopted the Clean Power Plan, with goals for addressing emissions from existing power generation nationwide. The administration was not simply contemplating regulation of greenhouse gases generally; it was specifically looking at GHG emissions from power plants that existed as of 2014. The emissions from these plants impose unburdens on the planet, and they also impact the health of the local communities where they have been operating, and emitting pollutants in addition to GHGs, such as particulate matter and toxic air contaminants.

The administration articulated specific nationwide goals for the Clean Power Plan: contemplating that cutting GHG emissions from existing Electric Generating Units ("EGUs") would have major public health benefits. President Obama identified these as including 3,600 fewer premature deaths; 90,000 fewer asthma attacks in children; 1,700 fewer heart attacks; 1,700 fewer hospital admissions; 300,000 fewer missed school and work days.[2] These benefits are not associated with GHG emissions, but rather with the co-pollutants that will not be emitted from existing EGUs, as a result of the Clean Power Plan.

These gains are possible because existing EGUs contribute significantly to the health burdens born by the public in general, and by communities in proximity to EGUs in particular. EGUs contribute pollutants like nitrogen oxides (NOx), sulfur oxides (SOx), and particulate matter (PM). NOx also is also a precursor for ground-level ozone (smog) and $PM_{2.5}$ formation. High $PM_{2.5}$ concentrations are linked to increases in heart attacks, particularly in those who are already vulnerable and in the elderly. "Some populations are more at risk to exposure than other groups: high 1-h NOx concentrations, 8-h ozone concentrations, and 24-h $PM_{2.5}$ concentrations are associated with increased asthma-related hospital visits in children; 8-hozone concentrations are also strongly correlated with negative health impacts on the elderly and those with low employment status, and weakly correlated with impacts on ethnic or racial minority populations, and populations with high poverty

[2] https://www.whitehouse.gov/blog/2015/08/03/what-clean-power-plan-means-america; *see also* Video address by President Obama announcing issuance of Final Clean Power Plan.

rates or low educational status."[3]

Unlike GHG emissions, which tend to disperse globally, for criteria pollutants like $PM_{2.5}$, NO_x and SO_x, location matters considerably. When the Clean Power Plan anticipates reducing public health impacts, it is because of the population sizes and demographics of the populations around existing EGUs.[4] Various researchers have quantified the cost benefits of reducing criteria pollutants from EGUs, for instance in 2005, the ozone-specific mortality and morbidity benefits of reducing NOx emissions from EGUs at different times and places across the country at $10,700–$52,800/ton NOx, depending on local population density and atmospheric conditions like temperature. A 2009 estimate projected the PM2.5-specific benefit of power plant NOx reductions as ranging from $1,100 per ton of NOx in Chicago to $120,000 per ton in Seattle. "In its Clean Power Plan, the US Environmental Protection Agency (EPA) estimated the 2020 health benefit of reducing NOx emissions to be highest in California, at $22–49,000/ton in $PM_{2.5}$-specific benefits and $14–59,000/ton in ozone-specific benefits."[5]

The Clean Power Plan also looks to existing sources of energy such as garbage incinerators, which generate tremendous co-pollutants along with GHG emissions. In its Initial Statement of Reasons ("ISOR") for the Cap and Trade regulation extension, CARB proposes extending the existing exemption for the state's three garbage incinerators (or "waste to energy") under the cap and trade program. This "exemption from a compliance obligation" would be for an industry that emits carbon dioxide and other harmful pollutants in three environmental justice communities. At a bare minimum, the state must align with the requirements of the CPP on this point. The CPP clearly recognizes that GHG emissions from burning the fossil fuel-based portion of garbage (including plastics) must be counted. The CPP also acknowledges that incineration undermines waste prevention programs, which have significant climate benefits. Any proposal to meet the CPP must, therefore eliminate any exemption from compliance with GHG regulation for "waste to energy."

A. Clean Power Plan Public Participation Requirements

It is reasonable for California's environmental justice communities to expect that some of the public health benefit identified by the Clean Power Plan will accrue to them. This begins with the mandate that CARB provide for meaningful public participation in development of California's implementation. EPA observes that, under the final Clean Power Plan,

> states need to engage meaningfully with communities and other stakeholders during the initial and final plan submittal processes. Meaningful engagement

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[3] A framework for siting and dispatch of emerging energy resources to Realize environmental and health benefits: Case study on peaker power plant displacement", E.M. Kriegeretal./Energy Policy 96 (2016) 302–313, 303.
[4] *See id.*
[5] *Id., citing* (EPA, 2015).

> includes outreach to vulnerable communities, sharing information and soliciting input on state plan development and on any accompanying assessments … , and selecting methods for engagement to support communities' involvement at critical junctures in plan formulation and implementation.[6]

EPA recommends that states consult its "Guidance on Considering Environmental Justice During the Development of Regulatory Actions."[7] EPA's Guidance poses three critical questions:

> 1. How did the public participation process provide transparency and meaningful participation for minority populations, low-income populations, tribes, and indigenous peoples?
> 2. How did the rule-writers identify and address existing and/or new disproportionate environmental and public health impacts on minority populations, low-income populations, and/or indigenous peoples?
> 3. How did actions taken under #1 and #2 impact the outcome or final decision?[8]

Although the Trading Plan for CPP articulates its conviction that it has satisfied these public participation and meaningful engagement requirements, it patently fails to do so. First, the Trading Plan for CPP relies almost exclusively on the analysis performed to adopt the existing cap and trade system. Environmental Justice Advocates were extremely vocal during adoption of the cap and trade system about how poorly the rulemaking process and the final rule reflected the risk to environmental justice communities. The system that already exists did not include transparency and a process for environmental justice communities, did not identify environmental and public health impacts on environmental justice communities, and therefore did not see an impact from participation or address disproportionate impacts. Rather than relying on a flawed system, CARB must undertake a new process with truly meaningful participation, one that candidly acknowledges disproportionate impacts and that is able to change outcome to address those impacts.

B. The Existing Cap and Trade Program has Environmental Justice Impacts

Second, the disproportionate impacts from cap and trade are now documented. What the environmental justice community has warned of since inception of CARB's cap and trade program has in fact been occurring -- major polluters are paying their way out of making real, on-site reductions at the expense of low-income communities, communities of color, and

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[6] 80 Fed. Reg. 64661, 64916 (Oct. 23, 2015).
[7] https://www.epa.gov/sites/production/files/2015-06/documents/considering-ej-in-rulemaking-guide-final.pdf. May 2015.
[8] *Id.* at pp. ii, 4.

indigenous communities. Reductions of GHG emissions on-site would also reduce the co-pollutants, such as $PM_{2.5}$ and air toxics, that are emitted into the surrounding community. This benefit is forgone when a facility buys allowances or offsets. California's existing trading scheme disproportionately impacts communities of color and low-income communities. Over two-thirds of California's low-income African Americans and about 60% of low-income Latinos and Asian/Pacific Islanders live within six miles of a Cap and Trade facility.[9] In California's power sector, the electricity sources that tend to generate the most pollutants – gas-fired peaker plants that are called on to start and stop – are located in or near environmental justice communities. One recent article showed that more than 80% of peaker plants are in communities with above-average CalEnviroScreen scores, and more than half of these plants are in communities in the top 30% of CalEnviroScreen communities.[10]

Since the Trading Plan for CPP was issued, some aspects of California's legal framework have changed. Others have not. California's SB 32 was signed into law, changing the mandate to CARB to ensure GHG emissions reductions continue, and increase, after 2020.[11] SB 32 did not change the reality that the cap-and-trade program sunsets in 2020. In addition, AB 197—companion legislation to SB 32—specifically requires CARB to prioritize "direct emission reductions" in achieving reductions beyond the 2020 limit.[12]

These new laws will result in major shifts across our state to meet the growing crisis of climate change. They are critical to the health of environmental justice communities, as shown by a report issued September 14, 2016, by researchers at UC Berkeley, USC, Occidental and SFSU.[13] Researchers reviewed cap and trade compliance data from CARB, looking at residential demographics of communities hosting regulated GHG facilities, along with trends in GHG and particulate emissions. The report, "A Preliminary Environmental Equity Assessment of California's Cap-And-Trade Program," demonstrates that polluters using the cap and trade system are adversely impacting environmental justice communities. The system is not delivering public health or air quality benefits, it is not achieving local emissions reductions, and it is exporting climate benefits out of California's environmental justice communities and out of state.

Three primary conclusions from the report are:

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[9] Manuel Pastor, *et. al*, Minding the Climate Gap (2010), 9, Figure 2 available at http://dornsife.usc.edu/pere/documents/mindingthegap.pdf.
[10] E.M. Kriegeretal./Energy Policy 96 (2016) 302–313, 308.
[11] Health & Saf. Code § 38566.
[12] Health & Saf. Code § 38562.5.
[13] A PRELIMINARY ENVIRONMENTAL EQUITY ASSESSMENT OF CALIFORNIA'S CAP-AND-TRADE PROGRAM, Cushing et al (16 Sept. 2016) p. 6 (available at http://dornsife.usc.edu/assets/sites/242/docs/Climate_Equity_Brief_CA_Cap_and_Trade_Sept2016_FINAL.pdf.) This report is further summarized in Environmental Justice Advocates' September 19, 2016 comments on the proposed cap and trade regulation, section "Cap and Trade Implementation Data Indicate Communities of Color are Adversely and Disproportionately Affected."

1. Emissions from cap-and-trade participant facilities in EJ communities are not substantially decreasing, even though overall GHG emissions have declined under the cap.

As described above, when it comes to GHG emissions, location matters because co-pollutant benefits are a much-anticipated, and badly needed aspect of climate change regulation. On the local level under cap and trade, though, there is either no decline or actual increases in GHG emissions. Environmental justice communities have long been concerned that cap and trade will not deliver "local emission reductions" in GHG emissions. These types of reductions, which occur on-site at facilities and also reduce co-pollutants, are critical to communities on the frontlines of climate change.

Unfortunately, the analysis shows GHG increases in several sectors, including cement, hydrogen, and oil and gas production and suppliers. Most emission reductions have come from the out-of-state electricity sector, as California has reduced imports from sources with a greater carbon footprint, such as coal. Emissions from in-state electricity generation, by contrast, have actually increased by 4.5%.

According to the report: "While overall, greenhouse gas emissions in California have continued to drop from a peak in 2001, we find that, on average, many industry sectors covered under cap-and-trade report increases in localized in-state GHG emissions since the program came into effect in 2013."[14]

2. Environmental justice communities are disproportionately impacted by large greenhouse gas emitters, whose emissions are correlated with harmful air toxics.

California's cap and trade program is exacerbating a longstanding air pollution problem, whereby some communities have clean air and some have dirty air and related health issues. GHGs are not emitted in isolation; they are accompanied by co-pollutants. The state's large emitters are releasing a range of pollutants, including particulate matter, which is known to negatively impact air quality and health. The emissions compound and potentially exacerbate already existing environmental impacts, since large GHG emitters are more likely to be in neighborhoods that have already high pollution burdens, as shown by CalEnviroScreen 2.0.

3. Offsets have allowed polluters to avoid making local emission reductions.

Offsets allow emitters to buy credits for projects run by another company. Theoretically, these projects reduce GHGs, and buyers get to include the saved GHGs as part of their legal requirement to reduce. Offsets are the cheapest way to meet required reductions under cap and trade. During the time period analyzed, over four times the total offset credits were used than the total reduction in allowable GHG emissions. To meet the GHG reduction requirements, many of the largest emitters, in particular energy companies and electric utilities, were buying offsets. It was primarily large climate polluters that were benefiting from use of cheap offsets; four companies accounted for nearly half (44%) of all

[14] "A Preliminary Assessment," p. 6.

offsets used: Chevron, Calpine Energy Services, Tesoro and Southern California Edison. The top 10 users of offsets accounted for about 36% of the total emissions and 65% of the offsets used, and include PG&E, San Diego Gas & Electric, NRG Power, and La Paloma Generating Station.[15]

C. CARB Outcomes Are not Capable of Being Affected by Public Input

Third, while the Trading Plan for CPP explains several avenues in which it has and is seeking to engage environmental justice communities, these avenues are not succeeding, for various reason. Staff correctly points out that EPA identified California's Adaptive Management Plan as one example of how states could propose "ongoing assessments of the impacts of their state plans on overburdened communities."[16] When promulgating the Cap and Trade regulations, CARB asserted that it would assess and prevent adverse impacts through an Adaptive Management Plan. The Initial Statement of Reasons ("ISOR") for the Cap and Trade Regulation admits that the State Board has not finalized or implemented the Adaptive Management Plan.[17] The Trading Plan for CPP fails to acknowledge that despite several years of operating the trading scheme, CARB has not taken action to assess or prevent disproportionate emissions impacts.

Even more fundamentally, California appears to have pre-determined its compliance course prior to finalization of the CPP. Environmental justice representatives who have sought to secure meaningful regulation in communities do not feel enfranchised, to the contrary, there is a strong sense of futility in seeking a regulatory process that could result in anything other than the existing, flawed, cap and trade program. To comply with the federal public participation requirements, CARB should not adopt the Trading Plan for CPP proposal. It should instead engage with California's most impacted communities to develop a program of direct emissions reductions that will benefit the health and welfare of California communities.

II. CARB has no Authority to Extend Cap and Trade after 2020, and May Not Rely on Cap and Trade for Compliance with the Clean Power Plan.

The Trading Plan for CPP seeks to use the post-2020 cap and trade program as the compliance demonstration for the Clean Power Plan.[18] Further, it proposes a state measures plan, which means that the cap and trade program would be used for compliance purposes but not itself be federally enforceable.[19] The Clean Power Plan allows states to submit a "state measures" plan, but that plan must meet the same integrity elements as federally enforceable measures.[20] California must demonstrate "adequate legal authority and funding

[15] *Id.* p. 9.
[16] 80 Fed. Reg. at 64919.
[17] ISOR at 302.
[18] Trading Plan for CPP, e.g. p.1.
[19] *Id.* pp. 1-2, 13-17.
[20] 80 Fed. Reg. at 64836.

to implement the state plan and any associated measures."[21]

CARB lacks authority to proceed with an extension of Cap and Trade. While CARB staff have offered amendments to various provisions of the Cap and Trade regulations to extend the program after the year 2020, agencies only have those powers delegated by the Legislature. Indeed, "...it is well established that the rulemaking power of an administrative agency does not permit the agency to exceed the scope of authority conferred on the agency by the Legislature. 'A ministerial officer may not ... under the guise of a rule or regulation vary or enlarge the terms of a legislative enactment..."[22] CARB's authority to implement the Cap and Trade program expires on December 31, 2020 and the Board has no authority to adopt regulations to extend the program beyond that date.[23]

The temporal limitation on CARB's authority to maintain a cap and trade program is not an accident; for two years the Legislature has refused to extend the program. During the 2015 legislative session, the version of Assembly Bill 1288 (Atkins) containing an extension of CARB's authority beyond December 31, 2020 did not become law. During the 2016 legislative session, Senate Bill 32 passed, requiring the State Board to achieve a 40 percent reduction in greenhouse gas emissions below 1990 levels by 2030. No provision of Senate Bill 32 amended section 38562(c) or otherwise expressly authorized CARB to implement cap and trade after the year 2020. Accordingly, CARB lacks the authority to extend the cap and trade program. Without legal authority to implement its state measures plan, CARB may not propose it in lieu of a State Implementation Plan that would meet the CPP's requirements.

III. The CEQA Analysis is Deeply Flawed

CARB offers a single Draft Environmental Analysis ("DEA") for both the Trading Plan for CPP and its proposed Cap and Trade regulation. The DEA purports to meet the CEQA requirements of CARB's certified equivalent duties. The DEA fails to meet the most basic CEQA mandates, such as providing a stable project description and providing project objectives that are broad enough that they can be met with more than a single alternative. It fails to identify impacts of the project on environmental justice communities, and fails to propose meaningful alternatives. Due to these pervasive infirmities, Environmental Justice Advocates are providing only a high-level review of their objections to this CEQA treatment. We look forward to working with CARB on a CEQA analysis that genuinely considers California's implementation of the Clean Power Plan.

CPP 13-1

A. Project description

Under CEQA, an "accurate, stable and finite" project description is the *sine qua non* of

CPP 13-2

[21] *Id.*; *see also* 80 Fed. Reg. at 64848; 40 C.F.R. § 60.5745(a)(9).
[22] *Agnew v. State Bd. of Equalization* (1999) 21 Cal.4th 310, 321 (citing *California Emp. Com. v. Kovacevich* (1946) 27 Cal.2d 546.
[23] *See* Health & Safety Code §§ 38562(c), 38570.

an environmental review.[24] CEQA requires a statement of the objectives of the project and a description of the Project in sufficient detail so that the impacts of the project can be assessed.[25] Only through an accurate depiction of a project may the public, interested parties, and public agencies balance the proposed project's benefits against its environmental cost, consider suitable mitigation measures, assess the advantages of rejecting the proposal, and appropriately weigh alternatives.[26] The importance of an accurate project description cannot be overstated.

Although the Trading Plan for CPP project is a broad programmatic undertaking, the DEA avoids providing any relevant details, such as historic performance of EGUs under the existing cap and trade system. As described above, EGUs located in environmental justice communities have not reduced their GHG (and co-pollutant) emissions under cap and trade. Indeed in-state electricity generation has increased, particularly in environmental justice communities.

Further, although it mentions expanded regional markets, it does not identify the detailed information from modeling conducted on an expanded regional balancing authority. Although modeling suggests that, under most scenarios use of California's natural gas-fired units would decrease by 2030 under a regionally expanded balancing authority, emissions could increase statewide, and in environmental justice communities, compared to a scenario without regionalization. These two pieces of information show the risks to environmental justice communities. They are important to understanding the project proposed, evaluating its goals and alternatives.

CPP 13-2 cont

In addition, the DEA describes one project objective as compliance with the CPP in a way that can only be met through use of cap and trade program:

> 6. Comply with the Federal Clean Power Plan
> The federal CPP is an action of the federal government to reduce GHG emissions. CPP facilitates the use of emissions trading markets for compliance, including markets that cover more entities than CPP-affected electric generating units (EGUs). California is in a good position to use existing state programs, specifically, the Cap-and-Trade Program, to comply with the federal CPP as part of a "State Measures" compliance plan design. Integrating CPP Compliance Plan into the Cap-and-Trade Program may also support a broader national carbon market as CPP, and other potential federal programs, mature. Therefore, the Proposed Project includes regulatory amendments to facilitate CPP compliance.[27]

Project objectives cannot be drafted so that no alternative could meet them. Indeed, if

[24] *County of Inyo v. City of Los Angeles* (1977) 71 Cal. App. 3d 185, 199.
[25] 14 Cal. Code Regs. § 15124.
[26] *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal. App. 4th 645, 655.
[27] DEA, p. 20.

applicants could thwart consideration of all potentially feasible alternatives simply by adopting overly narrow objectives, CEQA would be rendered meaningless.[28]

B. Project Impacts

The impacts of the Trading Plan for CPP are not adequately identified. CEQA requires environmental review to address all of a proposed project's anticipated environmental impacts.[29] "An EIR shall identify and focus on the significant environmental effects of the proposed project."[30] It must "identify and focus on the significant environmental effects of the proposed project," including providing an analysis of both short-term and long-term significant environmental impacts.[31] Agencies, moreover, should not approve projects if there are feasible mitigation measures or project alternatives available to reduce or avoid the significant environmental impacts contained in the project's EIR.[32]

CPP 13-3

The Trading Plan for CPP, which is the project as proposed, would provide that all affected EGUs in California will be required to participate in the cap and trade program. Based on the recent Preliminary Environmental Equity Assessment of the cap and trade program, it is foreseeable that the project's impacts would include increases, or at least failures to reduce, emissions in environmental justice communities. CARB has the list of affected units, and can correlate that list with CalEnviroScreen communities to identify the units that may trade, or purchase offsets, rather than reducing emissions. Instead, the DEA arbitrarily assumes that market operation makes it impossible to predict which units will reduce actual emissions, and which units are more likely to pay to pollute.

C. Alternatives analysis

The DEA's alternatives analysis fails to consider realistic alternatives to the Trading Plan for CPP. It considers a No Project alternative, a Direct Regulation alternative, and a Carbon Fee alternative. Several feasible alternatives exist beyond these three alternatives, and should be considered.

CPP 13-4

First, as an initial matter, the No Project alternative assumes CARB would not develop any new programs to effectuate its new regulatory responsibilities. It is not realistic to assume that CARB would fail to act on its legislative mandates. One such mandate is the SB 32 requirement to plan for, and implement, increasing GHG emission reductions. Further, SB 32's companion bill, AB 197, expressly directs CARB to prioritize direct emissions reductions at large stationary sources. Beginning in January 2017, CARB must

[28] *See Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal. App. 3d 692, 736-37 (holding that applicant's prior commitments could not foreclose analysis of alternatives.)
[29] Public Resource Code § 21100(b)(1); *See also, County of Inyo v. City of Los Angeles* (1977) 71 Cal.App. 3d 185, 199.
[30] 14 Cal. Code Regulations § 15126.2(a).
[31] *Id.*
[32] Cal. Pub. Resources Code §§ 21002, 21002.1(a).

prioritize "emissions reduction rules and regulations that result in direct emission reductions at large stationary sources of greenhouse gas emissions[.]" Describing a No Project alternative as one in which California's regulation of GHGs simply falls off a cliff in 2020 when cap and trade expires is not a No Project alternative. A true No Project alternative would consider that CARB would spend the next year or two developing regulations to meet its GHG emission reduction mandates without cap and trade.

Second, there are many feasible alternatives to cap and trade to comply with the Clean Power Plan. CARB could consider, as an alternative, a "cap and fee" system, to ensure that the requisite emission reductions occur, and provide an incentive to entities that reduce more aggressively. Although CARB would need still need legislative authorization for a cap and fee system, the DEA should consider one for CPP compliance. CARB should also consider removing the electricity sector from whatever regulatory system it applies to the rest of the state, and require, for all plants that were in operation in 2012, a 25% reduction from 2012 GHG emissions, and for all post-2012 plants, a 25% reduction from first full year of operation.[33] Another benchmark could be to connect mandatory reductions to AB 32 – reduction of approximately 30% by 2020 (program launches in 2022, so must demonstrate 30% reduction by 2024) and 40% by 2030.

CPP 13-4 cont

IV. Conclusion

For several years, environmental justice communities nationwide have worked to secure a meaningful federal regulatory program to address GHG emissions and the frontline communities most impacted by co-pollutants emissions. These communities are the most vulnerable to the impacts of climate change as well. Upon finalization of the Clean Power Plan, it is said that President Obama instructed "If you care about low-income, minority communities, start protecting the air that they breathe."[34] The Trading Plan for CPP does the opposite of protecting the air that California's environmental justice communities breathe. Environmental Justice Advocates respectfully request that CARB instruct its staff to prepare a compliance plan that does not include pollution trading trading, but rather reduces emissions in environmental justice communities.

Sincerely,

Shana Lazerow Staff Attorney Communities for a Better Environment	Brent Newell Legal Director Center on Race, Poverty & the Environment	Monica Wilson US & Canada Program Director GAIA

[33] 2012 benchmark year is logical for CPP compliance since 2012 is the year EPA used for its baseline emissions calculations. *See* EPA fact sheet "The Clean Power Plan: Key Topics and Issues" at 5.
[34] As described in http://grist.org/climate-energy/heres-how-environmental-justice-advocates-improved-obamas-clean-power-plan/

Letter
CPP 14 GAIA

GAIA comments to CARB on Cap and Trade program

Contact: Monica Wilson, monica@no-burn.org, 510-883-9490 x103

Dated: September 19, 2016

Submitted by CARB web form and email to cotb@arb.ca.gov

Subject: Oppose exemption for "Waste To Energy" in Cap & Trade, Oppose Cap and Trade for CPP compliance

In its Initial Statement of Reasons ("ISOR") for the Cap and Trade regulation extension, CARB proposes extending the existing exemption for the state's three garbage incinerators (or "waste to energy") under the cap and trade program. This "exemption from a compliance obligation" would be for an industry that emits carbon dioxide and other harmful pollutants in three environmental justice communities.

At a bare minimum, the state must align with the requirements of the CPP on this point. The CPP clearly recognizes that GHG emissions from burning the fossil fuel-based portion of garbage (including plastics) must be counted. The CPP also acknowledges that incineration undermines waste prevention programs, which have significant climate benefits.

Any proposal to meet the CPP must, therefore eliminate any exemption from compliance with GHG regulation for "waste to energy."

Exempting biogenic carbon from California climate regulation, including the Cap and Trade program, is causing other unintended consequences. CARB must examine the climate impacts of burning biomass, including the biological portion of municipal solid waste that is burned in such municipal waste incinerators. There is substantive harm to the climate and human health when such materials are burned, and incineration means these materials are not being composted and returned to the soil to store long term carbon.

The EJAC made similar recommendations to CARB about these particular points in the recommendations finalized August 26, 2016, on pages 16-19. (Available at https://www.arb.ca.gov/cc/ejac/ejac_recommendations082616revised.pdf)

Furthermore, we have signed comments with broader scope, including opposition to extending the use of Cap and Trade for compliance with the CPP. We do not support the Trading Plan for CPP because carbon trading places unjust burdens on low income communities and communities of color. Climate change solutions must protect all Californians, starting with those already overburdened by air pollution. CPP14-1

We support the request that CARB instruct its staff to prepare a compliance plan that does not include carbon trading, but rather reduces emissions in environmental justice communities.

Letter
CT 1 EJAC

Overarching Issues

The AB 32 Environmental Justice Advisory Committee (EJAC) started meetings about the 2030 Target Scoping Plan in December 2015. In addition to committee meetings across the state, the EJAC hosted a robust community engagement process in July of 2016, conducting 9 community meetings and collecting over 700 individual comments. The recommendations below are informed by those meetings, EJAC member expertise and comments received. To help make our recommendations more actionable, we sorted them into five themes that are described in more detail below and throughout this document: partnership with environmental justice communities, equity, economic opportunity, coordination, and long-term vision. While our recommendations are sorted by sector, we intend them to be read and implemented holistically and not independently of each other.

Partnership with Environmental Justice Communities	
1	Encourage public engagement and a culture shift in California to step up the implementation of our state's climate plans, using the following strategies: a. Develop a communications plan to get everyday people excited about our climate programs. The plan must focus on the health and socio-economic impacts of air pollution and climate change, and include innovative, multilingual delivery methods like integration into school curriculum, technology applications, or Public Service Announcements (PSAs) to convey how air pollution and greenhouse gases are related to increases in hospital visits, lost wages, and economic insecurity. b. Promote community-level climate projects to show people how they are done and what they can accomplish. c. Create a "report card" for elected officials that show community members how officials voted on regulatory policies and the implications of those policies. d. Create a "report card" on Scoping Plan implementation that is updated every two years, using metrics identified in the Scoping Plan.
2	Emphasize and demonstrate neighborhood-level solutions that draw on community ideas, rather than just taking a top-down approach. Ensure long-term community engagement and pre-assess projects in the targeted community and conduct at least five-year follow-up to ensure that projects result in community-directed benefits.
3	Continue to convene the EJAC beyond the Scoping Plan process. Implementation of the Scoping Plan can tap on the expertise and relationships of the EJAC members and their networks. Public policy is more successful when there is broad public awareness to ensure its success and oversight.
Equity	
4	ARB must better balance reducing greenhouse gases and reducing costs (cost compliance) with the other AB 32 goals of improving air quality in EJ communities while maximizing benefits for all Californians. There has been too much emphasis on reducing costs to industry, and not enough attention on reducing emissions and their associated costs in EJ communities.

CT1-1

5	Equity must always be a primary consideration when examining issues in any sector. Decades of cumulative impacts and inaction have led to a sense of urgency in needing to resolve adverse health and economic issues in disadvantaged communities. To demonstrate progress and build trust, both short- and long-term activities need to result in positive, immediate, and measurable impacts in these communities. ARB must

Overarching Issues		
	conduct an equity analysis on the Scoping Plan and each sector. Work with EJAC on the analysis and the right questions to ask.	
6	All climate goals and policies need to have metrics and baselines quantified to ensure that actions are meeting targets and goals over time. Each sector's data must show historic emissions and future trends (both business as usual and how much reduction if certain programs are implemented). Each emissions sector, must calculate goals for emissions reduction to 2030; see example with the Short Lived Climate Pollutant strategy. These metrics must also include public health outcomes and issues.	
7	ARB must develop contingency plans for mitigation and adjustment to the overall plan if emissions increase in benchmark years (due to huge leaks like Aliso Canyon, or if certain programs fail to reduce emissions). Timely emissions data will also allow ARB to adjust or incorporate new strategies as needed.	CT1-1 cont
8	Expand and integrate real-time air quality monitoring, citizen science, and SEPs (supplemental environmental projects) in disadvantaged regions, including the California/Mexico border region. Monitors must be placed throughout regions to ensure we have an accurate understanding of air quality issues in that region. Consider a carbon tax that funds monitor installation and maintenance at every school in California.	
Coordination		
9	Achieving our ambitious 2030 targets will require ARB to work with other agencies, jurisdictions, and program processes. Coordinate meetings between the interagency working groups (IWG) and EJAC, to encourage information sharing and mutual cooperation between the groups. Improve coordination among state, federal, and local agencies with regard to their planning and implementation activities. Support cities and local implementation of Energy and Climate Action Plans.	
10	Coordinate strategies to prevent and address sprawl with equity at the center. Sprawl has negative environmental impacts on transportation, air, water, and more. New projects must not create adverse impacts like displacement of existing residents. Negative Declarations need to be phased out. All new greenhouse gas sources must be mitigated.	CT1-1 cont
11	All policies and programs must adopt strong, enforceable, evidence-based policies to prevent displacement of existing residents.	
Economic Opportunity		

12	Maximize job and economic benefits for Californians. Develop a just transition for workers and communities in and around polluting industries with a pathway for them to be first in line for jobs in the green economy. Include a section in the Scoping Plan on healthy, well-paid jobs and broad economic benefits, especially targeted for EJ communities, for jobs that don't require a worker to sacrifice his or her health in order to support a family, as is currently common. These efforts must emphasize capacity building in the community and outline fair hiring practices and policies, and be first focused on transitioning workers from polluting industries.
13	Benefits from Scoping Plan implementation must be accessible to Environmental Justice communities. Vouchers to help access new technologies, geographic distribution of resources and investments to disadvantaged communities, and transparent/accessible engagement in any planning and decision-making processes are essential.
14	Build in incentives and support for compliance. Incentivize behaviors that protect and improve disadvantaged communities; both on a large scale (e.g., industry and agriculture) and at a community level (e.g., completing communities with paved roads,
Overarching Issues	
	sidewalks, bike/pedestrian paths, and planting trees). Explore effective strategies for change without incentives.
15	Ensure that AB 32 economic reviewers come from various areas around the state to represent insights on economic challenges and opportunities from those regions. The Environmental Justice Advisory Committee must choose at least half of the members. Ensure that the EJAC receives ready and timely notice of and access to any economic reviews, in time to give advice to and guide the process.
Long-Term Vision	
16	The Scoping Plan must not be limited to examining interventions and impacts until 2030, or even 2050. What we do today and for the next 30 years will have impacts for seven generations, so our planning and analysis must have a longer-term scale to prevent short-sighted mistakes and rather reach our long-term vision. We request that all policies and analyses include this long-term vision. a. Leave fossil fuels in the ground b. Do not create new infrastructure that relies on fossil fuels, including natural gas, fracking, pipeline development, crude oil shipments and processing c. Just transitions model of moving toward local living economies that prioritize the well-being of communities
17	The EJAC expects to see the largest proportion of reductions of greenhouse gases take place in California in the future. ARB must prioritize actions and investments in California EJ communities before looking at other Californian communities or outside of California.
18	Achieving our 2030 targets will require more effective implementation and creative innovation than we have ever done before. The Scoping Plan must prioritize whenever possible the innovation of new technologies or strategies to reach even deeper emissions cuts. These innovations must put EJ communities first in line for environmental and economic opportunities.

CT1-1 cont

Industry	
	Equity
1	State in the Scoping Plan that it is a priority to reduce emissions in EJ communities, and to ensure no emissions increases happen there. Through standardized metrics, ensure that emission reductions from AB 32 activities are being achieved, especially in EJ communities.
2	Use a "loading order" for Industry similar to the one that is used by the California Energy Commission for supplying demand. Always prioritize the approval and use of the most efficient and low-carbon technologies, facilities, and projects over high-polluting ones
3	Address localized impacts of short-lived climate pollutant emissions, such as black carbon from all sources.
4	A big design flaw of Cap-and-Trade is having an ambiguous economy-wide cap. Eliminate Cap-and-Trade, replace it with a non-trading option system like a carbon tax or fee and dividend program. In addition: a. Increase enforcement of existing environmental and climate laws, increasing penalties for violations in DACs. b. Establish a state run "Carbon Investment Fund" allowing the private financial sector to invest in Carbon Futures. Pay dividends through enforcement fines, permit fees and carbon tax receipts. c. Better coordinate climate pollution and local criteria pollutants programs. d. Place individual caps on emission sources, rather than using a market-wide cap. Set up a per-facility emissions trigger that will tighten controls when a certain level is reached. e. Establish a moratorium on refinery permits. f. Set goal of 50% emissions reduction in Oil and Gas sectors by 2030. Aggressively reduce emissions from these sectors, including fugitive and methane emissions from extraction and production. g. Put emissions caps on the largest polluters. h. If Cap-and-Trade continues, do not give out more free allowances. i. Do not exempt biomass burning activities. j. Do not allow regulated entities to apply for California Climate Investments funding. k. Increase the floor price to the real price of carbon; use the highest price offered, not the lowest. Incorporate industry's externalized costs into the cost of carbon (as is done with the mitigation grant program at Port of Long Beach). Calculate the cumulative impacts so they can be mitigated. Ensure that polluting facilities are paying the societal costs of their emissions, rather than externalizing them.
5	The Scoping Plan Economic Analysis must consider carbon tax, command and control regulation, and Cap-and-Dividend or Fee-and-Dividend. Cap-and-Trade must be eliminated. The price of carbon must be increased, with the resulting funds invested in local communities to ensure all benefits from a greenhouse gas free future.

CT1-1 cont

6	Expand the definition of *economy* to include costs to the public (e.g., U.S. EPA social cost calculator). Conduct an economic analysis that would account for the cost to public health (beyond cancer, respiratory and cardiovascular diseases) and environmental burdens from greenhouse gases. Include the Integrated Transport and Health Impacts Model (ITHIM) in the analysis. Ensure that ARB coordinates with other state agencies in this effort.
7	Ensure that the Adaptive Management tool is adequate for real-time monitoring and intervention. There must be at least two EJAC members on the Adaptive Management work group. To demonstrate how the tool can help communities, complete an Adaptive

Industry	
	Management analysis for Kern County.
8	To address tension between workers and community members who live in polluted areas, there needs to be access to economic stability and a just transition to the new clean economy. Ensure that workers in Environmental Justice communities whose livelihood is affected from a move to cleaner technologies have access to economic opportunities in that new clean economy and that local businesses continue to employ workers from that community.
9	Do not commit California to continuing Cap-and-Trade through the Clean Power Plan. Since carbon trading cannot be verified, ensure that the Clean Power Plan power purchases are from sustainable, renewable power plants.
10	Eliminate offsets. Actions and investments taken by industry to reduce emissions need to be reinvested in the communities where the emissions have occurred. Any benefits from greenhouse gas reduction measures must affect California first. In addition to California emissions, also consider activities that can reduce pollution coming from across the Mexican border, to reduce emissions in the border region. Do not pursue or include reducing emissions from deforestation and forest degradation (REDD) international offsets in the Scoping Plan.
Coordination	
11	ARB needs to examine ways to increase its partnerships with and oversight over air districts using its existing authority. Local air districts need to be held accountable to the same standards as ARB. Promises need to be documented and strictly enforceable. If an air district chooses to have stronger standards than ARB, that air district must have the power to enforce those stronger standards without interference from ARB.

12	Stop "passing the buck" from agency to agency and fix the problems. All agencies need to take responsibility for all pollutants. Coordinate efforts among agencies when necessary, and among local governments and communities. Implement the following measures: a. Improve community and neighborhood level air pollution monitoring. b. Add EJ members to all agency boards and committees. c. Tier pricing for allowances for facilities in EJ communities, making it more expensive to pollute in those communities. d. Improve communications about air quality between polluters and schools and nearby residents, both for individual accidents and in terms of overall facility emissions. Develop a cooperative, productive discourse. e. Provide easily accessible and immediate notification to schools and nearby residents in the event of a facility accident; current notification is much too slow. Develop and make accessible tools like the real-time air quality advisory network (RAAN) phone application, so residents can access real-time air quality information at the neighborhood level. f. Establish better coordination between enforcement agencies. Expand air quality night enforcement so that all communities have around-the-clock enforcement to address off-hours violations.
Partnership with Environmental Justice Communities	
13	Create a thorough air quality monitoring system and deputize the community to participate in that network through databases, apps, and community science. Fund a program to provide communities with the tools and training they need to participate. Identify the pockets not being monitored and also the hot spots. ARB must take a greater responsibility for monitoring. Ensure that all monitoring covers both greenhouse gas pollutants and criteria
Industry	
	pollutants, to expand the state's databases and accurately characterize all communities, so that CalEnviroScreen can more reliably identify areas that qualify for funding. Make monitoring transparent and accessible.

Energy, Green Buildings, Water	
Equity	
1	Develop aggressive energy goals toward 100% renewable energy by 2030 to reach emissions reduction sooner, especially if other sectors lag or increase emissions. Increase 2020 reduction target to 50%, aiming up to 100% reduction by 2050.
2	California must fully practice the state's energy loading order: prioritize all cost-effective energy efficiency, then demand response, and finally renewables and distributed generation. These priority strategies, in combination with energy storage, must be fully utilized prior to the use of natural gas power plants.
3	Expand rooftop solar in EJ communities, including desert communities. Use brownfields for solar.

4	Remove special considerations or exemptions for investor-owned utilities, and instead require them to develop power that is the most clean and efficient, and under the same rules and structure as their counterparts.
5	Imported electricity must not be considered renewable beyond the percent of renewable energy production (the renewable portfolio) currently existing in the exporting state. There must be no double-counting or incentives to encourage other states to burn fossil fuels.
6	Do not use Cap-and-Trade (or carbon trading, offsets) for the Clean Power Plan. The Clean Power Plan must ensure power is generated from sustainable, renewable sources.
7	Do not provide energy credits for biomass burning or count it as renewable energy. Make wood chips available from dead trees to use as mulch in gardens (don't burn it).
8	Carbon capture and sequestration power plant projects using captured carbon dioxide for enhanced oil recovery must not be certified as projects that sequester carbon for the purpose of carbon credits of any kind. Also, injection of carbon dioxide for sequestration purposes shall not take place without the express permission of all surface landowners above the zone of sequestration in order to qualify for carbon credits.
9	Climate investments and energy solutions (building retrofits, weatherization, solar, microgrids, etc.) must serve entire disadvantaged communities, rather than just individual buildings or homes. Other populations of note include: fixed-income, seniors, people with chronic conditions, and other low-income residents.
10	Develop innovation hubs for disadvantaged communities in order to support innovations, development and use of clean energy and weatherization, like low-cost solar cell stacking.
11	Upgrade residential building electrical systems to support clean energy upgrades in urban, rural and unincorporated communities. Increase progressive types of code for future upgrades. State funds for clean energy technologies in disadvantaged communities must allow for funding for maintenance and upgrades necessary for clean energy technologies. Create green development bank to fund energy efficiency programs in disadvantaged communities.
12	Prevent and mitigate negative land use impacts from energy projects, including increased dust from clearing land, sprawl, displacement, increased traffic, and understanding costs of these emissions projects.

Energy, Green Buildings, Water	
13	Set a moratorium on new oil and gas operations (refineries, power plants, fracking wells, etc.).
14	Phase out natural gas-based appliances and technologies, and transition to electric and solar thermal technologies. Offer energy efficient household appliance upgrades to low-income residents in particular.
15	Support tree planting and green infrastructure in communities to reduce energy use for cooling buildings. Such infrastructure could include cool roofs or permeable surfaces to cool community and reduce energy consumption.
16	Set and enforce greenhouse gas reduction targets for existing buildings and improve building codes. Broaden the definition of a "green building" to include retrofits of existing buildings in disadvantaged communities. Identify and implement best practices for retrofitting existing buildings.

17	Set goals for new and green buildings: all new constructions to be zero net energy (ZNE) by 2020, with none using natural gas or biogas. Include affordable housing buildings in ZNE goals.
18	Develop standards and support the construction of "living buildings" (regenerative buildings that more closely follow natural ecosystems, with features such as solar, water capture, efficient and affordable transportation options, etc.) within disadvantaged communities.
19	Provide direction to industry on best practices for rapidly moving toward widespread design and construction of green buildings within disadvantaged and low-income communities, and incentivize developers to adopt the standards and implement them. Ensure that building or retrofit costs are not passed along to low- and moderate-income tenants by providing tax incentives, or by adopting policies that prevent having those costs passed on to them. Share energy savings with renters.
20	Make pumping of water by the State Water Project in California 100% renewable by 2030, with consumers of the water paying for renewable energy installation and production along the project right-of-ways.
21	If geothermal energy is developed, ensure that it is benefiting, and not harming, the local community.
22	Identify the energy use and reduction goals for the proposed California Water Fix and Eco Restore project (formerly the Bay Delta Conservation Plan), including the pumps at Tracy (the single largest energy user in California).
23	Encourage regional self-sufficiency and conservation to maximize water supply through water recycling and rainwater capture, low-impact development, end-user education, and use of native plants, and by enforcing the proper use of landscape water. Provide resources to help low-income households install grey water designs for landscape irrigation.
24	Prioritize pollution prevention in all AB 32 projects and regulation. The provision and distribution of affordable, safe drinking water for all must be the highest priority. ARB is subject to code enforcement of making water available.
25	Stop investing in dirty energy. Eliminate subsidies and financing for fossil fuels and in technologies such as corn-based biofuels, agricultural methane, biomass burning, waste-toenergy, or other unsustainable technologies that result in negative impacts on EJ communities. Use funds instead for clean energy projects in EJ communities.
Coordination	
26	The California Energy Commission (CEC) must evaluate all renewable energy projects under the renewable portfolio standard (RPS) for lifecycle emissions and co-pollutants to ensure they do not create new problems in overburdened communities. The CEC must render

Energy, Green Buildings, Water	
	ineligible those technologies that increase local air quality burdens without direct and current 200% mitigation of all air quality impacts within ten miles of the project location. The CEC must ensure that imported renewable energy, including that from tribal lands, is consistent with California requirements.

27	Prioritize the siting of renewable energy, grid storage, microgrids, and community choice aggregation projects within communities identified by CalEnviroScreen. EJ communities need to be able to reap the environmental and economic benefits of these energy projects. Pilot 10–100 microgrid projects in EJ communities. The California Energy Commission must prioritize and maximize clean energy research and development investments in disadvantaged communities through its Electric Program Investment Charge (EPIC) Program and actively engage those communities in developing the investment plan for that work. Ensure that power companies do not disincentivize neighborhood-level renewable energy generation through taxes and feeds.
28	Avoid and mitigate any increased emissions from energy operations, and prioritize disadvantaged communities in this effort. The California Independent System Operator ("CAISO") must not pursue regionalizing the energy market if there are negative impacts like natural gas plant emissions increases or health effects on disadvantaged communities. Ensure an effective and aggressive adaptive management plan if there is grid regionalization. Prevent negative unintended consequences with strong inter-agency coordination between the Air Resources Board, California Public Utilities Commission (CPUC), California Energy Commission (CEC), CAISO, and local air districts, and in related proceedings and policy discussions.
29	The California Energy Commission (CEC) must provide guidance to state and municipal energy agencies to lower the barriers to pursuing deep energy retrofits to upgrade homes, businesses, and public institutions in low- to moderate-income communities. This can happen through the CEC's SB 350 Barrier Studies and any related follow-up studies.
30	Mandate local jurisdictions to install energy-efficient alternatives in community buildings (e.g., shopping malls, recreation centers) as they do in government buildings.
31	Coordinate federal, state, and local agencies to create a one-stop shop for residential, commercial, and industrial energy efficiency and renovation programs. Focus on the whole house rather than on one aspect at a time, so that multiple programs can be more easily accessed, and on retrofitting the whole community to leverage economies of scale. Make homes more energy efficient before installing renewables. Establish pilot projects to retrofit substandard low-income housing with federal Housing and Urban Development (HUD) funding.
32	Implementing agencies must build training partnerships with local institutions that have a proven track record of placing disadvantaged workers in career-track jobs (such as community colleges, nonprofit organizations, labor management partnerships, statecertified apprenticeship programs, and high school career technical academies).
Partnership with Environmental Justice Communities	
33	Increase literacy about clean energy programs and services, especially for people in geographically, linguistically, and/or economically isolated communities. Use trusted sources of information such as community-based organizations, school curricula, outreach to immigrant communities in-language and employ culturally appropriate and multigenerational messaging techniques.
34	Identify, implement, and standardize metrics to track energy savings, quantify energy reductions, conduct post-project assessments to ensure accountability, and survey local

Energy, Green Buildings, Water

	activities to determine if strategies are working (or not). Use EJ residents as a resource for data collection.
35	Promote more education to water end-users about ways to conserve water and energy.
Economic Opportunity	
36	Promote the development of community-driven clean energy projects that hire from disadvantaged communities, prioritize community ownership of (and equitable access to) clean energy technologies, maximize energy bill reductions for low- and moderate-income communities within disadvantaged communities, and prioritize anti-displacement strategies. For climate projects, employ project labor agreements, best-value contracting and local/targeted hire goals to provide access to career-track construction jobs for disadvantaged workers. In consultation with state workforce agencies, direct implementing agencies of climate programs to develop specific goals to train and facilitate employment of workers from disadvantaged communities. Use CalEnviroScreen, other robust screening tools, and local unemployment data to identify and prioritize communities for job creation programs.
37	ARB shall work with appropriate state agencies to identify and develop data and criteria for measuring economic and employment co-benefits resulting from AB 32-related public investments. Develop measurable targets and a process for determining if those targets are met. To improve transparency, report progress or lack of progress to the community regularly. Provide better oversight of climate change investments to ensure they benefit all EJ community members.
38	Maximize carbon reduction and energy savings by directing implementing agencies to promote the highest quality work, standards for participating contractors, and minimum training and skills for workers.
39	Provide scholarships for college work in relevant clean energy fields.
40	Develop incentives, rebates, and financing mechanisms to accelerate equitable access to clean energy technologies in low-income households, apartment buildings, small businesses, and other community-serving facilities such as community centers, churches, health clinics, schools, parking lots, local industry buildings, and community-based organizations. Surplus energy can be invested back into the community or to cleanly fuel industrial facilities. Eliminate landlord signature for energy improvements or rebate application programs; obtaining a signature can be difficult and landlords sometimes increase rent after upgrades.
41	Develop incentives and phase in requirements for renters and landlords to provide energy efficiency upgrades and provide upgrades that enable buildings to use renewable energy technologies and water capture. Update building and zoning codes to support renewables. Enable builders to fast-track a project if it includes solar. Follow U.S. Department of Housing and Urban Development (HUD) program guidelines so landlords cannot raise rents due to improvements.
42	Lower finance barriers and increase access to low- and no-interest energy efficiency financing for the low- to moderate-income single-family, multifamily, and small business sectors. This includes credit enhancements, interest rate buy downs, rebates, low-interest loans, and supporting the use of alternative measures of creditworthiness to provide greater access to affordable capital.
43	If federal tax credits for residential solar installations are discontinued in the future, California must make up the difference with state tax credits and rebates.

44	If federal tax credits for small business solar installations are discontinued in the future, California must make up the difference with state tax credits and rebates.
Energy, Green Buildings, Water	
45	Protect low-income households from energy price spikes.

Transportation	
Overarching Principles	
We envision a California where all communities breathe clean air and have access to safe, affordable, clean transportation options. The following recommendations will help to achieve this vision. The themes present in this Transportation Section that can be lifted up as overarching principles are: a. Access to clean transportation technologies b. Meaningful investments in disadvantaged communities c. Capturing economic benefits in disadvantaged communities d. Coordination of state and local agencies e. Reporting on actual impacts of programs, particularly community level impacts f. Robust community participation	
Equity	
1	The top priority for transportation planning and investments is to reduce vehicle miles traveled (VMTs) while increasing access to affordable, reliable, clean, and safe mobility options in disadvantaged communities.
2	Examine mobility regionally, as there are different challenges and opportunities in different areas of California. For example, reduce transportation emissions along the border with Mexico by focusing on cross-border commuting. Reduce the long border wait lines and idling by increasing lanes for walking and biking, providing zero-emission bus and shuttle options, and increasing transportation infrastructure to support traffic.
3	Expand transit services to provide neighborhood-level access, use different vehicle sizes and types to ensure economies of scale, sustainability, and accessibility to disadvantaged communities. Increase access to buses and trains for youth, students, elderly, those seeking medical care, and low-income riders. Employ free or discounted transit passes for these groups. Prioritize funding for buses in areas where buses are relied upon more by low- and moderate-income commuters in disadvantaged communities.
4	Define *infrastructure* not just to include highways, freeways, new fueling stations, and roads, but also sidewalks, bike paths, and green infrastructure. Invest in multi-modal and shared transportation instead of building new freeways. Furthermore, state and local government agencies must not count building freeways as a GHG reduction strategy.
5	Ensure that there is sufficient infrastructure to support new and current low emission vehicle types (i.e. bikes, electric vehicles, etc.). The state must strengthen and identify more opportunities to fund and mandate local land use decisions that support a low-carbon future and protect the health of local residents.

6	Promote more community-friendly land use planning that prioritizes the health and economic wellbeing of environmental justice communities and is developed in close consultation with community members. We recommend the following community-friendly land use planning strategies: a. Design and implement new incentives, beyond tax credits, to encourage infill and mixed-use development over sprawl. Develop and implement land use, building code, and permitting changes to streamline planning. b. Increase support for use of cleaner, safer sidewalks and bike paths. Better lighting,

Transportation	
	increased distance or barriers from roadways and freight railways. increase bike and path/sidewalk sweeping c. Ensure that the placement of bus garages, terminals, and hubs does not disproportionately impact environmental justice communities and pursue measures to reduce environmental impacts from these facilities. d. Promote and fund projects that create clean, safe, and accessible mobility pathways and networks for environmental justice community members, particularly more sensitive populations such as youth, elderly, and those with health problems. Mobility options must include more active transportation options such as bike paths and sidewalks. e. Improve existing transit resources, including increasing the number of bus stops where needed, developing intelligent and connected bus stops, and improving bus stop infrastructure (e.g., covered and better lit bus stops with more benches). Transit planning and maintenance must prioritize safety and coordinate with last mile initiatives. Transit planning must also prioritize efficiency and support routes that promote accessibility, reduce health impacts from criteria pollutants, and lower GHGs. f. Plan for dedicated bus lanes on the freeway to promote the efficiency and use of public transportation. The buses themselves must be cleaned more frequently and must integrate more easily with other mobility options such as biking and trains/trolleys to help increase user satisfaction and ridership.
7	Target truck fleets and vehicle fleets with electrification and cleaner, sustainable fuels to achieve the quickest, most significant reductions in emissions. The state must increase the fleet turnover target to at least 40%.
8	Actively support and implement California Cleaner Freight Coalition's recommendations to California's Sustainable Freight Action Plan.
9	Develop strategies that ensure small independent trucking companies and concerns are incentivized to transition to zero or near-zero emission vehicles as well as more efficient truck technologies.
10	Restrict truck routes and travel times and limit new trucking operations to reduce vehicle miles traveled to reduce their operational impacts in disadvantaged communities. Increase monitoring and enforcement of these requirements.
11	Support sufficient charging and refueling stations along freight corridors.
12	Increase the required reduction of carbon intensity of fuels under the Low Carbon Fuel Standard from the current 10% to 30% by 2030.

13	Eliminate the assumption in the Low Carbon Fuel Standard Life Cycle Analysis (LCFSLCA) that methane is a necessary by-product of dairies. This will eliminate the awarding of avoided methane emissions credits to dairies. Instead, methane emissions must count as an emissions debit against the fuel. Conduct a new LCFSLCA using standard methodologies applied to all organic and artificial chemical energy sources.
14	Promote clean and renewable energy sources to power vehicles. Plan electric vehicle programs and electricity supply together. Increase coordination among energy and transportation agencies to help ensure the success of supporting initiatives.
15	Study the emissions reduction benefits from increasing gasoline prices.
16	In support of state electric vehicle goals, such as SB 1275, the state must develop and provide funding for a program that ensures deep penetration of electric vehicle use and charging capacity in disadvantaged communities. This must include a pilot program that

Transportation	
	does the following: a. Funds demonstration program placing new and used electric vehicles, along with associated charging and maintenance infrastructure, in at least seven low-income and disadvantaged communities at the residential level, to evaluate best practices and accelerate their integration in these communities statewide b. Ensures a proper diversity of population density: urban, suburban, and rural areas c. Prioritizes areas with aging infrastructure d. Focuses on expanding access to electric vehicle use in schools in disadvantaged communities

17	Accelerate ownership and access to zero-emission vehicle technologies, through the following strategies: a. Universal application and point-of-sale rebates or vouchers for new and used electric vehicle and other clean energy programs in place by June 2017 b. Rebates for used electric vehicles available (outside of Enhanced Fleet Modernization Program (EFMP) and Plus-up project) by June 2017 c. A minimum of 20% of non-luxury multi-unit dwellings have electric vehicle charging stations (or stubs) by 2020 d. A minimum of 25% of state investments in electric vehicle charging station infrastructure occurs within disadvantaged communities e. ARB's "Electric Vehicle Car sharing Program" funds at least 50 projects by 2020 f. Employment and Education Shuttle rebates to fund at least 20 ZEV or hybrid vanpooling and carpooling (including support for charging infrastructure) projects that support community-serving workforce training programs and employment by 2020 g. At least 20 "last-mile" free electric shuttle/bus programs providing transportation to community-serving facilities (e.g., clinics, community colleges, community centers, hospitals, government facilities, job centers, shopping centers) in place by 2020. There must be a regionalized effort to promote integrated solutions connecting community members from public transit to their destination. h. All school districts in disadvantaged communities have electric school bus fleets by 2020. i. Provide incentives to small-businesses (particularly those heavily reliant upon goods movement) for the purchase or use of zero-emission medium- and heavyduty vehicles. j. Support and finance zero-emission truck and bus initiatives outlined in SB 1204.
18	Ensure that clean transportation infrastructure and mobility options are available in rural, indigenous, and small communities. Specifically: a. Fund and support clean transportation options for low-density communities with less cars and transportation resources. Vanpooling, community-driven ride-sharing (i.e., Green Raiteros in Huron, California), more frequent buses, and bus routes are examples of more mobility options that are more targeted for rural and small communities. b. Target clean mobility incentives to farmworkers who may not have vehicles or need smog tests for polluting vehicles.

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19	Improve access to transportation options (active transport, mass transit, ride-sharing) through the following recommendations: a. Promote more effective outreach and information sharing about zero-emission vehicles and other clean mobility options, as well as information about daily air quality conditions. 1. Work with the car industry and ethnic ad agencies on advertising and more targeted campaigning in multiple languages. 2. Get information out through a cell phone application that is free and available in multiple languages. 3. Work with community-based organizations to ensure that this information is available to community members who do not have access to a smart phone. b. Promote and fund community-driven, community-owned, affordable and accessible ZEV shared mobility options in environmental justice communities.
20	All SCSs and transportation project analyses, policies, and investments must include metrics around displacement and gentrification. Non-displacement of residents must be met as part of the permitting process and before awarding funds, and methods for enforcement must be identified.
21	California must promote a culture shift to more efficient and clean mobility options such as mass transit and active transportation. Streamline and promote widespread access to clean mobility options using the following recommendations: a. Promote and incentivize telecommuting as a way to reduce vehicle miles travelled, particularly for communities that have been displaced from areas closer to their work. b. Decrease vehicles idling by working with appropriate stakeholders to retime traffic lights, develop adaptive traffic management systems using real-time data, promote the use of signage or other efforts to reduce idling at drive-throughs and other businesses. c. Partner with businesses and provide outreach, education, and incentives to encourage truck drivers and companies to reduce emissions, reduce idling, and promote more a more efficient use of medium- and heavy-duty vehicles. d. Encourage more ride-sharing by employers.
22	The state must support research on the following topics: a. Growth regional growth projections with an assessment of clean mobility needs in the future. b. Updated and more targeted, scaled down science on the cumulative impacts of pollutants within environmental justice communities. c. Unintended consequences from clean transportation policies and investments on low-income individuals and environmental justice communities (e.g. displacement, impacts on vehicle miles traveled). d. Impacts of road use fees to generate revenue and discourage driving.
Partnership with Environmental Justice Communities	

23	Through robust community participation, ground-truth the actual impacts of program planning and implementation. Strategies include the following: a. Conduct and prioritize community needs, network analysis, and mobility assessments. Transportation agencies and planning groups must be mandated to address mobility gaps in EJ communities and for seniors, low-income populations,

Transportation	
	and people with disabilities. b. Conduct equity analyses when evaluating and implementing transportation options to prevent adverse secondary effects in disadvantaged communities (e.g., the Los Angeles FasTrak program which resulted in more vehicles on artery streets, creating even worse air quality problems for those communities) c. Conduct equity analyses in transportation projects to ensure that investments go to those most impacted by pollution and economic disparities d. Benchmark and track where projects are implemented to measure the emission reduction progress and economic return in disadvantaged communities e. Measure emissions reductions by per capita VMT
Coordination	
24	ARB must work with the California Energy Commission through its EPIC and ARFVTP funding sources must support the advancement of clean transportation innovations within environmental justice communities and must engage community-based organizations in investment plan development.
25	Sustainable Community Strategies (SCSs) must be improved in the following ways: a. SCS compliance with ARB greenhouse gas reduction targets must only be based on documented land use and transportation changes. b. ARB setting strong target for all Metropolitan Planning Organizations. Eliminate the "5 and 10" default for Regional Transportation Plans (RTPs). c. Metropolitan Planning Organizations must only be allowed to authorize implementation of projects that are included in the most recent SCS. d. Transit agencies must be required to adhere to projected routes and costs in the adopted SCS unless alternatives demonstrate increased emission reductions while maintaining or improving access to alternative transportation choices. e. Implementation of SCSs must prioritize investments in disadvantaged communities. f. ARB must consider California Transportation Plan 2040 and Regional Transportation Plan Update guidelines (see also section on improving coordination).
26	Strengthen oversight by state of local government activities. ARB must provide detailed guidance on local zoning to carry out climate and air quality priorities. Furthermore, state agencies need to give local transit authorities more direction about anti-discriminatory Title VI expectations, to promote more equitable funding of transit options, especially regarding fare increases and route changes that may limit access to transit.
27	Financially support transit operations and restoration of transit service and routes and expansion of services where lacking in disadvantaged communities.

28	Establish better interagency coordination among state, federal, and local agencies when planning projects and awarding funding. The following outline specific opportunities for improving coordination: a. Coordination must be transparent and actively seek community and stakeholder input. b. ARB must consider the California Transportation Plan 2040 and Regional Plan Update guidelines in developing and implementing its own planning documents, including the Scoping Plan. c. ARB must improve coordination with California Environmental Protection Agency (CalEPA) and the United States Environmental Protection Agency (U.S. EPA) to
Transportation	
	promote better scientific research on pollution impacts within environmental justice communities and pursue initiatives to prevent harmful cumulative impacts. d. ARB, California Public Utilities Commission, and California Energy Commission must better coordinate electricity planning and the planning of program supporting electric vehicle use to help maximize the use of renewable electricity for transportation, to ensure infrastructure needs are met for electric vehicles, and to better understand opportunities for renewable integration efforts. e. CalTrans and local governments must prioritize greenhouse gas reduction and public health and safety in funding activities and policies.
Economic Opportunity	
29	Prioritize the advancement of economic benefits such as job and workforce training opportunities in disadvantaged communities. Build skills and capacities locally, so infrastructure can be maintained and further advanced.
30	Technical Assistance and Marketing, Education, and Outreach (ME&O) – The state must dedicate funds toward helping less-resourced communities and small businesses take advantage of clean transportation investment opportunities. It is important to develop community-specific technical assistance and ME&O plans to maximize efficacy of outreach efforts.
31	Job Placement and Training – The state must dedicate resources for community-based organizations that support clean energy career pathways for disadvantaged community members. These pathways must include but not be limited to: job placement, apprenticeship opportunities, and building skills that are transferable to a broad set of clean energy jobs.
32	Ownership and Access – The state must support the increased access to and ownership of clean energy and clean transportation technologies and mobility options in disadvantaged communities (discussed in more detail above).

Natural and Working Lands, Agriculture, Waste
Coordination

1	ARB and other state agencies (including the California Public Utilities Commission, California Energy Commission, Office of Environmental Health Hazard Assessment, Department of Toxic Substances Control, and CalRecycle) must undertake a process to examine the growing evidence that biomass and biogenic carbon have real and significant climate impacts, examine the long-distance transport contribution to overall greenhouse gas impacts of burning biomass material, and examine assumptions of health and environmental impacts from burning various materials considered to be biomass, including the impacts of biomass ash. Ash from burning biomass, urban wood waste, and other materials has been found to be dumped on California agricultural land in recent years, and this ash has been found to be contaminated with dioxin and other health-threatening chemicals. Before pursuing increased burning of biomass in California, ARB, the Natural Resources Agency, and related agencies must investigate where ash from the existing burning of biomass is ultimately being dumped, the environmental justice impacts and impact on agriculture, and the cost of biomass ash handling in California. This is of growing importance as new EPA regulations allow for the increased burning of waste and biomass at industrial facilities (i.e. industrial boilers, cement kilns), and as material deemed to be biomass are exempt from compliance obligations under California's Cap and Trade program.
2	Establish better coordination between ARB, Caltrans, the California Energy Commission, CalRecycle, the Department of Toxic Substances Control, and other agencies whose purview include Natural Lands, Agriculture, and Waste-related emissions. Together, these agencies must be available for consultation with EJAC to support plan and policy development.
	Equity
3	Data Collection – timely and comprehensive data collection is essential to avoiding negative impacts and ensuring co-benefits. Such data must include: a. emissions from forestry and wood products, since forest management is a net source of greenhouse gases. b. wildlife habitat (including agricultural land) to facilitate conservation and link to the greenbelt. c. metrics to quantify the greenhouse gas benefits of managing natural and working lands. Achieve consensus on how to measure greenhouse gas emissions reductions from activities in natural systems. Discuss and agree upon these metrics with the interagency working group and community stakeholders.
4	No credits must be given for landfill or for biodigestors for greenhouse gas avoidance. The state's biomass garbage and all other incinerators, including but not limited to gasification, will be treated like other carbon-intensive industries and pay for all carbon emissions under California's Cap and Trade program. At a bare minimum, the state must align with the requirements of the EPA's Clean Power Plan (CPP) on this point. The CPP clearly recognizes that carbon dioxide emissions from burning the fossil fuel-based portion of garbage (i.e., plastics) must be counted. CPP also acknowledges that incineration undermines waste prevention programs, which have significant climate benefits. Beyond this minimum accounting requirement, the state already recognizes the benefits of using compost (from food, paper, wood, yard waste, and other natural materials in the waste stream) to store carbon in the soil. Thus, the carbon dioxide emissions of burning such materials must also be counted in the state's Cap and Trade program. Additionally, the state must revoke all existing incinerator carbon credits. Disincentivize and discourage locating biomass and
	digesters in disadvantaged communities or in close proximity to housing.

5	Healthy Soils – a critical element to land and waste management is soil regeneration. Strategies include: a. Implement climate action plan goals for urban agriculture and community gardens with integrated composting strategies. b. Research and market development for creation, storage, and application of compost for environmental health protection and carbon sequestration, the composting of woody materials together with manure, and agricultural land application of mulch from excess woody materials. c. Promote urban hydroponics and aquaponics. d. Ban agricultural burning of waste; Provide a baseline credit for applying carbon back to soils. e. Promote composting by providing education and assistance to implement composting in all communities. Support the expansion of infrastructure for composting where necessary, and map out the mechanisms for composting in each community. Share best practices between municipalities to ensure all residents have access to programs. Incentivize neighborhoods to compost food waste from schools and at the community level. Establish communication plans that show Californians how to compost and motivate people. f. Promote biologically intensive (regenerative organic) agriculture for the variety of agricultural, environmental, and economic benefits it provides, and to rebuild soil g. Stop overgrazing h. Do not strip forest waste from the mountains to feed biomass plants; instead, sequester the carbon on site through chipping and burying. i. Manage forests to maintain a solid canopy and replant open areas immediately. j. Build clean air, water, and healthy soil consciousness aggressively. k. Mandate that all communities balance natural and working lands to sequester carbon and uptake pollution to replenish natural systems. l. Develop a simple metric for soil carbon or soil organic matter (SOM), to set up a meaningful reward system for carbon farmers who meet an obvious threshold of SOM or carbon sequestration.

6	Waste diversion – a. Establish waste diversion programs like "pay as you throw," where people pay per pick up amount b. To minimize emissions from waste and recycling trucks fleets, establish more efficient routes and use cleaner fuels. c. Enforce the mandate that commercial buildings have recycling programs d. Set composting as the primary goal for incentivizing waste diversion. Waste needs to be composted and recycled as close as possible to its point of origin and/or collection. Communities must take full ownership of their waste and not export it to disadvantaged communities, and must recognize that impacts stem from not only the waste, but also the use of diesel trucks to carry the waste away. Encourage the use of waste as a resource and support infrastructure investments that maximize recycling and composting programs. Ensure that environmental justice communities do not become the repositories of this excess waste. Finished compost can be exported where it's needed to support forestry and agriculture focused carbon sequestration goals e. Divert dairy waste as fertilizer and for carbon sequestration before it can be converted to methane.

7	Waste from "renewable resources" like geothermal need to be evaluated, managed, and waste and other externalities must be considered, in the determination of renewable energy sources. Do not use or provide financial support or investment to gasification and biofuels as qualifying renewable options.
8	Develop more local agricultural processing centers so food is not being trucked long distances. Introduce a scoring system for food that indicates food-miles traveled. Encourage local food processing of food and meat, and educate people on the greenhouse gas reduction benefits of not eating meat. Establish public financing for healthy, environmentally sound food sources.

9	Restrict sprawl— a. use productive lands for production. Do not use usable agricultural lands for solar and wind farm projects. Such projects produce only a few, short-term jobs and the electricity is sent to large population centers, which results in farmworker displacement and a net job loss. Recognize that with new agricultural technologies, lands seen as "marginal" are greatly reduced. If solar or wind farms are created, provide job training locally for long-term, well-paying jobs operating and maintaining those technologies. b. encourage less driving. c. Support lifecycle analyses of sprawling developments to determine long-term economic and societal costs versus infill projects, to identify actual costs. d. Support local training, education, and incentives for architects, planners, engineers, and developers to design and develop infill building projects rather than sprawling developments. Provide incentives such as guarantees for a more streamlined planning and approval processes for infill projects. e. Protect greenspace and expand it in disadvantaged communities, insure equity though better enforcement of SB375/SCSs. f. Identify, develop, and implement policy tools to prevent the current trend of gentrification and displacement of local residents, businesses and people of color, pushing residents and people of color out of their communities. Do not provide greenhouse gas reduction funds for improvement projects that will displace current local residents, businesses, and nonprofits.
10	Encourage watershed inventory and awareness. We need better infrastructure and drainage in low-income communities to eliminate pooling polluted water on neighborhood streets and property; and that addresses the high pollution levels that lead to asthma and other illnesses.
11	Integrate urban forestry within local communities. Revise the goal of increasing tree canopy by 5% by 2030 to 20%–30% by 2030. Conduct research to identify methods of achieving that increase given drought conditions. Include urban tree and greenspace maintenance, not just planting/creation.
12	Build biomass, do not burn biomass. Instead of incinerating biomass from trees and municipal solid waste, which puts more carbon dioxide into air immediately, we recommend ARB expand its work to identify and support methods for returning that carbon to the soil, such as composting biomass together with manure. Investigate the growing evidence of carbon sequestration benefits from applying compost to grasslands (resources include the Marin Carbon Project and UC Berkeley Dept. of Environmental Science researchers). Additional benefits of such measures are the reduction of methane and nitrogen oxides, reduced synthetic fertilizer imports, and reduced water use.
13	Identify and establish effective methods for implementing food rescue programs, with quality controls to avoid dumping inedible food on communities. Identify strategies for
	getting edible food to those who need it. Incentivize these programs and promote communication plans for projects, so all communities have access to successful plans.
14	Push innovation on measuring waste and learning how to conduct activities. Overcome infrastructure barriers in dealing with waste.

15	Perform a complete lifecycle analysis of dairy and other bio-digester technology and related infrastructure investment. If biogas from dairies is converted to bio-methane, ARB must mandate that vehicles servicing digesters and converters utilize that gas as a primary fuel source. This is a better use of the fuel than building new pipelines and related infrastructure to transport the gas to other locations.
16	Expand the definition of "urban forestry" to include "rural desert urban forestry," "rural/urban interfaces," and "rural desert communities," so those areas can qualify for funds to support tree planting.
17	Support community land trusts to address gentrification and preserve affordability and access
18	Research and identify alternatives for dumping biosolids (sewage sludge) in disadvantaged communities. Pilot a program to explore and demonstrate better options.
Economic Opportunity	
19	Quantify potential local jobs created from regenerating forests, both urban and rural. Include jobs for maintenance of all green environments, and increase funding to support local workforce development in support of this industry. Fund green infrastructure technician training and tree care maintenance jobs for green space.
Partnership with Environmental Justice Communities	
20	In consultation with all stakeholders including tribal councils and local communities, design and implement healthy forest management strategies that ensure sustainability of the existing forest canopy and decrease extreme wildfire events.
21	ARB must implement a public outreach and education campaign on the climate and co-benefits of urban agra-forestry, as well as the myriad benefits of urban greening in creating livable, healthy communities.
22	Continue to work with local communities and other stakeholders to refine metrics and tools that better quantify the greenhouse gas benefits and co-benefits of managing natural and working lands, including urban green spaces and trees. Achieve consensus on how to measure greenhouse gas emissions reductions from activities in natural systems.

California Climate Investments	
Long-Term Vision	
1	Emphasize regulations that force the advancement of clean technologies. Ensure that nearterm technologies do not adversely impact communities and long-term investments moves towards zero emissions.
Equity	

2	Greenhouse Gas Reduction Fund projects must be transformative for disadvantaged communities, in ways defined by each community themselves. California climate investments must take a place-based, regional approach focused on the unique needs of the people of each region, and prioritize projects that boost regional capabilities and economies. The state must support the ability of communities to use technology to communicate progress to the state. These projects must never result in displacement.
3	Within SB 535, further prioritize attention and funding for disadvantaged communities that experience increased greenhouse gas emissions despite implementation of AB 32 programs.
4	Create a formula for funding allocations that ensures investments are equally distributed across DACs in California.
5	To ensure adequate and continued funding of programs, EJ communities must have access to additional funding beyond Cap-and-Trade and the Greenhouse Gas Reduction Fund.
6	No funding must be given to fossil fuel-based industries or any regulated entities under AB 32.
7	Increase accountability of all grantees with regard to reductions claimed for their Greenhouse Gas Reduction Fund (GGRF) funded activities. Provide tools and training so communities can monitor progress based on data.
Economic Opportunity	
8	Spend Greenhouse Gas Reduction Funds (GGRFs) to incentivize local economic development so people can get well-paying local jobs closer to their homes and avoid displacement. Also incentivize local contracting to substantially involved community-based organizations so communities can build capacity at the local level. Community-based organizations must be required to demonstrate community support before receiving funds. Create a system that allows nonprofit organizations to earn points or access to the funds for providing improvements in Environmental Justice communities. For example, larger projects could include nonprofits as part of their proposals, or nonprofits could tap into Cap-and-Trade funds to help supplement their grants.
Partnership with Environmental Justice Communities	
9	The EJAC must help with outreach, accountability, and helping agencies prioritize investments. We must also inform the funding guidelines and investment plan.
10	The Greenhouse Gas Reduction Fund (GGRF) program staff representatives must attend EJAC meetings to provide information and gather input from EJAC members. ARB climate investment staff must identify ways to provide information to EJAC communities and gather community feedback in response. Insure community outreach and engagement is empowered to hold agencies accountable to help them prioritize activities and continually inform guidelines as they relate to ay investment plan.
11	Innovation must come from both the communities involved and ARB. ARB must support K–12 and local college educational programs that educate students about climate change and teach them how to use tools to address it (e.g., students wearing technology that shows the air quality). ARB must work with schools and local colleges to support environmental
	literacy and sponsor multigenerational understanding of climate change and its impacts on the larger community. Funds gathered through polluter violation fees must be used to pay for educational programs in the affected communities.

Panoche Energy Center
Legacy Contract Background

Letter
CT 5 PANOCHE

I. **The Issue**

- Panoche Energy Center (PEC) in Firebaugh, CA is a 400 MW natural gas peaking electric power plant that has historically been determined by the California Air Resources Board (CARB) to be a "Legacy Contract Generator" under the current Cap-and-Trade Regulation. This status recognizes that the PEC facility is unable to pass along GHG costs associated with the program under its contract with PG&E to the ultimate consumer of the electricity. These "stranded costs" are very significant and growing.

- CARB is currently amending the Cap-and-Trade Regulation to make modifications which take effect next year and also extend the program post 2020. In the immediate time preceding the amendment package release, staff presented at a public workshop a proposed solution for the issue facing PEC—to treat the facility the same way as other non-power plant Legacy Contract holders[1]. But the subsequently published amendments reversed course (without opportunity for public input) and now propose to completely eliminate "Legacy Contract" status and regulatory relief for PEC[2]. The current draft amendments would leave the PEC facility, along with its bondholders, which include public pensions, completely exposed to the price of compliance. This is an inequitable situation not encountered by any other power plant inside or outside of California.

- The CARB Board is meeting on September 22 to hear the entire amendment package. Without an acknowledgement from the Board for staff to continue to address this issue CARB's current proposed amendments will strand PEC with the entire cost of the regulation--a total stranded liability exposure for 2015 will exceed $5,000,000. Over the next 12 years PEC's stranded liability is set to be no less than approximately $108,000,000, and likely will be much more.

- Under PEC's exclusive contract with PG&E signed in 2006 (before AB 32 was finalized, hence the term "legacy contract"), PEC operates the facility exclusively for PG&E. PG&E has full control over when the facility runs, and therefore also has control over the quantity of GHG and criteria (smog forming) emissions the facility emits.

- Critically, the fundamental "carbon price signal" associated with AB 32 is missing from the cost to PG&E's (and its ratepayers) for electricity from the facility. Without a price of carbon built into the dispatch orders, the facility has been operating far more than normal/design thus increasing: 1) costs for PG&E ratepayers, 2) increasing local air pollution, 3) increasing the use of scare water resources, and 4) dramatically increasing the costs of operation, and 5) completely defeating the regulatory "price signal" intended to be sent to consumers.

- For the past three years, despite repeated attempts, PEC has not been able to negotiate a workable contract amendment with PG&E. The prior regulatory relief (set to be eliminated) and the current proposed amendments (failing to address PEC's issue), create zero burden or incentive for PG&E to address this situation, but their ratepayers, the citizens of the San Joaquin Valley, the facility bondholders, and the environment are all losers in this equation. There are no winners under the current proposal.

- If CARB were to revert to the earlier staff proposal, market forces would bring the operation of the facility into line with its design efficiency, it would release less local air pollution, it would use less water, it would cost less to operate and thus saving PG&E ratepayers on operational costs, and there would be a consistent policy price signal under AB 32. CT5-1

[1] June 24, 2016 Workshop https://www.arb.ca.gov/cc/capandtrade/meetings/062416/arb_and_caiso_staff_presentations_updated.pdf (slide 35)
[2] July 12, 2016 Released https://www.arb.ca.gov/regact/2016/capandtrade16/appa.pdf

PACIFICORP

Letter
CT 52 PACIFICORP

September 19, 2016

VIA ELECTRONIC SUBMISSION

Clerk of the Board
Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Comments of PacifiCorp on the August 2, 2016 Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation and the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions

PacifiCorp respectfully submits these comments in accordance with the public notices issued August 2, 2016 on proposed amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation ("Cap-and-Trade Program") and the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions ("MRR").

I. Regional ISO and Energy Imbalance Market

As part of its proposed amendments, the California Air Resources Board ("ARB") is proposing to modify how it accounts for greenhouse gas emissions that are imported into California via the energy imbalance market ("EIM"). With respect to these proposals, PacifiCorp's central interest is in preserving the value and integrity of the EIM while also respecting California's environmental objectives. As they are currently proposed, the amendments to the Cap-and-Trade Program and MRR have the potential to negatively impact the EIM, including emissions reductions currently being achieved. Moreover, the current proposal is unlikely to solve issues raised by ARB regarding the existing methodology for identifying emissions associated with electricity imported to California via the EIM. To more effectively achieve California's overall environmental and energy policy objectives, PacifiCorp recommends that these complex issues be resolved as part of a joint inter-agency effort between ARB and the California Independent System Operator ("CAISO"). ARB's accounting for emissions associated with electricity imports is unavoidably intertwined with the CAISO methodology for identifying those electricity imports. The CAISO methodology for identifying emissions and the associated regulation and accounting by ARB should be developed and/or modified at the same time. ARB's current proposal is made in the absence of a clear proposal from the CAISO as to any potential changes to the existing methodology. In light of potential negative impacts to the EIM and a future multistate Regional Independent System Operator ("RSO"), accounting for emissions associated EIM imports must be much more carefully considered before the adoption of any proposed amendments.

While ARB's amendments are pending, the CAISO recently announced a new stakeholder initiative called Regional Integration California Greenhouse Gas Compliance. This initiative will determine how greenhouse gas costs for supply resources outside of California will be treated in the CAISO's integrated forward market covering an expanded multi-state balancing authority area. In the issue paper for the RSO initiative, the CAISO acknowledges the connection between greenhouse gas treatment in the EIM and the RSO, noting that it is currently working with ARB and stakeholders to address concerns that the EIM greenhouse gas market design is not capturing the impact on the atmosphere that occurs in connection with EIM transfers into the CAISO to serve CAISO load. The paper states, "Resolution of those concerns may inform how to address similar concerns in connection with a day-ahead [greenhouse gas] market design." As noted above, these complex issues should be addressed jointly by CAISO and ARB to ensure the harmonization of energy and environmental policies and to avoid both economic inefficiencies and emissions leakage.

A. The EIM Has Resulted In Significant Economic and Environmental Benefits for Entities Inside and Outside of California

The EIM is of critical value to PacifiCorp as well as other existing and future EIM participants in terms of both economic and environmental benefits. The EIM provides significant benefits to electricity customers both inside and outside of California in the form of economic, reliability, and renewable integration benefits. By accessing a wider portfolio of resources, the EIM can reduce the amount of reserves needed to maintain system balancing within an intra-hour time interval and automatically dispatch generation needed to meet future imbalances. The geographical diversity of loads and resources participating in EIM also enables improved integration of variable energy resources which can be managed more closely and at lower cost. In this way, the EIM can also facilitate the reduction of greenhouse gas emissions by enabling greater integration of renewable resources.

The CAISO quantifies benefits associated with the EIM on a quarterly basis. As of July 28, 2016, the CAISO estimated the total benefits of the EIM to be $88.19 million from November 2014 through June 2016. Of this total, $28.14 million in benefits accrued to the CAISO region. In addition, the EIM has resulted in overall greenhouse gas emissions reductions: a recent analysis conducted by the CAISO found that from January-June 2016, EIM dispatch reduced greenhouse gas emissions by 291,998 metric tons.[1] These emissions reductions (and economic benefits) are largely enabled through transfers across balancing areas. In other words, if not for energy exports out of California facilitated by the EIM, some renewable generation located within the CAISO would have been curtailed. Generally, these renewable exports displace energy from higher-emitting resources outside of California. The EIM has resulted in actual emissions reductions of greenhouse gases in the Western Interconnection. Importantly, these actual emission reductions are quantified through CAISO's assessment of resource dispatch with and without the EIM and are a result of exports of renewable energy from California which displace higher-emitting resources outside of California.

Not only have emission reductions been realized from avoided renewable curtailment in California, but the EIM has allowed PacifiCorp to experience environmental benefits on its own

[1] http://www.caiso.com/Documents/EIMGreenhouseGasCounter-FactualComparison-PreliminaryResults_JanJun_2016_.pdf

system by enabling PacifiCorp to balance greater quantities of generation from its renewable resources. These renewable resources are not bid into the EIM but are nonetheless subject to the CAISO's five-minute dispatch for purposes of managing imbalance. Though these resources are not eligible to be "deemed dispatched" to California because they are largely flagged as ineligible to be dispatched to California[2], the absorption of unexpected increased generation from these resources is nonetheless enabled by EIM transfers to California. PacifiCorp's wind and solar generating capacity has increased by 39 percent thus far in 2016 (compared to 2015), from 1,952 megawatts to 2,712 megawatts; PacifiCorp anticipates the addition of another 322 megawatts to come on line by the end of 2016. This year-end capacity of 3,034 megawatts is expected to constitute 29 percent of PacifiCorp's peak load. The ability to integrate this level of variable generation is in part enabled by the EIM. PacifiCorp's owned-resource emissions from January-August 2016 are 14 percent lower than the average of the previous five years for that time period, partially due to PacifiCorp's participation in the EIM and associated greater integration of renewables.

As will be described in detail below, ARB's proposals, in particular the removal of the EIM from the resource shuffling safe harbor, have the potential to significantly dampen continued interest in EIM and, in the extreme, result in entities such as PacifiCorp choosing to discontinue their participation in EIM altogether as the only way to avoid an enforcement action. Given that the EIM has already resulted in demonstrable emissions reductions, ARB should strive to avoid creating policy changes that will prevent future environmental benefits from being realized, either through greater participation in EIM or a potential future RSO.

B. CARB Should Not Remove the EIM From the Resource Shuffling Safe Harbor

Entities participating in the EIM have little or no control over how resources are dispatched in the EIM or how resources are deemed delivered to California. CAISO dispatches resources in the EIM—regulated entities have no ability to "shuffle" their resources to intentionally avoid a compliance obligation. However, because CAISO is not regulated under the Cap-and-Trade Program, removing the EIM from the resource shuffling safe harbor creates significant uncertainty regarding how the prohibition of resource shuffling in EIM would be enforced, both for existing and future EIM participants. This is likely to dampen continued and future participation in the EIM as well as a future RSO. Given the lack of control that entities have over dispatch in the EIM or a broader regional market, the concept of resource shuffling should be reconsidered entirely in this context and should be rejected for purposes of the EIM or an RSO.

PacifiCorp understands that the ARB is including this amendment as a "placeholder" for further discussion; however, this approach for proposing regulatory amendments is extremely problematic. At the very least, this method of establishing regulations fails to meet the necessary

[2] Oregon and Washington require compliance with their respective renewable portfolio standard (RPS) requirements through the retirement of renewable energy credits (RECs)—the definition of REC in both states includes all of the environmental attributes associated with one megawatt-hour of renewable energy. *See* OAR 330-160-0015(13) and RCW 19.285.030(2). Informal discussions with staff of Oregon and Washington state agencies led PacifiCorp to the conclusion that those states would consider reporting energy as zero-emitting when imported into California for purposes of California's Cap-and-Trade Program would constitute a "use" of the environmental attributes, and therefore the REC, associated with that energy. Because Oregon's and Washington's share of PacifiCorp RECs are allocated to those states for RPS compliance and must be preserved, the underlying energy is rendered unavailable for import to California.

notice and comment provisions required as a fundamental principle of administrative law. ARB indicates that this change provides notice that ARB will continue to work with CAISO and stakeholders to ensure any final accounting method for emissions associated with load imported to serve California through EIM transactions does not pose a conflict with prohibitions to resource shuffling, which would result in the possibility of emissions leakage.[3] It is unclear why, if ARB's intent is to begin a dialogue around the definition of resource shuffling in EIM, it was necessary to take the extreme approach of proposing to remove EIM from the resource shuffling safe harbor. Assurance from ARB that it does not intend to enforce this provision as drafted fails to provide the necessary policy direction needed for regulated entities to make informed decisions to avoid being in violation of the rules the ARB ultimately decides to implement. Regardless of ARB's stated intent, this proposed change creates significant uncertainty for existing and future EIM participants and an unknown and unknowable burden on market participation. ARB should not propose such amendments, even as a "placeholder," without a full understanding and explanation of the potential market impacts and the potential *negative* environmental impacts in the form of increased greenhouse gas emissions associated with decreased participating in the EIM.

C. *Accounting for Emissions Associated With Electricity Imported via EIM Should Be Clearly Separate From Accounting For the Overall Environmental Effects of the EIM*

In its statement of reasons, ARB continually conflates the concept of assessing the overall greenhouse gas emissions associated with the EIM, as felt by the atmosphere, with the concept of accounting for emissions associated with imported electricity. ARB refers to its exercise as reporting the "full [greenhouse gas] burden experienced by the atmosphere as a consequence of the electricity consumed in California"[4] and "full accounting of [greenhouse gas] emissions experienced by the atmosphere when there is dispatch to serve California load during periods of imbalances."[5]

The concept of accounting for greenhouse gas emissions experienced by the atmosphere as a consequence of California load is separate from the concept of accounting for greenhouse gas emissions associated with imported electricity. Because ARB's programs do not fully account for emissions reductions that occur outside of California, quantifying emissions associated with electricity imports does not give a *full* picture of the overall emissions associated with California load resulting from the EIM. While this limitation in ARB's programs might arguably make sense for imports outside of the EIM structure which lack the operational visibility and control that comes with the EIM, it does not make sense where the EIM has been implemented. With the EIM, the CAISO has superior dispatch tracking data for the resources outside of California which are serving California load *and* which are being displaced by renewable exports from California. Depending on how greenhouse gases associated with imports are accounted for under the EIM, there may be an *increase* in emissions imported to California even while overall emissions outside of California are reduced. Accordingly, the only credible approach for greenhouse gas emissions accounting with the EIM is to consider all of these effects. Only in this manner can there be a full accounting of greenhouse gas emissions experienced by the atmosphere when there is dispatch to serve California load during periods of imbalances.

CT 52-1

[3] Cap-and-Trade ISOR at 156.

[4] Cap-and-Trade ISOR at 52.

[5] MRR ISOR at 9.

Since the time ARB issued its proposed regulations on August 2, 2016, the CAISO released a greenhouse gas counter-factual comparison of resources dispatched in EIM with a counterfactual without the EIM which precisely illustrates how emissions associated with imported electricity may increase while overall emissions attributable to EIM may decrease. As noted above, the CAISO's study found an overall impact to the atmosphere of a reduction of 291,998 metric tons. These reductions are largely associated with renewable energy exports out of California to neighboring balancing areas. CAISO's study also shows that the greenhouse gas emissions associated with electricity imported via EIM were incrementally lower in some months and incrementally higher in other months. Accordingly, unless ARB accounts for emissions reductions associated with California load, it is simply not capturing the full environmental impact of the EIM. Unless ARB is considering an accounting mechanism that includes emission reductions associated with electricity exported out of California, ARB's current exercise should be more clearly focused on the accounting methodology for emissions associated with electricity imports as opposed to an assessment of the overall emissions impact of California's participation in the EIM.

CT 52-1 cont

D. Given the Challenges Associated with Accounting for Emissions Attributable to Energy Imported Via EIM, CAISO's Existing Methodology Is Reasonable

There are a number of challenges associated with accurately accounting for greenhouse gas emissions associated with EIM imports. In large part these challenges stem from the fact that, for resources outside of California, a greenhouse gas compliance cost is only incurred if load inside California is met with resources outside of California. If resources outside of California serve load outside of California, no greenhouse gas compliance costs are incurred. This dual framework creates challenges for dispatching a single footprint on a simultaneous basis. CAISO's dispatch must also accommodate participating resources that have flagged a resource as ineligible to be imported into California. As a result, the CAISO developed a methodology to "deem" certain resources as meeting California load.

ARB notes its issue with the CAISO's existing methodology as: clean resources with lower deemed-delivery bid price are selected for "deemed-delivery" to California, while higher emitting power plants with higher deemed-delivery bid may be the actual plants dispatching to serve California load.[5] This approach is reasonable from a market perspective in that ARB's market-based policies place a higher price on emitting resources thus communicating a policy preference to the market for cleaner resources. The consequence of placing a compliance obligation on emitting resources imported into California is to increase the cost, all other things equal, of importing emitting resources. With this policy, California is placing a preference for zero-emitting resources. Accordingly, from a market perspective, CAISO's existing methodology is reasonable because it places a preference for zero-emitting resources.

While PacifiCorp supports CAISO's current methodology, PacifiCorp also acknowledges that there may be other methodologies for capturing emissions associated with resources that are dispatched in the EIM to meet California load. PacifiCorp does not currently have a stated preference for any of the proposals regarding an alternative mechanism. However, any

[5] Cap-and-Trade ISOR at 52.

methodology must adhere to the principle that PacifiCorp or other EIM entity participants outside of California are not impacted by California's policies.

Importantly, ARB and CAISO should also consider any revised methodology in the context of broader energy policy trends including the development of an RSO and evolving federal carbon standards. As states in the West adopt Clean Power Plan compliance programs and/or their own state carbon regulations that may or may not link with California's program or adopt California's design elements, the complexity of developing an accounting mechanism in EIM or an RSO that efficiently accommodates all state policies may be prohibitive. Multiple state programs are also likely to result in the double regulation of emissions that would create inefficiencies in the market and increase costs unnecessarily without associated environmental benefits. The significance of these issues calls for a broader, more thoughtful joint-agency process, with both ARB and CAISO, which should consider how to harmonize these complex environmental and energy policies. ARB's current proposal falls significantly short of this objective.

II. Compliance with the Federal Clean Power Plan

ARB is proposing to use a "state measures" approach to demonstrate California's compliance with the federal Clean Power Plan, which establishes guidelines for carbon emission reductions from electric generating units.[6] This will allow California to incorporate Clean Power Plan compliance into the Cap-and-Trade Program and MRR. However, this approach may potentially limit California's ability to participate in a broader carbon allowance trading regime, if one is developed, across the Western Interconnection or nationally. California's potential to be isolated from a broader regional or national carbon market is likely to create seams issues if the western energy market develops into a regional organized market. As described above with respect to the EIM, the energy market is becoming more integrated to maximize the benefits of a regional market to integrate the region's increasing renewable resources. State-specific carbon policies such as California's, if imposed myopically, have the potential to hinder this modernization and integration and slow the transition to a less carbon-intensive future. Accordingly, PacifiCorp urges ARB to consider its Clean Power Plan compliance approach with this long-term regional vision in mind and, to the extent feasible, retain flexibility to ensure that California's energy and environmental policies are developed in concert.

III. Allowance Allocation

PacifiCorp supports ARB's "cost burden" approach to post-2020 utility allowance allocations. PacifiCorp also generally supports comments submitted by the Joint Utility Group regarding the application of this principle.

ARB proposes to use load data from the California Energy Commission 2015 Energy Demand Forecast and resource data from 2015 S-2 forms, supplemented by additional data as needed. Due to its small service territory in California and its status as a multi-state utility, PacifiCorp is not currently required to submit the S-2 form. In addition, as a multi-jurisdictional retail provider (MJRP), PacifiCorp's compliance obligation under the Cap-and-Trade Program is developed uniquely through the establishment of a system emission factor. PacifiCorp develops its load forecasts and resource plans through its integrated resource plan ("IRP"), which is filed with the

[6] Cap-and-Trade ISOR at 24.

California Public Utilities Commission as well as PacifiCorp's five other state utility commissions. Through informal conversations with ARB staff, PacifiCorp understands that flexibility is available to utilize a methodology for calculating PacifiCorp's allocation that takes the IRP and system emission factor approach into account. PacifiCorp looks forward to working with ARB to develop this methodology.

IV. Conclusion

PacifiCorp appreciates the opportunity to submit these comments and is also available to discuss the issues addressed herein with ARB staff if doing so would be constructive.

Dated: September 19, 2016

Respectfully submitted,

By

/s/ Mary Wiencke

Mary Wiencke

Director, Environmental Policy & Strategy

Letter
CT 59 JOINTENVJUSTICE

September 19, 2016

Via Electronic Filing on ARB Website

Mary Nichols, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Comments on Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market Based Compliance Mechanisms

Dear Board Chair Nichols:

On behalf of the undersigned environmental justice and environmental organizations, we submit these comments on the Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market Based Compliance Mechanisms (hereafter "Proposed Amendments"). The environmental justice groups and community organizations listed below work directly with low-income residents and residents of color who are disproportionately impacted by industrial

pollution, toxic air emissions, and climate change. We do not support Cap and Trade because it places unjust burdens on low-income communities and communities of color. Climate change solutions must protect all Californians, starting with those already overburdened by air pollution and climate change.

Cap and Trade ignores the reality that location matters and disproportionately harms communities of color and low income communities. Reductions of greenhouse gases on-site reduce co-pollutants, such as fine particulate matter (PM2.5) and air toxics, emitted into the surrounding community – a benefit that is forgone when that facility buys allowances or offsets. At worst, co-pollutants increase when a facility increases its greenhouse gas pollution. Over two-thirds of California's low-income African Americans and about 60% of low-income Latinos and Asian/Pacific Islanders live within six miles of a Cap and Trade facility.[1] CT 59-1

Cap and trade is like a house built on a foundation of sand. The recent collapse of the allowance market, with a vast oversupply of allowances, exposes the inadequacy of Cap and Trade where so much of the "reductions" have occurred through heavy use of offsets (mostly out of state) and changes in imported electricity. *See* Section I, *infra*. Further, refinery emissions data show increased emissions in several communities during the first compliance period[2] while many of those refineries are among the Top-10 users of those offsets.[3] All of this comes at the undeniable expense of those communities living amongst these major sources of greenhouse gas and co-pollutant emissions.

The State Board should not continue the Cap and Trade Program post-2020 and should instead institute a program of direct emissions reductions that will benefit the health and welfare of California communities. Assembly Bill 32 limited the State Board's authority to implement Cap and Trade by codifying a sunset date for the program. Furthermore, the Legislature in Senate Bill 32 directed the State Board to ensure that disadvantaged communities benefit – not suffer – from climate policy. The State Board "shall achieve the state's more stringent greenhouse gas emission reductions *in a manner that benefits* the state's most disadvantaged communities and is transparent and accountable to the public and the Legislature." Stats. 2016, ch. 249, § 1, subdivision (d), p. 88 (emphasis added). In Assembly Bill 197, the Legislature directed the State Board to *prioritize* direct emissions reductions.

The threats posed by climate change to our health, communities and livelihoods are permanent and real, and so must our efforts to stop these threats be permanent and real. Cap and Trade, with pollution trading and heavy use of questionable and mostly out-of-state offsets cannot accomplish this objective. The facts unequivocally demonstrate that Cap and Trade, with all of its loopholes, distortions, and exceptions does not "work" and does not reflect the kind of equitable and just approach we need to solve our climate problems. The State Board's goals of

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[1] Manuel Pastor, *et. al*, Minding the Climate Gap (2010) at 9, Figure 2, attached as Exhibit 1.
[2] California Environmental Justice Alliance, Summary of Refinery Emissions Data, attached as Exhibit 2.
[3] California Environmental Justice Alliance, Top 10 Offsets Users in California, available at http://caleja.org/2016/02/stop-redd-from-harming-communities-locally-and-globally/

low-cost and flexibility should never trump environmental justice values or the collective statutory schemes of AB 32, SB 32, and AB 197, all of which call for climate policy with environmental justice at its core.

I. Cap and Trade Implementation Data Indicate Communities of Color are Adversely and Disproportionately Affected.

Last week, the California Environmental Justice Alliance released a report assessing the inequalities in the location of greenhouse gas-emitting facilities and the amount of greenhouse gases and particulate matter ("PM10") emitted by facilities regulated under Cap and Trade.[4] The report also provides a preliminary evaluation of changes in localized greenhouse gas emissions from large point sources since the advent of the program. The report found:

1. On average, neighborhoods with a facility within 2.5 miles have a 22 percent higher proportion of residents of color and 21 percent higher proportion of residents living in poverty than neighborhoods that are not within 2.5 miles of a facility.
2. These communities are home to a higher proportion of residents of color and people living in poverty than communities with no or few facilities nearby. Indeed, the higher the number of proximate facilities, the larger the share of low-income residents and communities of color.
3. The neighborhoods within 2.5 miles of the 66 largest greenhouse gas and PM10 emitters have a 16% higher proportion of residents of color and 11% higher proportion of residents living in poverty than neighborhoods that are not within 2.5 miles of such a facility.
4. The first compliance period reporting data (2013-2014) show that the cement, in-state electricity generation, oil & gas production or supplier, and hydrogen plant sectors have increased greenhouse gas emissions over the baseline period (2011-2012).
5. The amount of emissions "offset" credits exceed the reduction in allowable greenhouse gas emissions (the "cap") between 2013 and 2014 and were mostly linked to projects outside of California.

CT 59-1 cont

The report raises significant concerns and discloses new data that should foreclose the Air Board from extending the Cap and Trade program. The report demonstrates three fundamental points that environmental justice advocates have raised for years: (1) Cap and Trade disparately affects communities of color; (2) Cap and Trade denies communities the benefits of on-site reductions; and (3) greenhouse gas reductions attributed to Cap and Trade occur primarily outside of California.[5] It concludes:

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[4] Lara J. Cushing, *et al.*, A PRELIMINARY ENVIRONMENTAL EQUITY ASSESSMENT OF CALIFORNIA'S CAP AND TRADE PROGRAM, attached as Exhibit 3.

[5] Claimed reductions from imported electricity generation remain suspect given the State Board's creation of safe harbor exemptions from the resource shuffling prohibition, which allow

> Preliminary analysis of the equity and emissions impacts of California's cap-and-trade program indicates that regulated GHG emission facilities tend to be located in neighborhoods with higher proportions of residents of color and those living in poverty. There is a correlation between GHG emissions and particulate matter levels, suggesting a disparate pattern of localized emissions by race/ethnicity and poverty rate. In addition, facilities that emit the highest levels of both GHGs and particulate matter are similarly more likely to be located in communities with higher proportions of residents of color and those living in poverty. This suggests that public health and environmental equity co-benefits could be enhanced if there were more GHG reductions among the larger emitting facilities that are located in disadvantaged communities. Currently, there is little in the design of cap-and-trade to insure this set of localized results. Moreover, while the cap-and-trade program has been in effect for a relatively short time period, preliminary evidence suggests that in-state GHG emissions from regulated companies have increased on average for several industry sectors and that many emissions reductions associated with the program were located outside of California. Large emitters that might be of most public health concern were the most likely to use offset projects to meet their obligations under the cap-and-trade program.[6]

CT 59-1 cont

The State Board has to date not taken action to assess or prevent these impacts, and instead has consistently demonstrated its intent to prevent the public from accessing facility-specific climate data. When promulgating the Cap and Trade regulations in 2011, the State Board claimed that it would assess and prevent adverse impacts through an Adaptive Management Plan. The Initial Statement of Reasons ("ISOR") admits that to date, the State Board has not finalized or implemented the Adaptive Management Plan. ISOR at 302. Moreover, the State Board has taken the position that the public may not access critical Cap and Trade compliance and trading data, claiming that compliance with Cap and Trade constitutes "confidential business information."[7]

II. The State Board has no Authority to Extend Cap and Trade after 2020.

The State Board lacks authority to act on these proposed regulations. Staff propose amendments to various provisions of the Cap and Trade regulations to extend the program beyond the year 2020. *See, e.g.* ISOR at 149 (describing changes to section 95841 to establish allowance budgets for the years 2021 to 2050); ISOR at 299 (describing Appendix C to set dates for auctions and reporting for the years 2021 to 2050). A fundamental principle of administrative law dictates that agencies only have those powers delegated by the Legislature. The State Board's authority to implement the Cap and Trade program expires on December 31, 2020 and the Board has no authority to adopt regulations to extend the program beyond that date.

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greenhouse gas emissions to continue in fact as leakage. *See* Danny Cullenward, BULLETIN OF THE ATOMIC SCIENTISTS, 2014, Vol. 70(5) 35–44, attached as Exhibit 4.

[6] Lara J. Cushing, *et al.*, A PRELIMINARY ENVIRONMENTAL EQUITY ASSESSMENT OF CALIFORNIA'S CAP AND TRADE PROGRAM at 7-9, attached as Exhibit 3.

[7] *See, e.g.* Email from Edie Chang to Brent Newell, dated August 19, 2015, attached as Exhibit 5.

Health & Safety Code §§ 38562(c), 38570.

ARB staff have claimed that AB 32 authorizes these regulations because of language in Part 3 of AB 32 related to the statewide greenhouse gas limit (the level of emissions in 1990). "It is the intent of the Legislature that the statewide greenhouse gas emissions limit continue in existence and be used to maintain and continue reductions in emissions of greenhouse gases beyond 2020." Health & Safety Code § 38551(b). Grasping on to the words "continue reductions," the staff believe they can extend Cap and Trade to 2030 and then all the way to 2050. This provision, however, must be understood in the context of the statutory scheme as a whole. The very next subsection of section 38551 directs the State Board to make recommendations to the Governor and the Legislature on how to continue reductions, and does not give the State Board the authority to take those actions *sua sponte*. "The state board shall make recommendations to the Governor and the Legislature on *how* to continue reductions of greenhouse gas emissions beyond 2020." Health & Safety Code § 38551(c) (emphasis added).

Nor has the Legislature acted to extend the State Board's authority. During the 2015 legislative session, the version of Assembly Bill 1288 (Atkins) containing an extension of the State Board's authority to implement Cap and Trade beyond December 31, 2020 did not become law. During the 2016 legislative session, Senate Bill 32 became law and requires the State Board to achieve a 40 percent reduction in greenhouse gas emissions below 1990 levels by 2030. Stats. 2016, ch. 249, § 2, p. 88 (codified as Health & Safety Code § 38566). No provision of Senate Bill 32 amended section 38562(c) or otherwise authorized the State Board to implement Cap and Trade after the year 2020. Accordingly, the State Board lacks the authority to adopt the Proposed Amendments and should not proceed absent direction from the Legislature.

III. The State Board Must Prioritize Direct Emissions Reductions.

Assembly Bill 197 recently became law and expressly directs the State Board to prioritize direct emissions reductions at large stationary sources. The ISOR rejects direct emissions reductions in favor of Cap and Trade without any effort to identify or prioritize those regulatory strategies. ISOR at 306-307. The State Board has no authority to disregard direct emissions reduction strategies for the purposes of meeting the additional reductions required by Senate Bill 32. Rather, the Board must prioritize "emissions reduction rules and regulations that result in direct emission reductions at large stationary sources of greenhouse gas emissions[.]" Stats. 2016, ch. 250, § 5, subdivision (a), p. 92 (codified as Health & Safety Code § 38562.5(a)). The State Board may not proceed with the Proposed Amendments, which plainly do not comport with AB 197.

IV. The State Board may not rely on Cap and Trade for Compliance with the Clean Power Plan.

The ISOR reflects staff's proposal to use the post-2020 Cap and Trade program as the compliance demonstration for the Clean Power Plan. ISOR at 12. Further, staff propose a state measures plan, which means that the Cap and Trade program will be used for compliance purposes but not itself be federally enforceable. ISOR at 22. The Clean Power Plan allows states to submit a "state measures" plan, but that plan must meet the same integrity elements as

federally enforceable measures. 80 Fed. Reg. 64662, 64836/2 (Oct. 23, 2015). California must demonstrate "adequate legal authority and funding to implement the state plan and any associated measures." *Id.*; *see also* 80 Fed. Reg. at 64848/3; 40 C.F.R. § 60.5745(a)(9). For the reasons set forth above in Section II, the State Board has no legal authority under state law to implement Cap and Trade after 2020 and therefore may not use Cap and Trade as a means for compliance with the Clean Power Plan.

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V. Conclusion

The recent report highlights the disparity and impacts of the current Cap and Trade Program. Rather than perpetuate this injustice, we urge the State Board to reject the Proposed Amendments extending the Cap and Trade program beyond 2020. Thank you for your time and courtesy.

Sincerely,

Brent Newell
Legal Director
Center on Race, Poverty & the Environment

Bahram Fazeli
Director of Research and Policy
Communities for a Better Environment

Rebecca Claassen
Senior Campaigner
Food & Water Watch

Tom Frantz
President
Association of Irritated Residents

Gary Hughes
Senior California Advocacy Campaigner
Friends of the Earth – US

Jesse Marquez
Executive Director
Coalition for a Safe Environment

Bradley Angel
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Environmental Justice

Phoebe Seaton
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Letter
CT 69 SCPPA

September 19, 2016 | Submitted Electronically

Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95184

Re: SCPPA Comments on Cap-and-Trade Regulation 2016 Amendments

Thank you for the opportunity to provide comments on the 2016 Cap-and-Trade Regulation amendment package, including the Initial Statement of Reasons staff report, and the six accompanied appendices, A-F.

The Southern California Public Power Authority (SCPPA) is a joint powers agency whose members include the cities of
Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Los Angeles, Pasadena, Riverside, and Vernon, and the
Imperial Irrigation District. Our Members collectively serve nearly five million people throughout Southern California. Each Member owns and operates a publicly-owned electric utility governed by a board of local officials who are directly accountable to their constituents.

Each SCPPA Member has a duty to provide reliable power to their customers at affordable rates while also complying with all applicable local, regional, state, and federal environmental and energy regulations. Currently, SCPPA and our Members own, operate, or have binding long-term procurement arrangements with 35 generation and natural gas projects and three transmission projects, generating power in California or importing from Arizona, New Mexico, Utah, Oregon, Washington, Nevada, Texas, and Wyoming. This is in addition to individual, Member-owned or contracted and operated transmission, generation, and natural gas projects throughout the Western United States. All are funded through municipally-backed financing mechanisms. SCPPA, its Members, and their customers will be significantly affected by the proposed regulatory amendments in California and throughout the West given anticipated market impacts across balancing authority areas – some of which are controlled by SCPPA Members.

The impact of this amendment package cannot be understated, as these are significant amendments to an already complex regulation. In addition to momentous changes on how the Regulation will impact California's load serving entities and their ratepayers, this package lays the groundwork for yet-to-be-finalized Federal Clean Power Plan implementation and integration, additional international linkages, and potential

regionalization of the western power grid. With this regulation, the Air Resources Board (ARB or Board) has laid out an ambitious planning cycle that extends through 2050.

SCPPA has actively participated throughout the intensive year-long informal development process leading up to this official amendment package, and has provided numerous comments on the variety of issues presented[1]. We appreciate the additional review time provided by ARB, but note that ***there are many important and fundamental questions about the current version of the proposed regulation that will still remain unanswered when the ARB Board hears this item for the first time.*** With so many remaining issues on the table it will be difficult for all stakeholders, including ARB Board Members, to fully understand all of the implications of this significant and complex rulemaking until after much of the public process has been completed. This bifurcated process could subject the final rulemaking to a process challenge.

Knowing that there is still a great deal of work to be done moving forward, SCPPA stands ready to engage with ARB, the other state energy agencies whose input remains critical in this process, and our fellow impacted stakeholders as the 2016 Cap-and-Trade Regulation and Mandatory Reporting amendments are more thoroughly vetted to ensure that the policies considered, and the programs ultimately adopted, affordably yield the greatest benefits for Californians.

SCPPA wishes to emphasize the following points:

Process Concerns

In recent years, ARB staff has shifted away from the historic practice of presenting a fully developed rule for Board consideration, to a sequential process where many important policy, technical and implementation decisions are made after its initial presentation. When this happens, it chops the process up in a piecemeal fashion, with one or more —15-day amendment packages‖ squeezed in between Board meetings. These packages not only reduce the review and comment period by two-thirds, but they also limit the scope of comments to only those portions of the regulation that ARB staff have identified as being open for review. This Regulation has many complicated components which are interdependent on each other (e.g., cost containment, allowance allocation and cap setting); therefore, commenting on one moving piece while the others may already be set in stone is not an effective way to finalize an economy-shifting regulation. This change in process does a disservice to ARB's many diverse stakeholders and the people of California. In addition, when the Regulation is finally put together for Board consideration at its second hearing, the timing is such that the Board will normally only act on the CEQA responses, and cannot address any outstanding and potentially significant policy or technical issues. CT 69-1

[1] https://www.arb.ca.gov/lists/com-attach/4-caps-allocation-ws-B3RVMFYnWHtXMFMM.pdf
https://www.arb.ca.gov/lists/com-attach/18-mrr-cpp-ct-amend-ws-UiFSNwNyWXoFYgVa.pdf
https://www.arb.ca.gov/lists/com-attach/13-capandtradecpplan-ws-UCMHYlYnUXJRNlIN.pdf
https://www.arb.ca.gov/lists/com-attach/11-ct2016amendments-ws-USlGY1QlU3BSNQlW.pdf

As proposed, this regulation package has over three dozen placeholder clauses, as well as notations of future policy decisions that are dependent on decisions made today (e.g., Electric Distribution Utilities (EDU) Allocation). Therefore, we know that at least one 15-day amendment package is needed before the Regulation is in complete form, and staff has indicated they are planning at least two separate 15-day packages. SCPPA requests that the scope of the first 15-day amendment package include the entire Regulation that was noticed on August 2 to provide the public sufficient opportunity to comment on the entirety of the regulation. Additionally, any narrowing of the scope of subsequent 15-day amendment packages should be carefully reviewed.

Importance of Retaining the "RPS Adjustment"

SCPPA – along with numerous other stakeholders, including other publicly-owned utilities, investor-owned utilities, community choice aggregators, renewable developers, and renewable trade associations – continues to strongly believe that the ***Renewables Portfolio Standard (RPS) Adjustment must be retained in the Regulation in order to complement implementation of California's expanding and more aggressive RPS Program***. These stakeholders have repeatedly expressed the importance of avoiding regulatory changes that would undermine the RPS Program, which is achieving the bulk of the state's emissions reductions to date. Indeed, for nearly a year, there have been dozens of oral and written comments submitted, meetings and discussions held with ARB staff and managers, and multiple iterations of industry proposals and background information offered to relay the importance of retaining and consistently implementing the RPS Adjustment. This programmatic feature is a critical component to ensuring that successful and cost-effective RPS implementation is continued, as it safeguards against any prejudice between in-state and out-of-state renewable resource procurement. Eliminating the RPS Adjustment will create sector-wide ramifications that would detrimentally impact current and future RPS goals, investment in renewable generating resources, and electricity markets. California surely could not intend such a negative consequence to its climate policies.

The RPS Adjustment is important to offset the Cap-and-Trade compliance cost for imported renewable energy that is not directly delivered to California. Eliminating the RPS Adjustment credit would impose significant annual compliance costs on California electric utilities and consumers. These costs will run in the tens of millions of dollars annually and it seems these costs have not been incorporated into any ARB economic models to date.

Imported renewable electricity is essential for many California utilities to achieve California's increasing RPS target, and will continue to be essential as the RPS requirement increases from 33% in 2020 to 50% by 2030. The RPS *and* the Capand-Trade Regulation are key regulations in the State's efforts to dramatically reduce statewide GHG emissions. *These programs should complement one another, and one program must not reduce the effectiveness of the other.* Out-of-state renewables are an important means of achieving the State's renewable energy goals, especially with the anticipated implementation of the federal Clean Power Plan, potential expansion of the California Independent System Operator (CAISO) Energy Imbalance Market (EIM) and grid regionalization efforts, and increasing land-use restrictions that inhibit the ability to build large-scale renewable projects in California. The RPS Adjustment acts to ensure

fair treatment of RPScompliant contracts and investments. As was recognized by ARB Chairman Mary Nichols during the recent June 23, 2016 Board Meeting on the 2030 Scoping Plan where she stated —We are implementing a number of very big, costly, important regulations as part of our existing climate program, of which the Cap-and-Trade Program is certainly one, and an important one, but not the only one....The Renewable Portfolio Standard, we were lapped...we started out with a certain number, and now we're coming up with a more ambitious number, layered on top of a Cap-and-Trade Program, so that they -- our electric generating sector is subject to multiple different requirements, and yet [the RPS] program is also operating in a way that's pushing change...‖

SCPPA appreciates the Chairman's recognition that the electric sector is subject to multiple requirements, and further stresses the need for the myriad of state policies to work together. We urge ARB to work alongside stakeholders towards reconciling contradictory policy and program implementation concerns – such as the proposed elimination of the RPS Adjustment – that are collectively hampering efforts to get us to where we, as a state, are headed with climate and energy policies.

Throughout the numerous meetings on this topic, the Joint Utilities Group has presented ARB staff and managers with a counter proposal which SCPPA believes achieves the goals of both ARB and stakeholders. This proposal has not yet been responded to by ARB staff. SCPPA requests an in-depth analysis of the proposal prior to the regulation being finalized.

CAISO EIM Greenhouse Gas Emissions Accounting

In a May 2014 letter to the Federal Energy Regulatory Commission (FERC), Governor Jerry Brown and Nevada Governor Brian Sandoval said, —The Energy Imbalance Market (EIM) will help grid managers in Nevada, California, and five other states optimize renewable energy resources, balance power supplies, enhance grid reliability, and reduce power costs for customers by taking advantage of a larger, multi-state pool of geographically diverse energy resources.‖ The new market was touted as one that would help —green‖ the electric grid, which has been an important component of California state leaders' efforts to promote policies that combat the effects of global climate change. Indeed, Governor Brown even referenced it in his January 5, 2015 inaugural address as one of many means to achieve his ambitious climate goals.

We understand that ARB staff has since identified a concern (based upon a limited set of preliminary draft data) that GHG emissions accounting for the CAISO EIM does not consider the climate impacts of —secondary dispatch‖ resources that are being used to indirectly serve California load. ARB staff has proposed amendments in this package that would extend the accounting reach of the California GHG program to non-participating entities. If implemented, this could have a significant and chilling effect on the broader regionalization goals and its accompanying GHG reduction benefits. The potential benefits of the EIM or a broader regional market could substantially dwarf the secondary accounting impacts being proposed in the regulation.

Indeed, California Energy Commission Chair Robert Weisenmiller said at the August 10, 2016, CEC Business Meeting, —...it turns out as you get into the [ARB Cap-and-Trade]

accounting stuff it becomes more and more complicated. A classic example is on the Cap and Trade Program, there's a lot of following of imports of dirty stuff into California. There is zero accounting for renewables flowing out of California. Zero. Think about it for a second, which might be more a clean power plan. But having said that certainly most people's forecast now is there's a lot of [excess renewables] today under EIM flowing out of California. And there'll be progressively more over time, so zero is -- or ignoring it is not a particularly good approach.‖ SCPPA strongly agrees that crediting renewables exports must be accounted for to ensure accurate accounting of the atmospheric effects associated with the electric industry's significant programmatic- and market-based contributions towards addressing climate change. This includes how to optimize the efficient use of clean electricity through the EIM. On August 26, 2016, the CAISO issued preliminary results of an EIM GHG —counter-factual comparison,‖ in response to ARB's June 24, 2016 Cap-and-Trade Program Workshop. This analysis concluded both of the following: 1) EIM dispatch reduced GHG emissions by 291,998 MTons during January-June 2016; and 2) the secondary dispatch GHG emissions associated with EIM transfers into CAISO to serve load are offset by GHG emission reductions associated with EIM transfers out of the CAISO – reflecting renewable resources displacing external emitting resources. According to CAISO's analysis, the EIM construct and framework reduces GHG emission impacts that the atmosphere actually —feels.‖ This analysis should be sufficient to justify withdrawing the proposed EIM GHG emissions accounting amendments, and thereby avoiding all the associated implementation effort and costs.

It would be in the best interest of all stakeholders involved to more fully understand the extent of this perceived problem, since remedying this concern will have significant implications. At this time, it does not appear that there is adequate understanding of either the problem or the solution. We believe that more robust inter-agency evaluation (based upon a more comprehensive set of data) and *meaningful* stakeholder engagement are necessary to fully understand the issue and the magnitude of the impact, as well as the realm of possible solutions and the resulting impacts. Of all the topics discussed prior to the formal rulemaking notice, this EIM issue received the least amount of lead time prior to its inclusion.

SCPPA therefore urges ARB to defer proposed changes to the reporting requirements until such time as the problem (if any exists) is fully understood, CAISO has completed its stakeholder engagement process on the matter, and the state agencies have reached an agreement with stakeholder concurrence. Otherwise, we fear the hurried ARB regulations now may only serve to capture short-term Cap-and-Trade Program gains (which could possibly deter imports into California that are necessary to meet the state's RPS requirements), while undermining long-term emissions reductions initiatives across the West. This is one issue that does not have an immediate looming deadline, so it would be beneficial to take a few steps back to re-evaluate.

We believe it is also critical that each affected state agency have an equal voice in matters that directly impact their primary mission. It is imperative to recognize that California is part of the broader western electricity grid, and that any actions taken in our state may impact the larger regional market. Without a fix, any potential EIM benefits

will be eviscerated by ARB carbon cost compliance obligation accounting; the consequence of which may be to *deter* new participant interest in, or even *undermine* existing participation within a flourishing market that has been widely touted by state energy officials, while burdening California ratepayers with the entirety of any accounting system for a broader market that they may not even benefit from. Further magnifying the need for inter-agency coordination is the fact that we (as a state) have yet to thoroughly explore how these GHG emission accounting efforts may translate to a broader, regionallyintegrated market as the Governor has sought to advance in the CAISO grid regionalization effort. The GHG accounting issue has proven to be an extremely contentious one amongst neighboring states in regionalization discussions.

EPA Clean Power Plan Implementation

Aligned Compliance Dates

ARB staff's proposed language in section 95840(d) would establish new, shorter compliance periods under the
Cap-and-Trade Program to facilitate compliance with the federal Clean Power Plan (CPP). It is our understanding that
ARB's intent with regard to this section is to only alter the current three-year compliance period structure of the Cap-andTrade Program if the CPP is upheld on appeal in the federal courts, and even then only if EPA subsequently approves California's state plan submission. SCPPA supports the conditionality of these provisions and, in the absence of the CPP, would prefer to retain the current 3-year compliance period structure of the existing Cap-and-Trade Regulation. SCPPA requests that ARB confirm our understanding that the change in compliance period timing specified in proposed section 95840(d)[2] would *not* take effect if any of the following events take place:

- The CPP is vacated or remanded to EPA by a federal court (either the D.C. Circuit or the U.S. Supreme Court);
- The EPA voluntarily withdraws the CPP or issues subsequent regulations that supersede the CPP; □ Congress passes legislation that effectively stays, rescinds, or significantly amends the CPP; or □ The EPA disapproves California's CPP compliance plan in whole or in relevant part.

As written, section 95840 does not explicitly address what the Cap-and-Trade Program's compliance periods would be under circumstances other than approval or disapproval of California's plan. For example, the proposed regulation does not address the possibility of remand, regulatory revision, or legislative override of the CPP that would block or substantially delay implementation of the CPP program. SCPPA envisions that ARB would need to conduct additional rulemaking in the future to address the repercussions of these events. Although it may not be possible to specify all of the events that would prevent a new compliance schedule from taking effect, ARB should at least clarify in its Final Statement of Reasons that if any of these events occur, the proposed compliance dates in section 95840(d) would not apply.

[2] Proposed section 95840 also provides that if EPA has not approved California's plan for compliance with the CPP by January 1, 2019, (including the new timeframes for compliance periods specified in specified in section 95840(d)), then current timeframes will continue to apply. In this case,

In addition, SCPPA anticipates that in the event the CPP is upheld and subsequently goes into effect, a court or EPA may nonetheless push back the start date of the CPP due to delays caused by the current Supreme Court stay of the CPP. In the event that the CPP's deadlines are tolled and thus the start of the CPP program is extended beyond 2022, SCPPA urges ARB to maintain the 3-year compliance period structure of the Cap-and-Trade Program for as long as possible before adjusting the compliance period length to comply with the CPP. Such an approach will minimize any potential disruption that could result from changing the current compliance deadline schedule in order to align the federal and state programs.

Clean Power Plan and Imported Electricity

The proposed amendments reflect ARB's proposal that the Cap and Trade program serve as the compliance program for the CPP if the stay of the regulation is lifted. Thus, consideration of the CPP's impact on out-of-state generation that is ultimately imported to California is of vital importance when vetting the proposed amendments as noted in the Proposed Compliance Plan for the Federal Clean Power Plan[3]. ARB staff are proposing and recognizing that under the proposed CPP Plan, imported electricity will realize *both* the Cap and Trade compliance obligations under the proposed regulation *and* the compliance obligations from other states. This essentially doubles the compliance obligations for these facilities. SCPPA is concerned that ARB has not recognized or discussed the economic impacts on electric utility customers for those affected utilities, including many SCPPA members, which have must-take contracts with out-of-state fossil-fueled generating facilities. This may result in heavy cost burdens on California electric utilities, many of which serve disadvantaged communities. Because of this, SCPPA requests that ARB evaluate and address the cost burdens that may be faced by these utilities.

Clean Power Plan Backstop

SCPPA generally supports ARB's approach to designing a backstop measure for compliance with the CPP, which is required for a —state measures‖ approach. In particular, SCPPA supports the creation of a separate Cap-and-Trade program only for CPP-affected electric generating units (EGUs), as well as ARB's proposal to allocate allowances at no cost (i.e., free allocation) to affected EGUs under the backstop based on historic emissions. SCPPA also supports ARB's proposal to allow affected EGUs to trade backstop emission allowances.[4] SCPPA seeks clarity on whether a triggered backstop would remain in effect for the remainder of the program, or could potentially include a mechanism to revert back. However, SCPPA recommends that ARB make the following changes to the allocation and trading components of the backstop approach.

the fourth compliance period would start on January 21, 2021 and end on December 31, 2023, with each subsequent compliance period having a duration of three calendar years.

[3] See California's Proposed Compliance Plan for the Federal Clean Power Plan, released August 5, 2016.

[4] *See* proposed § 95859(e)(6) (providing that backstop emission allowances —may … be traded among entities that own or operate affected EGUs located in California and that are registered in the Program‖). *Changes to Allocation Component of Backstop.* SCPPA recommends that ARB *not* use the most recent calendar year (described as —triggering compliance period‖ in the

proposal) as the basis for allocating allowances to EGUs.[3] Using the period in which emissions first exceeded California's mass-based CPP limits would have the counterproductive effect of rewarding the very EGUs whose excess emissions caused the sector to exceed the CPP goal, while under-allocating allowances to those EGUs that have lowered their emissions to levels that may be well below a level that would be sufficient to meet the CPP goal without triggering the backstop.

Rather than using this proposed approach, ARB should instead use a known, pre-CPP baseline of emissions as the basis for allocating allowances. For example, ARB could use the average of affected EGU emissions from 2013-2015 as the basis for allocating allowances to affected EGUs.[4] Using a historic baseline appropriately reflects the relative size and emission-intensity of different EGUs while avoiding the possibility of rewarding those EGUs that are most responsible for triggering of the backstop. In particular, it would prevent those EGUs – whose high emissions may have contributed most significantly to the triggering of the backstop – from being rewarded for their high levels of emissions by receiving a greater share of allowances than the EGUs that have taken measures to achieve significant reductions in their emissions.

In the alternative, if ARB decides to retain its current approach of using most recent emission years to calculate the backstop allowance allocation, ARB should consider using a longer averaging period (e.g., using the previous *two* compliance periods, or a minimum of three full years of emission data) in order to lessen the extent to which ARB rewards the biggest emitters under the backstop approach. In addition, the use of a multi-year period will provide a more representative benchmark of normal operations than a one-year period. Specifically, a multi-year period should minimize the distortions that would result from forced outages of EGUs, low energy demand, abnormally low hydroelectric supply, or other unusual circumstances during any given one-year period.

Changes to Trading Component of Backstop. While SCPPA strongly supports ARB's proposal to allow EGUs to trade —CPP allowances‖ within the backstop Cap-and-Trade program, SCPPA also urges ARB to allow the *interstate* trading of allowances between California and other states' CPP plans with emissions trading programs. First and foremost, the statutory prerequisites of SB 1018 for interstate trading only apply to the California Cap-and-Trade Program and other market-based programs to implement the goals of the AB 32 legislation.[5] *This means that the requirements of SB 1018 do not apply to the CPP backstop program* given that ARB would establish the backstop program to assure compliance with the federal Clean Air Act (CAA) requirements under the final CPP rule, and not to implement the reduction requirements under the California Cap-and-Trade program and achieve the emission targets under AB 32. So long as the federal backstop program is kept separate and independent from the Cap-and-Trade program, ARB does not need to demonstrate compliance with SB 1018 requirements in

[3] *See* proposed § 95859(e)(5).

[4] If any affected EGUs were constructed or modified after January 1, 2013 but before the January 8, 2014 applicability cutoff date for the CPP, those EGUs' emissions during the historic baseline period could be estimated—for example, by assuming that these EGUs operated at an average capacity factor and emission rate the comports with the technology in use at the EGU.

[5] *See* Senate Bill 1018, codified at Chapter 39, Statutes 2012 (providing that the prerequisites for interstate trading only apply to a market-based compliance mechanism established pursuant to AB 32 and specified in Sections 95801 to 96022).

order to authorize interstate emission trading under CPP backstop program. To avoid any confusion on the relationship between the federal and state programs on this point, SCPPA recommends that ARB not codify the proposed backstop provisions in final Cap-and-Trade regulations specified in Sections 95201 to 96022 of Title 17 of the California Code of Regulations, as has been proposed. Rather, we suggest that ARB adopt the backstop program pursuant to regulations that are entirely separate from the Cap-and-Trade regulations and codify that program in a separate regulatory section of the California Code.

Second, allowing interstate trading under the backstop program makes good policy and economic sense. Most California utilities—including many SCPPA members—supply electricity to their customers from a mix of in-state and out-of-state generation sources. Although SCPPA supports ARB's selection of a state measures plan, we note that this selection— combined with other states' likely selection of other compliance approaches—will somewhat complicate these utilities' abilities to flexibly and cost-effectively balance in-state load and in- and out-of-state supply as demand and power availability fluctuates on a daily and seasonal basis. We recognize that authorizing interstate allowance trading between the AB 32 Cap-and-Trade Program and other states' EGU-only CPP programs may be complicated (although we urge ARB to continue working with utilities to enable such trading to take place). However, in the case of the backstop approach ARB has selected, such linkages between the California backstop Cap-and-Trade and other states' CPP Cap-and-Trade programs are likely to be both straightforward and beneficial for all entities.

Allowing interstate trading of CPP allowances between California's backstop program and other states' CPP programs will be straightforward because the instruments being traded between the California backstop program and other states' CPP programs will be EGU-only allowances created specifically for the CPP. The CPP explicitly authorizes trading of such allowances between affected EGUs that are subject to linked mass-based plans, and provides for one-for-one adjustments of states' CPP mass-based goals to account for net flows of allowances between participating states.

Finally, allowing EGUs in California to use CPP allowances issued by other EPA-approved programs, and vice versa, will also enhance the flexibility of California's backstop program while promoting more economically efficient decisions about generation throughout the West because it will allow California utilities to use CPP allowances obtained in California to satisfy obligations in other Western states, or to use allowances obtained in other state programs to satisfy the California backstop requirements. Such flexibility and economic efficiency will be needed most acutely in a backstop situation because the factors that could lead to excess emissions—e.g., greater-than-expected load growth or an extended outage of low-emitting generation (e.g., due to extended drought conditions in the Northwest or an extended nuclear outage)—are also likely to complicate utilities' abilities to reduce in-state EGU emissions while meeting these utilities' obligations to serve California ratepayers reliably and cost-effectively. For these reasons, ARB should ensure its backstop program is —ready for interstate trading,‖ including explicitly authorizing EGUs to trade CPP allowances with other mass-based CPP state programs if the backstop is triggered, and to use

allowances from these other programs to comply with California's backstop cap-and-trade requirements (and vice versa).

SCPPA requests that the CPP provisions in their entirety be available for comment and possible modification under any 15day amendment package.

Linkage Provisions
SCPPA is leery of allowing outside entities to remove allowances from the California Cap-and-Trade program, especially when the entities are not contributing to the overall allowance pool. These regulatory amendments propose two possible situations where this may occur. The first is the Retirement-Only Linkage, and the second is a full linkage with a jurisdiction that is projected to be a net buyer of allowances from day one (Ontario). The proposed amendments immediately provide for linkage with Ontario, and sets up a process for a future Retirement-Only linkage with Washington State, and others that may wish to join.

These provisions lead to unanswered questions about cost containment, upward allowance price pressures, impacts on the cap and future unknown consequences on the California program. SCPPA has not seen any robust staff analysis on these proposals, or other potential long-term implications. See additional comments under Cost Containment.

EDU Allocations
Allowance allocation is a key component to ensuring the costs of the Cap-and-Trade program are contained. It is fundamental to the structure and cost of the regulation, and establishes the market rules by which all parties must participate. It is of critical importance for Electrical Distribution Utilities (EDUs) that the proposed package contains the following language:

—Staff may propose post-2020 allocation as part of this rulemaking process. Any change proposed will be circulated for a 15-day public comment period."

California EDUS have not been provided the opportunity to review and comment on an actual EDU allowance allocation for post-2020 prior to the Board's initial public hearing, but the language implies that such a proposal may *not* be made during this regulatory process. SCPPA recognizes that this issue is complicated given the diversity and number of EDUs in the state, the number of other entities seeking allowance value, and that SCPPA is actively participating with ARB and other EDUs in a process moving forward. However, SCPPA is extremely uncomfortable with such a central piece of the policy puzzle not being sorted out before the Board provides input and direction to staff. The ripple effects of EDU allocation will be felt by consumers throughout the state and, depending on the final proposal, could impact how other aspects of the proposed regulation operate.

ARB staff has consistently noted in the informal rule development process that the post-2020 EDU allocations will be utility specific, and there will not be a sector-wide sub cap as was the case from 2013-2020. SCPPA recognizes that the details really matter in a bottom-up calculation approach. To be fair, the data used to determine each utility's

individual allocation needs to be reviewed for accuracy and normalized to a consistent set of assumptions. In addition, the GHG emission factors used in the post-2020 allowance allocation calculation need to accurately reflect the specific generating resources, and reflect the updated (SAR4) Global Warming Potential factors that will take effect starting in 2021.

Another basic tenet of the potential staff methodology is to base post-2020 allocations on a utility's potential "cost burden". SCPPA is supportive that this is the right guiding principle, but, as noted previously, this is a very data specific endeavor where the details really matter. SCPPA believes a wider application of that principle is needed to cover additional costs not currently included within ARB's definition of cost burden (e.g.., the costs of utility GHG reduction measures adopted independent of the Cap and Trade Program).

ARB staff has discussed the concept of reducing total load by less than the full 33% RPS target as a way to compensate utilities for the removal of the RPS Adjustment. SCPPA does not believe this is an equal trade and would prefer to see the retention of the RPS Adjustment over an allocation adjustment (see RPS Adjustment comments). Some utilities would potentially optimize their portfolio by maximizing their option for contracts that currently are able to utilize the RPS Adjustment - which is greater than the 15% adjustment ARB staff is proposing, resulting in greater cost burdens than the allocation accommodates; however, other utilities may not utilize this option at all and will be provided more allocation than accurately reflects their cost burdens.

Though the regulation does not propose a post-2020 methodology, it does contain a partial allocation table that runs through 2026. SCPPA would recommend that, for whichever methodology is used, allocations for the full time frame up to 2030 be assigned. This would provide additional utility certainty and reduce the workload associated with revisiting this issue midway through the program's next phase.

Shifting of Electrical Allocation Value to the Industrial Sector. This proposal is a "solution" that creates five-fold concerns for publicly-owned utilities without practically solving the perceived problem. There are numerous issues associated with trying to separate out Cap-and-Trade regulated entities from not only other industrial ratepayers, but also from other customer classes. Ratemaking can be a multi-year process in POU territories. The time and effort needed to complete such ratemaking would surely be in continual arrears to what the price of carbon actual is in the market. Therefore, it would be very difficult to provide the signals ARB staff believes can be sent. In addition, this issue could result in disproportionate impacts among publicly-owned utility and investor-owned utility customers. As public entities, it would be especially burdensome or nearly impossible for POUs to comply with the requirements of Proposition 26. SCPPA is opposed to this concept and recommends ARB staff not pursue this issue.

Planned retirements: Between now and 2030 there will be retirements of large coal-fired generating facilities. Any early retirement prior to contract expiration is a benefit to the environment at a cost to participating utility ratepayers. ARB should not penalize (by way of a lower allowance allocation) any utility that voluntarily exits these types of contracts early. Allocations should be based on contractual dates, not on potential early

exits. Specifically, some SCPPA Members are under contract to procure power from the Intermountain Power Project through June 15, 2027; however, there have been aspirational discussions of repowering to use natural gas in 2025. As noted above, SCPPA strongly suggests that ARB base allowance allocations on the current contractual obligations in place and not on aspirational planning targets.

Distributed Generation and Energy Efficiency: ARB Staff have recommended that allocations —recognize investments in zero-emitting energy sources‖ for industrial compliance entities. SCPPA recommends similar treatment for smaller energy users. Continued investment in energy efficiency is among the most beneficial and cost-effective means of combating climate change and should be encouraged through every available means, as increased energy efficiency is the primary means of decoupling economic growth from GHG emissions growth. In 2010, ARB included investments in energy efficiency programs in its cost basis methodology; SCPPA supports a continuation of that precedent.

Crediting Utilities for Increased Electrification

SCPPA agrees with ARB staff's recognition that load growth from transportation and other sector electrification efforts will require additional allowance allocations post-2020. As a primary climate change strategy of the State, electrification of multiple other sectors will only serve to increase EDU loads and will need to be addressed accordingly with additional allocation value. But SCPPA is concerned that the issue of Allocation for Increased Electrification merited only one paragraph in the ISOR. This is especially disconcerting since the discussion only mentioned that this is an outstanding issue that needs more evaluation. As noted numerous times, this is a complicated and interdependent regulation, and allocations for known electrification are a key issue. California has clearly stated that one of its overarching climate goals is the electrification of the transportation and goods movement sectors, as is seen in the considerable work on zero emission vehicles (ZEVs) and other forms of electrification. As ARB develops a workable methodology for electrification allocations, SCPPA recommends that it not be overly burdensome or require data that is not readily collected by the utilities. Further, the issue of additional allocations should be clearly understood before the Regulation is finalized.

Staff has repeatedly dismissed the use of the Low Carbon Fuel Standard model for determining the amount of electricity used for ZEVs, but the discussions surrounding the level of rigor desired is more than enough to warrant concern. SCPPA recommends that ARB staff develop a straightforward, data driven methodology for stakeholder review on electrification allocations. SCPPA has already sought the assistance of the CEC to collaborate in development of an estimation methodology.

Cost Containment

ARB has previously acknowledged that Cap-and-Trade cost containment mechanisms are critical towards ensuring the Program's long-term stability. In Resolution 13-44, the ARB Board directed staff to develop a plan for a post-2020 Capand-Trade Program (including cost containment) before the start of 2018 to provide market certainty and address a potential 2030 emissions reduction target. We have previously urged ARB to engage stakeholders as soon as possible in designing, testing, and implementing

possible cost containment mechanisms before the 2018 deadline. We further urged ARB to incorporate a meaningful —safety valve‖ in the event new technologies do not develop; this would allow entities to meet policy goals in a cost-effective manner.

Further consideration is still needed to determine how new 2030 and beyond emissions reduction targets are technologically feasible, adequately demonstrated at a commercial level, and can be implemented in a cost-effective manner for California utility ratepayers. In addition, the emission reduction targets and policies must be implemented in a way that does not cause conflict with other local, state, and national environmental regulations (including federal energy reliability standards). SCPPA urges ARB to assess the full economic impact across options available for achieving the 2030 emissions reduction target on the California economy, California businesses, and individual ratepayers. As the suite of California's environmental and energy policies are intended to work together to reduce emissions, ARB should consider broader categories of cost impacts experienced by market participants as they are interlinked to the cost of compliance with the Cap-and-Trade program. ARB should also work with state agency partners to include a quantitative analysis of progress to date in terms of meeting emissions reduction targets.

Allowance Price Containment Reserve. We appreciate ARB staff's proposed revisions to the Allowance Prince Containment Reserve (APCR), and its proposed 2021-2031 extension, in order to support cost containment efforts. We believe that this is consistent with current policies. This includes efforts to simplify and streamline the APCR by —collapsing‖ the existing three fixed-price, equal-sized tiers (which now includes a transitional 5% annual escalator plus a measure of the rate of consumer inflation) for reserve sales of any allowances. SCPPA notes that there is now a widening gap between existing allowance sales prices (generally at or near the —price floor‖ of just under $13) and the proposed APCR allowances even under the 2016 offer prices ($47.54 to $59.43 between the three tiers) – which will only increase with escalators over time. Given this significant market differential – and the cost containment intent of the APCR itself – SCPPA urges ARB to reconsider setting a fixed arbitrary price of +$60, which may actually undermine the intent of the reserve going forward by making allowance prices held in reserve inordinately expensive to address market fluctuations over the next 15 years. We recommend that staff consider a lesser amount that would endeavor to keep APCR prices more accessible for regulated entities as a means to ensure rate affordability for their customers. SCPPA also encourages the long-term ability to borrow allowances from future years.

Cap Setting. SCPPA supports a well-designed, economy-wide market based system that includes necessary cost containment protections. SCPPA also appreciates ARB staff's proposal to apply an approximately 3% annual linear reduction path for emissions caps between 2020 and 2030, rather than a —step down‖ or programmatic —shave‖ that could more significantly impact the electricity sector versus other sectors. We also support a straightforward 2050 formula methodology to calculate annual allowance budgets. SCPPA agrees with ARB staff's proposal to allow any allowances of vintage 2020 or earlier to be used for compliance in a post-2020 program as a signal that this program will be available for the long-term; however, we do have concerns with staff's proposal to lock-in annual allowance budgets for 2031 through 2050. SCPPA believes it

is extremely important that such intent also be associated with rigorous long-term market monitoring mechanisms; ongoing expert evaluation of economic feasibility and technological/commercial viability; and, meaningful cost containment features that offer certainty and protect California ratepayers for the long-term. SCPPA is concerned that not taking steps now to ensure these long-term market protections may negatively impact the program over coming decades – particularly given commensurate efforts underway to —linkll other international parties to the program that do not have a federal Clean Power Plan obligation, discussions to regionalize California's electric grid (with other states that do not have Cap-and-Trade and/or Renewables Portfolio Standard mandate(s) either as aggressive as California's or at all), and future EPA Clean Power Plan compliance efforts on a California-only or linked basis.

Linkages. SCPPA generally supports programmatic —linkagesll as a means to potentially reduce costs to California ratepayers. We are concerned, however, with any proposal that could seemingly establish a simplified procedural manner to establish linkages – particularly one-way linkages (e.g., with the State of Washington, or if Ontario becomes a net buyer only) – with unequal and less stringent qualifications for operational integration (e.g., California/Quebec two-way linkage) and without vigorous vetting by agency leaders. SCPPA is concerned there may be undue burdens that California ratepayers may experience due to leakage risks and added in-state economic development constraints and/or competitive disadvantages. We believe it is important that linkage protocols be inclusive of pre-established criteria – with input included through a meaningful public stakeholder process – to ensure inclusion of meaningful cost containment features. This is particularly problematic given the current implementation of California policies directly affecting California's electric utility sector associated with Senate Bill 350, the recently enacted Senate Bill 32 and Assembly 197, and numerous other measures that already place significant climate change-related policy requirements on our Members . Collectively, these existing policies raise the Renewables Portfolio Standard to 50% by 2030, double energy efficiency savings in existing buildings, and set aggressive 2030 emissions reduction targets. SCPPA therefore urges a preference for, and greater support of, rigorous and mutually beneficial two-way linkages with proper safeguards for California ratepayers that are thoroughly vetted through both the ARB staff level, with pre-established Board approval processes.

Treatment of Unsold Allowances. SCPPA appreciates staff's proposal that unsold state-owned allowances could be transferred to the Allowance Price Containment Reserve, as a potential means to address cost containment concerns and to address oversupply concerns beginning in 2018. We generally support the proposed methodology specifying that allowances that remain unsold for over 24 months would be transferred to the APCR, but seek further clarification on how to structure access to unsold allowances in a reasonable manner and timeframe. SCPPA would support ARB's use of unsold allowances to fund the continuation of the Voluntary Renewable Energy Program.

Potentially requiring the completion of eight auctions before the APCR transfer could be effectuated, without simultaneously clarifying that those allowances will remain there until sold, could reduce the effectiveness of the APCR's intent. SCPPA seeks

clarification that these allowances will remain available until they are sold. Given the legal uncertainty currently associated with California's Cap-and-Trade Program – which may not be resolved through the judicial system for quite some time – SCPPA is concerned that limiting administrative flexibility will place undue and premature pressure on the market. SCPPA urges staff to further explore alternative programmatic options that could better firm and shape the market in the short-term. This includes an option to increase restrictive —holding limitsll for regulated entities.

Reporting Requirements

Some changes may seem small, but can have a significant impact on implementation. Assigning a default reporting response time of only 10 days is problematic. Many times it is not possible for organizations, either large or small, to respond to an information request in 10 days. This is a very short turnaround time, particularly if the request is complex, requires multiple inputs, or even requires customer authorization to release the data. Defaulting to 10 days is problematic since the nature of future requests is unknown. SCPPA understands that ARB would like a default timeframe, when otherwise not specified; therefore, SCPPA recommends that the default response time be extended to 30 days to ensure sufficient processing times.

Thank you for your time and consideration. SCPPA and our Members continue to seek forward progress on a variety of issues that have been raised over the past year. We remain ready to meet with ARB staff to work towards mutually agreeable solutions that best advance the State's climate change goals in an affordable manner for California ratepayers.

Respectfully submitted,

Tanya DeRivi
Director of Government Affairs

Sarah Taheri
Energy Analyst, Government Affairs

Letter
CT 78 CBD

CENTER for BIOLOGICAL DIVERSITY Because life is good.

September 19, 2016

Via internet upload: ***https://www.arb.ca.gov/lispub/comm/bclist.php***

Clerk of the Board
Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Proposed Amendments to the California's Greenhouse Gas Cap-and-Trade Program Beyond 2020 Dear Members of the Board:

The Center for Biological Diversity ("Center") offers the following comments on the Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market Based Compliance Mechanisms ("Proposed Amendments"). The Center is a non-profit organization with more than one million members and online activists and offices throughout the United States, including in Oakland, Los Angeles, and Joshua Tree, California. The Center's mission is to ensure the preservation, protection and restoration of biodiversity, native species, ecosystems, public lands and waters and public health. In furtherance of these goals, the Center's Climate Law Institute seeks to reduce U.S. greenhouse gas emissions and other air pollution to protect biological diversity, the environment, and human health and welfare. Specific objectives include securing protections for species threatened by global warming, ensuring compliance with applicable law in order to reduce greenhouse gas emissions and other air pollution, and educating and mobilizing the public on global warming and air quality issues.

The Center very strongly supports California's continuing commitment to statewide reductions in greenhouse gas emissions beyond 2020. Dramatically reducing anthropogenic greenhouse gas emissions is critical not just for stabilization of the global climate but for the integrity of the health, environment, and prosperity of California.

That said, the Center has deep concerns with the Proposed Amendments as they overwhelmingly rely on cap-and-trade as the primary mechanism for achieving emissions reductions, and they would perpetuate certain crucial failings of California's current greenhouse gas Cap-and-Trade program. For example, the Cap-and-Trade program's failure to account for the substantial climate impacts of forest-sourced woody biomass energy is contrary to science, undermines the integrity and effectiveness of the cap, and threatens California's ability to attain the emissions reduction targets established in AB 32, SB 32, and Executive Orders S-3-05 and

B-30-15. The program's overwhelming reliance on carbon offsets forgoes direct reductions in California and the associated co-benefits, prolonging, and in some cases exacerbating, environmental burdens borne by low-income communities and people of color. Also, the failure

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to prioritize direct reductions contradicts the explicit mandate of Assembly Bill 197. These concerns and others are detailed below.

For all of these reasons, the Center respectfully urges the Board to reject the Proposed Amendments to extend the existing Cap-and-Trade program beyond 2020, and to pursue alternative, non-cap-and-trade approaches to achieving California's greenhouse gas reductions.

I. California's Cap-and-Trade Program Fails to Account for the Climate Impacts of Forest-Sourced Woody Biomass in Bioenergy Production.

California's continuing refusal to address biomass emissions under the cap-and-trade program—and, accordingly, under the Clean Power Plan Compliance Plan built around the capand-trade program—is contrary to science and unsupportable, and undermines the integrity and effectiveness of the cap as a whole. The Cap-and-Trade regulation exempts emissions from combustion of many forms of biomass from any compliance obligation whatsoever, and thus effectively treats biomass as "carbon neutral"; this exemption is completely out of step with prevailing scientific knowledge.[1] Extending this exemption beyond 2020 would be arbitrary, capricious, and indefensible.

Treating biomass as effectively carbon neutral is also inconsistent with the limits imposed on biomass energy generation as a compliance measure in the CPP.[2] In the CPP, EPA confirmed that its own Science Advisory Board panel and its revised draft "Framework" for biomass carbon accounting had explicitly rejected the assumption that all biomass combustion can be considered "carbon neutral." (Carbon Pollution Emission Guidelines for Existing Stationary Sources:

[1] The Center has addressed these issues in detail elsewhere. (See Center for Biological Diversity, Comments on the Proposed Short-Lived Climate Pollutant Strategy (May 26, 2016), available at https://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=slcp2016 [comment nos. 94, 96, 97]; Center for Biological Diversity, Comments on Second Set of Proposed Modifications to the AB 32 Greenhouse Gas Cap-andTrade Regulation (Sept. 27, 2011), *available at* https://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=capandtrade10 [comment no. 93]; Center for Biological Diversity, Comments on the Proposed Greenhouse Gas Cap-and-Trade Regulation (December 15, 2010, *available at* https://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=capandtrade10 [comment nos. 718, 746].) Each of the comment letters referenced in this footnote, and all exhibits submitted with those letters, are hereby incorporated by reference.

[2] The Center has also addressed this issue in its comments on California's proposed CPP Compliance Plan, filed under separate cover today.

Electric Utility Generating Units, 80 Fed. Reg. 64,662, 64,885 (Oct. 23, 2015) ("Final CPP".) Rather, "the net biogenic CO_2 atmospheric contribution of different biogenic feedstocks generally depends on various factors related to feedstock characteristics, production, processing and combustion practices, and, in some cases, what would happen to that feedstock and the related biogenic emissions if not used for energy production." (*Ibid.*)

The CPP thus provided that states may use only "qualified biomass"—defined as "a biomass feedstock that is demonstrated as a method to control increases of CO_2 levels in the atmosphere (40 C.F.R. § 60.5880)—in demonstrating compliance with either a rate-based or a mass-based emissions goal.[3] (Final CPP, 80 Fed. Reg. at p. 64,886.) "Not all forms of biomass are expected to be approvable as qualified biomass (i.e., biomass that can be considered as an approach for controlling increases of CO_2 levels in the atmosphere)." (*Ibid.*) Accordingly,

> State plan submissions must describe the types of biomass that are being proposed for use under the state plan and how those proposed feedstocks or feedstock categories should be considered as ''qualified biomass'' (i.e., a biomass feedstock that is demonstrated as a method to control increases of CO_2 levels in the atmosphere). The submission must also address the proposed valuation of biogenic CO_2 emissions (i.e., the proposed portion of biogenic CO_2 emissions from use of the biomass feedstock that would not be counted when demonstrating compliance with an emission standard, or when demonstrating achievement of the CO_2 emission performance rates or a state rate-based or mass-based CO_2 emission goal).

(*Ibid.*) EPA will "review the appropriateness and basis for proposed qualified biomass and biomass treatment determinations and related accounting, monitoring and reporting measures in the course of its review of a state plan," and the agency will base its "determination that a state plan satisfactorily proves that proposed biomass fuels qualify . . . in part on whether the plan submittal demonstrates that proposed state measures for qualified biomass and related biogenic CO_2 benefits are quantifiable, verifiable, enforceable, non-duplicative and permanent."

The Compliance Plan relies entirely on the cap-and-trade regulation, which in turn treats virtually all biomass generation as "carbon neutral"—directly contrary to EPA's intent in the federal CPP. Indeed, as the Center's comments in other contexts (see footnote 1, *supra*) and supporting materials indicate, it is extremely doubtful that many, if any, biomass resources typically used in California can be verifiably demonstrated to "control" atmospheric CO_2 concentrations on the timescales relevant to the CPP (i.e., between 2022 and 2030).

This problem alternatively could be described as a leakage problem: generation and emissions from CPP-covered EGUs, which bear regulatory costs under cap-and-trade,

CT 78-2

[3] EPA's proposal for allowance trading under a federal mass-based implementation plan would require covered facilities co-firing with biomass to hold allowances for all of their CO_2 emissions, including emissions from

may "leak" to biomass units, which are not covered EGUs and bear no similar regulatory costs. The effect of this leakage on the atmosphere could be dramatic. California's CPP-covered EGUs had a combined emissions rate of 870 lbs/MWh in 2014. (Compliance Plan at p. 12.) A new biomass steam turbine, in contrast, would have an emissions rate of more than 3,000 lbs/MWh at the smokestack.[4] Absent a sound, verifiable demonstration that California biomass actually controls atmospheric CO_2 concentrations, leakage to biomass facilities could dramatically undermine achievement of California's overall CPP emissions target, as well as threatening

biomass; EPA sought comment on an alternative approach allowing facilities to identify "qualified biomass" and "potential methods for demonstrating compliance, and thus reduc[ing] the mass emissions attributed to" an EGU cofiring with biomass. (Federal Plan Requirements for Greenhouse Gas Emissions From Electric Utility Generating Units Constructed on or Before January 8, 2014; Model Trading Rules; Amendments to Framework Regulations, 80 Fed. Reg. 64,966, 65,012 (Oct. 23, 2015).) Although EPA has not yet finalized the proposal, it confirms provisions in the Final CPP indicating that "qualified biomass" requirements apply to both mass-based and rate-based compliance options.

[4] This figure is based on heat rate and efficiency data from the Department of Energy, Energy Information Administration, and Oak Ridge National Laboratory. (See Partnership for Policy Integrity, CO2 Emission Rates for Modern Power Plants (Sept. 2016) (Attachment 1 hereto).)

California's ability to attain the emissions reduction targets established in AB 32, SB 32, and Executive Orders S-3-05 and B-30-15.

CT 78-2 (cont)

II. California's Cap-and-Trade Program Allows for the Use of Offsets to Exceed the Amount of Targeted Reductions.

Like the current cap-and-trade regulation, the Proposed Amendments would allow offset credits to be used to satisfy up to 8 percent of the greenhouse gas compliance obligation of covered entities (i.e., regulated emission sources). As detailed in an analysis released last week by Lara Cushing, et al., offset credits worth more than 12 million tons CO_2eq were utilized to meet compliance obligations in the first compliance period.[4] These offsets represent 4.4 percent of the total compliance obligation of all regulated companies and over four times the targeted greenhouse gas reduction in 2013 to 2014.[5]

Seventy-six percent of the offset credits used to date were generated by out-of-state projects. Thus, rather than achieving reductions at the emissions sources, where California communities might benefit from reductions in associated co-pollutants, those reductions were produced via financial transfers from offset projects outside of California. Furthermore, for the 46% of offset credits that came from the destruction of ozone-depleting substances—primarily industrial refrigerants, previously captured and stored in containers—no co-benefits were felt at the actual project site outside of California, either.

[4] Lara J. Cushing, Lara J. Cushing, Madeline Wander, Rachel Morello-Frosch, Manuel Pastor4 Allen Zhu, and James Sadd, 2016, A Preliminary Environmental Equity Assessment of California's Cap and Trade Program, at 9. Available at http:// dornsife.usc.edu/PERE/enviro_equity_CA_cap_trade.

[5] *Id.* at 8.

III. California's Cap-and-Trade Program Adversely Affects Communities Facing Existing Pollution Burdens.

We share the serious concerns raised in the comments submitted by the Center on Race, Poverty and the Environment, et al., on the Proposed Amendments, regarding the ways in which cap-and-trade appears to be prolonging, and in some cases exacerbating, environmental burdens borne by low-income communities and people of color, and we include those comments by reference here.

According to the aforementioned report by Cushing, et al., which assessed the inequalities in the reductions of greenhouse gas emissions and associated particulate matter (PM_{10}) co-pollutants from sources covered under California's Cap-and-Trade program, "preliminary evidence suggests that in-state GHG emissions from regulated companies have increased on average for several industry sectors and that many emissions reductions associated with the program were linked to offset projects located outside of California."[6] Cushing *et al.*, also found that "large GHG emitters that might be of most public health concern were the most likely to use offset projects to meet their obligations under the cap-and-trade program."[7] Specifically, the report found that the first compliance period reporting data show that the cement, in-state electricity generation, oil and gas production or supplier, and hydrogen plant sectors have increased greenhouse gas emissions in the 2013-2014 compliance period over the baseline period (2011-2012.

CT 78-1 cont

As mentioned in the Initial Statement of Reasons ("ISOR"), the Air Resources Board has yet to finalize and/or implement the Adaptive Management Plan that has been under development since 2011, and which may be able to identify potential public health issues such as those identified in Cushing *et al.*,. ISOR at 302. Furthermore, the long-awaited Adaptive Management Plan, as it has so far been represented, is narrowly constrained to look only at *increases* in emissions due to the implementation of California's Cap-and-Trade program and is deliberately designed *not* to identify scenarios in which California's Cap-and-Trade program results in the persistence of emissions or slower reductions in some communities and locations
compared to others. These are serious problems that call for rejecting the Proposed Amendments to extend California's Cap-and-Trade program beyond 2020, and a .

IV. Linking With Ontario is Premature and Further Undermines In-State Reductions.

The Proposed Amendments propose to link California's Cap-and-Trade program with the new cap-and-trade program in Ontario, Canada, beginning January 2018. However, the government of Ontario has yet to publish offset protocols, or even to specify those sectors for which it intends to develop offset protocols in the foreseeable future. In June

[6] *Id.* at 10.
[7] *Id.* at 10.

of this year, the government of Ontario indicated that it was considering offset protocols for agriculture, forestry, lands, and resource recovery sectors.[8]

As the Initial Statement of Reasons points out, Senate Bill 1018 (SB 1018; Chapter 39, Statutes of 2012) requires that the Governor of California make specific findings prior to linking the California Program with other jurisdictions. Among other things, the Governor must find that the linked program has adopted program requirements for greenhouse gas reductions (including, but not limited to, requirements for offsets) that are equivalent to or stricter than those required by AB 32.[10] While this is admittedly not a particularly daunting hurdle, the aforementioned sectors are all highly complex and problematic, and it has proven very difficult for California to develop offset protocols that would effectively provide high-quality offsets. Ontario's protocols would certainly need to be finalized with sufficient time for review not only by the Governor, but by the public and experts, before such credits could be incorporated and accepted into California's Cap-and-Trade program.

Even under the best scenario, in which Ontario is able to develop offset protocols that result in high-quality offsets, linking with Ontario and accepting those offsets credits means that California would be further exacerbating the problems of forgoing in-state direct reductions in exchange for out-of-state offset credits. Again, as indicated by the findings of Cushing, *et al.*, , this is exactly the type of approach that risks prolonging and exacerbating environmental burdens borne by low-income communities and people of color here in California.

V. California Must Prioritize Direct Reductions

The California Legislature recently adopted, and Governor Brown has since signed, Senate Bill 32, legislation requiring California to reduce emissions 40 percent below 1990 levels by 2030. Stats.2016, ch. 249 (Sen. Bill 32), § 2 (Health & Saf. Code § 38566, eff. Jan. 1, 2017). However, that law is conspicuously silent on the role of the cap-and-trade regulation in achieving these increasingly steep reductions after 2020. Specifically, SB 32 did *not* identify cap-and-trade as a vehicle for attaining those goals. Moreover, Assembly Bill 197—companion legislation to Senate Bill 32, and also recently signed into law by Governor Brown—specifically requires the Air Resources Board to prioritize "direct emission reductions" in achieving reductions beyond the 2020 limit. Stats.2016, ch. 250 (Asm. Bill 197), § 5 (Health & Saf. Code § 38562.5, eff. Jan. 1, 2017).

The Proposed Amendments must be considered—and revised—in light of the specific direction and authority provided in SB 32 and AB 197. Specifically, the Proposed Amendments must be revised to prioritize direct emission reduction rather than increased reliance on out-ofstate carbon offsets.

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[8] "Due to their ability to remove carbon from the atmosphere, Ontario's agriculture, forestry, lands, and resource recovery sectors will be able to supply carbon offsets to the cap and trade market, providing made-in-Ontario compliance options for emitters."
https://www.ontario.ca/page/climate-change-action-plan#section-11
June 2016 [10] ISOR at 17.

Conclusion.

The Center very strongly supports California's continuing commitment to statewide reductions in greenhouse gas emissions beyond 2020. Dramatically reducing anthropogenic greenhouse gas emissions is critical not just for stabilization of the global climate but for the integrity of the health, environment, and prosperity of California.

However, the concerns and problems enumerated above speak to the failure of California's Cap-and-Trade program to provide an adequate and equitable mechanism for achieving the necessary greenhouse gas reductions. Therefore, the Center must respectfully urge the Board to reject the Proposed Amendments to extend the existing Cap-and-Trade program beyond 2020, and to instead pursue alternative, non-cap-and-trade approaches to achieving California's greenhouse gas reductions.

Thank you for your consideration of these comments.

Sincerely,

Brian Nowicki

Brian Nowicki
Center for Biological Diversity
(916) 201-6938
bnowicki@biologicaldiversity.org

Attachment 1.

CO2 Emission Rates for Modern Power Plants (Sept. 2016)
Published by the Partnership for Policy Integrity.

EDF
ENVIRONMENTAL DEFENSE FUND
Finding the ways that work

Letter
CT 81 EDF

Electronically filed at:
http://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=caps-allocationws&comm_period=1

September 19, 2016

Rajinder Sahota
California Air Resources Board
1001 I Street
Sacramento, CA 95184

Re: Comments on Proposed Amendments for Third Compliance Period and Post-2020 Cap-and-Trade Program

Dear Ms. Sahota:

On behalf of the Environmental Defense Fund, and our over 60,000 members in California, we appreciate the opportunity to comment on the proposed amendments for the third cap-and-trade compliance period and to establish the post-2020 cap-and-trade program.

In over three years of implementation, California's cap-and-trade program has proven to be a successful part of California's suite of climate policies. Capped emissions are declining, California is adding jobs and growing the economy faster than the national average, the state is able to create more wealth with fewer emissions, Quebec and California are linked and holding quarterly joint auctions, almost all businesses have successfully complied with cap-and-trade requirements, and California communities - especially low-income, pollution-burdened communities - are seeing real benefits from cap-and-trade investments. Cap-and-trade is an essential part of achieving these outcomes because it places an absolute limit on carbon pollution and ensures that polluters are held accountable for their pollution and must include a price on carbon into their regular business decisions.

Because of this success we strongly support ARB moving forward with amendments to extend the cap-and-trade program beyond 2020 and believe this is the right time to do so. The cap-andtrade program needs certainty about future emissions reductions in order to continue providing robust incentives for reducing emissions.

Authority to Act

AB 32 gave the Air Resources Board the responsibility and obligation to regulate greenhouse gas pollution in California. Although, AB 32 set out a specific target for 2020, the language of AB

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32 is clear that the Board's responsibility does not end in 2020. Therefore, EDF has been fully supportive of ARB's efforts to extend the cap-and-trade program beyond 2020 under their existing AB 32 authority. Furthermore, the California Legislature has now made it clear, through the recently passed SB 32, that ARB does have existing authority to act to reduce greenhouse gasses and that they must use that authority to reduce harmful pollution consistent with reaching a target of at least 40 percent below 1990 levels by 2030.

Post-2020 Cap Setting

Support a 2021 cap based on expected actual emissions in 2020:

Since the impact of greenhouse gas pollution in the atmosphere is cumulative over time, the trajectory of reductions in California is environmentally significant. An earlier reduction on greenhouse gasses has a greater benefit to the atmosphere than an equivalent reduction in a later year. In informal workshop comments, EDF supported ARB setting the 2021 allowance budget based on the most up-to-date expectation of emissions in 2020 (which are broadly anticipated to be below the level of the 2020 allowance budget), rather than based on a straight line reduction from 2020 to 2030. We continue to support this approach.

ARB is proposing an approach where an amount of allowances equivalent to the difference between the 2021-2030 allowance budgets implied by using the most up-to-date expectation of 2021 emissions versus the straight-line (i.e., between the 2020 allowance and 2030 allowance budgets) trajectory would be placed in the Allowance Price Containment Reserve (APCR). If allowances prices remain below the APCR, this would have a similar practical effect to setting the post-2020 budget based on the most up-to-date expectation of 2021 emissions. However, the long-term difference in the aggregate level of the cap could weaken the price signal to the economy. The fact that actual 2020 emissions are expected to be below the 2020 allowance budget shows that businesses can make the sorts of deeper emissions reductions that will be necessary for California to achieve its post-2020 reduction targets. Market participants do not have an established expectations about post-2020 budgets that have not yet been set. Therefore, stakeholders do not have a legitimate claim to allowances that represent a budget set at the straight-line reduction trajectory.

Maintaining consistency with previous cap-setting practices and stated policy positions would also suggest that ARB should set the 2021-2030 allowance budgets based on the most up-to-date expectation of 2021 emissions. ARB set the 2013-2020 allowance budgets based on expected emissions and then set aside APCR allowances from below those budgets. In reference to EPA rulemaking, ARB has noted how important cap adjustments would be if a mass based cap was significantly above actual emission levels, due to unforeseen factors affecting emissions. In this context, a cap adjustment is also appropriate given that factors related to imported electricity may have made it easier than anticipated for importers to bring (or appear to bring) clean energy

into California. Given these dynamics we believe ARB should err on the side of being conservative, setting a tighter rather than a looser cap.
EDF believes that the 2021 cap should be set based on the most up-to-date expectation of 2021 emissions and that APCR allowances should be set aside from under that cap level, perhaps with some relationship to the level of the offsets limit.

Support including fugitive methane emissions:

The issue of fugitive methane emissions is not directly addressed in this rulemaking except to the extent that natural gas consignment might incentivize a reduction in fugitive methane emissions. EDF believes that ARB should begin taking steps to accurately account for fugitive methane emissions in the cap post-2020. In reality, all natural gas is already under the cap since importers of natural gas and natural gas extractors have compliance obligations under the cap. However, those compliance obligations are based on the emissions associated with combusting that natural gas. When that natural gas is leaked from a pipe, for example, as methane, the greenhouse gas impact associated with that now fugitive methane is much higher.

When ARB initially set the cap before compliance began, measurement techniques were not yet sophisticated enough to accurately account for fugitive methane emissions. However, major progress has been made since that time in the ability to measure fugitive or leaked methane. ARB will need to do a thorough evaluation of the steps necessary to include fugitive methane in the cap and an evaluation of the available data. Much of that discussion is beyond the scope of these comments but we look forward to engaging with ARB on this topic. We do encourage ARB to complete this effort in time to include fugitive methane in the post-2020 cap starting with the 2021 compliance year.

Support updating global warming potentials:

EDF supports ARB's decision to update the GWPs relative to the second IPCC assessment but encourages ARB to continue considering moving to the fifth, rather than the fourth IPCC assessment.

Linkage

Support linkage with Ontario

EDF supports ARB moving forward with the process to link Ontario to the California-Quebec market. There are many potential benefits of this linkage but one of the most significant is the work it will do to further California and Quebec's example of how local, bottom-up partnerships and action can help to solve a global threat. The early collaboration that took place in the WCI process continues to bear fruit and allowed participating jurisdictions to consider action at their own pace and adapted to their own local needs. Once Ontario was well situated to take up the issue of cap-and-trade again, they were able to act very quickly and are implementing a cap-andtrade program on a very aggressive timeline because of the intervening work completed by California and Quebec. This avoided delay is a major benefit to the atmosphere which will benefit California and its partners.
Other benefits of the Ontario linkage include market benefits such as a broader market with potentially more cost-effective emissions reductions and greater market liquidity. There are also administrative benefits of cost-sharing within WCI, Inc., for example, related to maintaining the

CT
81-1

CITTS system and administering auctions. As climate leaders we also hope that California, Quebec, and Ontario will encourage one another to set ambitious caps, caps that not only meet their established targets but that recognize that the trajectory taken to achieve those targets also has significant environmental impacts.

CT 81-1 cont

Ontario is well suited for the type of full linkage contemplated in this rule making. Ontario was a WCI participant and is in the process of adopting a cap-and-trade regulation that is well aligned and appears to be harmonized with California and Quebec's programs. Ontario has also set 2020, 2030 and 2050 targets that are more stringent than California's in 2020, slightly less stringent in 2030, and equivalent in 2050. This seems a comparable level of ambition adequate to meet California SB 1018 standards.

Support to develop a regulatory proposal for sector-based offsets from tropical forests:

Although the current proposed regulations do not include amendments to allow the use of international sector-based offsets from tropical forest for compliance in California's program, the staff's Initial Statement of Reasons (ISOR) does contemplate this option for the program's third compliance period. We would like to take this opportunity to briefly emphasize why we believe that is critical for the State of California to develop a compliance pathway for jurisdiction-scale reductions in emissions from tropical forests through its cap and trade program, and to do so as soon as possible. First, tropical deforestation is a significant global contributor to climate change. Climate modeling suggests that reducing deforestation below current levels is crucial to stabilizing global average temperature below key thresholds above pre-industrial levels. Without economic incentives that make standing forests worth more alive than dead, the unsustainable conversion of forests worldwide is likely to continue and will further fuel the disastrous effects of climate change.

The jurisdictional and sector-based approach to crediting international offsets from the tropical forest sector being currently contemplated by CARB (i.e. one that is implemented comprehensively at state, provincial, regional, and ultimately national levels) offers critical features that overcome many of the most prominent criticisms of the project-by-project model for reducing emissions from tropical deforestation. A pathway for credits from such sectorbased and jurisdictional-level programs in tropical forest jurisdictions, done right, could set a global gold standard and drive other states and countries to take action to address this significant source of global emissions. California can leverage its program to achieve emissions reductions beyond its borders at a large scale by incentivizing high-integrity programs abroad the can demonstrate reduction in deforestation emissions and benefits for tropical forest communities. In addition, an adequate supply of high-quality offsets within the regulatory offsets limit is an important cost-containment feature for California's program.

Support following international best practices on accounting:
With only one linkage partner, Quebec, the mechanics of linkage so far have been relatively simple. However, as California engages with new linkage partners and considers new types of linkage such as Retirement-Only Linkage and Retirement-Only Linkage Agreements these relationships and their emissions impacts of them will grow increasingly complex. The Paris agreement has identified this challenge as countries consider voluntary cooperation to achieve their nationally determined contributions ("NDCs"). Article 6.2 of the Paris Agreement requires parties to "apply robust accounting to ensure, inter alia, the avoidance of double counting" when

engaged in emissions trading to meet their NDCs. The Conference of the Parties will be providing further guidance to parties on what is required under this provision. Although subnational jurisdictions are not parties to the Paris agreement, California and its partners are viewed globally as a model for emissions trading and contributing to and following best practices on issues such as accounting is critical to maintaining that position. We encourage California and partners to follow developments within the Conference of Parties closely and to consider contributing to the development of best accounting practices where appropriate as the state's linkage relationships mature. EDF is deeply engaged in discussion about accounting practices under the Paris Agreement and looks forward to working with ARB on this topic in the future.

Allowance Allocation

Consignment Requirements for the Natural Gas (NG) Sector:

EDF supports the staff proposal to increase the percentage of allowances NG suppliers are required to consign to auction. Some transition assistance was appropriate. However, increasing the consignment percentage for the NG sector will create more parity with electric utility sector and create a more even price signal across the cap-and-trade program. Furthermore, EDF supports ARB continuing to disallow a volumetric return of allowance value to customers. In the electricity sector, the climate credit provided by utilities to households is providing a progressive benefit that shields low-income customers from overall increased costs while preserving an incentive to implement like energy efficiency that will lower electricity use. Moving to 100% consignment without a volumetric return of value in the NG sector will have a similar effect.

Including Purchased Electricity or Steam in Industrial Benchmarks:

EDF strongly supports ARB's proposal to include purchased electricity and steam in the calculation of industrial benchmarks, and strongly advocates that ARB apply EDU or purchasespecific (in cases where an industrial source purchases electricity directly from and EGU, for example) emissions factors. Applying EDU or purchase-specific emission factors will provide the correct economic incentives to industrial sources to substitute between electricity and steam supplied by an EDU, or other third party, and on-site combustion. In contrast, applying a state average emission factor would unduly penalize sources of electricity and steam with emission factors below the state average and unduly advantage sources with emissions factors above the state average, potentially distorting technology choices of covered industrial sources and leading to higher GHG emissions.

ARB should reduce the annual allocation to each EDU by an amount equivalent to the total annual allowance allocation to industrial sources for electricity or steam purchased from that EDU. This netting out should be conducted on an updating annual basis in concert with the allocation to industrial sources for purchased electricity and steam. As opposed to forecasting approaches, which would reduce the allocation to EDUs by projecting emissions associated with purchases of electricity or steam by covered industrial sources, this approach guarantees that allocations to EDUs are appropriately adjusted for net sales, avoiding under or over compensation associated with sales of electricity or steam to covered industrial sources.

Allocation to EDUs for Increase End-use Electrification:

EDF believes ARB has taken the appropriate step by continuing to consider the question of whether and how to update allowance allocation to EDUs to account for expanded electrification deserves further study and consideration. Driven by decarbonization of the grid, electrification increasingly presents an opportunity for deep carbon reductions in a variety of sectors, most notably the transport sector. As emissions in those other sectors fall, increased demand for electricity will result in greater emissions associated with the electric sector, potentially warranting greater allocation to fund direct investments in decarbonization. That said, it will be critical that allowances are not used to blunt the carbon price signal in electricity rates. Using allowances to distort the price signal in electric rates could potentially disadvantage alternative technologies, leading to higher GHG emissions and delaying (or derailing) critical innovations.

Another potential source of risk in updating allocations to EDUs stems from the method used to update the allocations. If allocation are updated based on changes in load, as opposed to wellidentified instances of substitution toward electric alternatives (i.e., by measuring the change in electricity demanded by the EV fleet, for example), there is potential to disincentive energy efficiency. That is, if allocation is based on changes in load, as opposed to changes in load driven by specific, and well-quantified, instances of electrification, then EDUs will have a strong disincentive to invest in activities that reduce load.

Sincerely,

Erica Morehouse

Erica Morehouse
Senior Attorney, Global Climate

Letter
CT 92 CEJA

September 19, 2016

California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms

To the California Air Resources Board:

On behalf of the California Environmental Justice Alliance (CEJA), we respectfully submit these comments on the Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms.

CEJA is a statewide coalition of community-based organizations working to advance environmental justice in state policy. Our members work across California in low-income communities and communities of color most impacted by pollution, struggling with long-standing air-quality and related public health issues. These same communities will be hit first and hardest by climate change. Ensuring environmental justice is effectively integrated into California's climate policies is critical to the health and well-being or the communities where CEJA members work.

We request that ARB reject the staff's recommendation to continue the cap-and-trade program post-2020. The reasons for our request are outlined in more detail below.

1. Analysis of ARB's data from the 2013-14 compliance period prove that localized increases in GHG emissions are happening, and more often in environmental justice communities. Last week, together with leading researchers, we released a report assessing the inequalities in the location of greenhouse gas-emitting facilities and the amount of greenhouse gases and particulate matter ("PM10") emitted by facilities regulated under Cap and Trade.[1] The report also provides a preliminary evaluation of changes in localized greenhouse gas emissions from large point sources since the advent of the program. The report found: CT 92-1

    a. On average, neighborhoods with a facility within 2.5 miles have a 22 percent higher proportion of residents of color and 21 percent higher proportion of residents living in poverty than neighborhoods that are not within 2.5 miles of a facility.
    b. These communities are home to a higher proportion of residents of color and people living in poverty than communities with no or few facilities nearby. Indeed, the higher the number of proximate facilities, the larger the share of low-income residents and communities of color.
    c. The neighborhoods within 2.5 miles of the 66 largest greenhouse gas and PM10 emitters have a 16% higher proportion of residents of color and 11% higher

[1] Lara J. Cushing, *et al.*, A PRELIMINARY ENVIRONMENTAL EQUITY ASSESSMENT OF CALIFORNIA'S CAP AND TRADE PROGRAM.

proportion of residents living in poverty than neighborhoods that are not within 2.5 miles of such a facility.

d. The first compliance period reporting data (2013-2014) show that the cement, instate electricity generation, oil & gas production or supplier, and hydrogen plant sectors have increased greenhouse gas emissions over the baseline period (20112012).
e. The amount of emissions "offset" credits exceed the reduction in allowable greenhouse gas emissions (the "cap") between 2013 and 2014 and were mostly linked to projects outside of California.

The report demonstrates three fundamental points that environmental justice advocates have raised for years:

a. Cap and Trade disparately affects communities of color compared to communities that do not host a cap and trade facility;
b. Cap and Trade denies communities the benefits of on-site reductions;
c. greenhouse gas reductions attributed to Cap and Trade occur primarily outside of California.[2]

The report concludes: *Preliminary analysis of the equity and emissions impacts of California's cap-and-trade program indicates that regulated GHG emission facilities tend to be located in neighborhoods with higher proportions of residents of color and those living in poverty. There is a correlation between GHG emissions and particulate matter levels, suggesting a disparate pattern of localized emissions by race/ethnicity and poverty rate. In addition, facilities that emit the highest levels of both GHGs and particulate matter are similarly more likely to be located in communities with higher proportions of residents of color and those living in poverty. This suggests that public health and environmental equity co-benefits could be enhanced if there were more GHG reductions among the larger emitting facilities that are located in disadvantaged communities. Currently, there is little in the design of cap-and-trade to insure this set of localized results. Moreover, while the cap-and-trade program has been in effect for a relatively short time period, preliminary evidence suggests that in-state GHG emissions from regulated companies have increased on average for several industry sectors and that many emissions reductions associated with the program were located outside of California. Large emitters that might be of most public health concern were the most likely to use offset projects to meet their obligations under the cap-and-trade program.*[2]

The staff report, when talking about adaptive management, said that "ARB is committed to promptly developing and implementing appropriate responses" to any adverse impacts. Based on the recent findings now is the time to adjust strategies to ensure inequitable burdens are alleviated, and the proposed amendments do not achieve this.

CT 92-1 cont

2. **Assembly Bill 197 expressly directs the State Board to prioritize direct emissions reductions at large stationary sources, and these regulations do not comport with that authority.** AB 197 was recently signed into law by Governor Brown. Under it, the Board must prioritize "emissions reduction rules and regulations that result in direct

[2] Lara J. Cushing, *et al.*, A PRELIMINARY ENVIRONMENTAL EQUITY ASSESSMENT OF CALIFORNIA'S CAP AND TRADE PROGRAM at 7-9, attached as Exhibit 3.

emission reductions at large stationary sources of greenhouse gas emissions." The staff recommendation to extend the cap and trade regulations rejects direct emissions reductions

in favor of Cap and Trade without any effort to identify or prioritize those regulatory strategies.

3. **ARB staff must fully consider all scenarios in the 2030 Target Scoping Plan.** The 2030 Target Scoping Plan has four scenarios, only one of which focuses on Cap and Trade. All of these scenarios need to be fully analyzed and considered by ARB.

For these reasons, we respectfully **request that ARB reject the staff's recommendation to continue the cap-and-trade program post-2020.**

Thank you for this opportunity to comment on the Proposed Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms. We look forward to working collaboratively with ARB staff to ensure the needs of environmental justice communities are met.

Sincerely,
Amy Vanderwarker
CEJA Co-Director; amy@caleja.org; (510) 808-5898 x 101

Letter
CT H8 CALBIO

CALIFORNIA BIOENERGY

Plugging dairies into a renewable future

September 22, 2016

California Air Resources Board 10011 Street
Sacramento, CA 95814

RE: California Bioenergy's Comments to the Proposed Amendments to Mandatory Greenhouse Gas Reporting Regulation ("MRR") and California Cap on Greenhouse Gas Emissions and Market Based Compliance Mechanisms ("Cap and Trade")

Dear ARB Staff and ARB Board Members,

We would like to thank the ARB Staff and ARB Board for the opportunity to speak today and submit Comments.

We started California Bioenergy LLC ("Ca\Bio") ten years ago in order to reduce dairy-manure methane emissions. The goal has been to capture this methane, destroy it and in that destruction process use it beneficially- to generated renewable electricity or to produce renewable compressed natural gas ("R-CNG") for truck and car fuel. We have three electricity projects in operations and three more that will start construction this year. We are also focused on building a dairy biogas upgrading facility to produce R-CNG for vehicle fuel use in a cluster outside of Bakersfield in Kern County and are one of the three finalists in the Sustainable Freight Action Plan. We have benefited from CEC and CDFA grants, which have made a great difference and for which we are grateful.

Regulatory Non-Compliance is an issue than can prevent the development of dairy projects at the speed and scale that ARB and the state of California are seeking- 40% reduction by 2030 as per SB 1383. We view Regulatory Non-Compliance as one of the two most critical issues standing in the way of large scale dairy methane R-CNG projects. The other is the lack of LCFS price and program certainty, but that is a separate discussion.

The staff proposal takes important steps forward, but it is vastly insufficient, and we discuss two important examples.

The staff proposal to limit the loss of carbon credits to the period of the violation is one step forward, and we strongly urge that it is supported. However, it is not enough. Violations may occur for long-periods of time and not be recognized. Or even violations that are recognized, for instance a PM 10 reading exceeding the permitted limit by 5%, could take multiple weeks to schedule a second external party test to close out the violation. The proposal also addresses all violations as if they are of equal consequence. The severity of a violation should also be taken into account since many would be viewed by the regulating agency as of minor impact. In short, while the proposal decreases carbon credit revenue risk, significant risk will remain.

The recommendation to limit the boundary of the project is a separate significant step forward, and we strongly urge that it is supported. However, it has an important flaw. It includes within the boundary the effluent from the digester. In the Base Case dairies take manure water from their storage lagoon and use it to fertilize and irrigate their adjacent farmland to grow the feed crops. In a lagoon digester (and we estimate over 95% of manure processed in California digesters are

covered lagoon digesters) the same thing happens: the manure water, called effluent, is given back to the farmer to apply to their farmland. If the dairy fails to submit a report, submits a report missing data, makes an error, or does something improper, it will receive a Notice of Violation (NOV). If the digester project does not own or control the effluent, it should not be held responsible and lose vital credit revenue for what is outside its control and is for an on-going process that pre-dates the digester. Thus the project boundary should end when the effluent is handed back to the farmer. By contrast if the project retains ownership of the effluent- for instance if the digester project is seeking to export and sell the nutrients' and in their handling process they receive an NOV, then it makes sense to include the effluent
within the project boundaries.

Further, based on conversations with staff, an argument was made that if the digester output effluent goes into the dairy's lagoon, which is where it will likely go prior to irrigation, then the dairy- all of it- will be included in the project boundary. As a result, the advancement of project boundaries that apparently is being made would be illusory. We strongly urge the Board to determine that the project boundary begins at the point of receipt of the dairy manure and ends at the point it hands over the digester effluent whether to the farmer or an external party; and that this boundary is clear and that it assumes the effluent will go into the dairy's lagoon.

While limiting the loss of credits to the period of an NOV and correcting the project boundaries are important steps forward, there remains significant risk of a project receiving an NOV and losing carbon credits and credit revenue, at a potentially significant level. These are complex projects. Especially since an NOV can be a small exceed a need of the permitting level, it is our view that there is a risk of a violation of a permit in any given year. It is our understanding this is also the view of the Air District.

The receipt of the NOV and the resulting loss of carbon credits will put a project in financial jeopardy. Moreover, simply the risk of loss of revenues from carbon credits- and the potential inability for a project to deliver returns to investors, pay bank debt, provide a new revenue stream to farmers, or prevent developers from building a viable business- will result in a significant slowdown in project development- at the very moment we need a massive acceleration.

Further this a significantly larger issue with R-CNG projects, relative to electricity projects, since GHG methane destruction, as calculated by the ARB protocol, are a greater percentage of the overall revenues, roughly 50% to 60% for R-CNG project to versus roughly 15% for electricity projects. As a result, if there is uncertainty over the ability to receive carbon credit revenues, developers will be pushed to projects that generate electricity. However, it will also require a higher electricity price, since the carbon revenue will be uncertain and this higher electricity price may never be achieved in the BioMAT. Furthermore, the risk of regulatory noncompliance, developed with the goal of advancing environmental protection, will inadvertently have a perverse consequence, since it would increase NOx emitting electricity projects while reducing NOx eliminating R-CNG projects fueling diesel truck replacements.

There is an additional important consequence: there are higher regulatory standards in California than many other states. Inadvertently the likely higher incidence of NOVs within California, based on the greater and tighter monitoring, will likely result in greater risk for loss of carbon credits for California based dairy manure reduction projects than those in other states, and result in a relative slowing of California digester projects and the inability to meet SB 1383's objectives.

We understand one considered reason for the requirement for a project to have 100% perfect regulatory compliance comes from the CEQA process that was used to support the regulation. It is important to note that while that may be important for many offset protocols in the case of dairy digesters many if not most projects are deemed CEQA exempt by the responsible agency (usually

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H8-1

the Air District) since they have a diminutive effect on a large dairy's manure operation, yet deliver substantial benefits. As a result, there may be grounds to exempt dairies from this historically global ARB CEQA approach.

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A Recommended Approach

The solution is to think significantly anew not incrementally about the issue of regulatory compliance. We and others suggest to ARB that the policy should be changed to make clear that an NOV that reduces carbon credits should only be those NOVs that impact greenhouse gas reductions. This would leave the other environmental and worker safety impacts to the local, state and federal agencies chartered with regulating these issues. Further, if a project is failing to address its NOV with the agency issuing the NOV then and only then, should its revenues from its reduction of GHGs be in jeopardy.

While there is a long history of the current interpretation of limiting carbon credits based on NOVs of any type, we would suggest the code itself provides an alternative approach.

In the Regulatory Code (Version dated 11-1-15), 95973, Requirements for Offset Projects Using ARB Compliance Offset Protocols, (b), it states:

"Local, Regional, and National Regulatory and Environmental Impact Assessment Requirements. An Offset Project Operator or Authorized Project Designee must fulfill all local, regional, and national requirements on environmental impact assessments that apply based on the offset project location. In addition, an offset project must also fulfill all local, regional, and national environmental and health and safety laws and regulations that apply based on the offset project location and that **directly apply to the offset project,** including as specified in a Compliance Offset Protocol. The project is out of regulatory compliance if the project activities were subject to enforcement action by a regulatory oversight body during the Reporting Period. An offset project is not eligible to receive ARB or registry offset credits for GHG reductions or GHG removal enhancements for the entire Reporting Period if the offset project is not in compliance with regulatory requirements **directly applicable to the offset project** during the Reporting Period." (Emphasis added).

If "directly apply to the offset project" and "directly applicable to the offset project" refers to the GHG reduction aspect of the project only, then the relevant regulatory violations; as determined by outside agencies (non ARB agencies), are only those that apply to the GHG reductions. The definition of an offset project, per the Regulatory Code (Definition 245). It furthers this interpretation, since it states, "'Offset Project' means all equipment, materials, items, or actions that are directly related to or have an impact, up n GHG reductions, project emissions, or GHG removal enhancements within the offset project boundary." (Note "Project Emissions," definition 296, "means any GHG emissions associated with the implementation of an offset project…")

In the Staff Report: Initial Statement of Reasons, released August 2, 2016 and Scheduled for Consideration September 22, 2016,.for instance, where the staff is proposing limiting the penalty for regulatory compliance violations to the duration of the violation, it states,

"Staff is proposing modifications to the requirement that offset projects may not receive ARB offset credits for the entire Reporting Period when they are out of regulatory compliance with any local, regional, and national environmental health and safety laws and regulation that apply to the offset project. The proposed amendments would limit the period of time livestock <JI)d mine methane capture offset projects are ineligible to receive ARB offset credits for not being in regulatory compliance to the time period the project was actually out of regulatory compliance, to the extent that time period can resubstantiated by doc mentation." (Section (c), page 70)

If the phrase "off set projects" reflects the code's definition, then the staff's proposal too could be interpreted to mean a project is only out of regulatory compliance if the NOVs impact GHG reductions.

Our focus and proposal to limit NOVs to those that impact GHG reductions are not a means to decrease overall environmental impacts. Rather it is the opposite. The change will increase the reliability of receiving carbon based revenues and, as discussed above, will increase the percentage of projects that produce R-CNG for vehicle use, reducing NOx emissions in the San Joaquin Valley, home to a vastly disproportionate number of disadvantaged communities. Further, we work every day, at advancing the co-benefits of dairy digesters. We construct double-lined lagoon digesters, increasing ground water protection. Digestion increases the mineralization of nitrogen, increasing the percentage in a plant absorbable form. We are studying this issue (and seeking funding for it), since it should further limit the risk of leakage as well as reduce the need for chemical fertilizers. We are also working to develop processes to add effluent into drip irrigation systems, decreasing water use while also increasing nitrogen absorption. A digester improves the starting point for drip irrigation at a flush dairy, providing manure water with less solids and greater consistency. A well designed digester will improve the sustain ability, in both meanings of the word, of California dairies.

At the same time CaiBio's focus is to decrease methane emissions and play our small part in slowing the rate of climate change. The proposed changes to limit NOVs to those that impact GHG reductions will help increase the chance to meet or exceed the goals in SB 1383, while simultaneously advancing other environmental goals. The failure to make these changes will make the state's methane reduction goals vastly less likely to be achieved.

AB 32 Environmental Justice Advisory Committee (EJAC)
Recommendations for Proposed 2030 Target Scoping Plan Update
December 22, 2016
Initial Recommendations prepared Aug. 26, 2016; revisions made Dec. 22, 2016.
New text underlined, deleted text in ~~strikeout~~.

Letter 2EJAC

Industry	
	Equity
1	State in the Scoping Plan that it is a priority to reduce emissions in EJ communities, and to ensure no emissions increases happen there. Through standardized metrics, ensure that emission reductions from AB 32 activities are being achieved, especially in EJ communities.
2	Use a "loading order" for Industry similar to the one that is used by the California Energy Commission for supplying demand. Always prioritize the approval and use of the most efficient and low-carbon technologies, facilities, and projects over high-polluting ones
3	Address localized impacts of short-lived climate pollutant emissions, such as black carbon from all sources.
4	A big design flaw of Cap-and-Trade is having an ambiguous economy-wide cap. Eliminate Cap-and-Trade, replace it with a non-trading option system like a carbon tax or fee and dividend program. In addition: a. Increase enforcement of existing environmental and climate laws, increasing penalties for violations in DACs. b. Establish a state run "Carbon Investment Fund" allowing the private financial sector to invest in Carbon Futures. Pay dividends through enforcement fines, permit fees and carbon tax receipts. c. Better coordinate climate pollution and local criteria pollutants programs. d. Place individual caps on emission sources, rather than using a market-wide cap. Set up a per-facility emissions trigger that will tighten controls when a certain level is reached. e. Establish a moratorium on refinery permits. f. Set goal of 50% emissions reduction in Oil and Gas sectors by 2030. Aggressively reduce emissions from these sectors, including fugitive and methane emissions from extraction and production. g. Put emissions caps on the largest polluters. h. If Cap-and-Trade continues, do not give out more free allowances. i. Do not exempt biomass burning activities. j. Do not allow regulated entities to apply for California Climate Investments funding. k. Increase the floor price to the real price of carbon; use the highest price offered, not the lowest. Incorporate industry's externalized costs into the cost of carbon (as is done with the mitigation grant program at Port of Long Beach). Calculate the cumulative impacts so they can be mitigated. Ensure that polluting facilities are paying the societal costs of their emissions, rather than externalizing them.
5	The Scoping Plan Economic Analysis must consider carbon tax, command and control regulation, and Cap-and-Dividend or Fee-and-Dividend. Cap-and-Trade must be eliminated. The price of carbon must be increased, with the resulting funds invested in local communities to ensure all benefits from a greenhouse gas free future.
6	Expand the definition of *economy* to include costs to the public (e.g., U.S. EPA social cost calculator). Conduct an economic analysis that would account for the cost to public health (beyond cancer, respiratory and cardiovascular diseases) and environmental burdens from greenhouse gases. Include the Integrated Transport and Health Impacts Model (ITHIM) in the analysis. Ensure that ARB coordinates with other state agencies in this effort.

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Industry	
7	Ensure that the Adaptive Management tool is adequate for real-time monitoring and intervention. There must be at least two EJAC members on the Adaptive Management work group. To demonstrate how the tool can help communities, complete an Adaptive Management analysis for Kern County.
8	To address tension between workers and community members who live in polluted areas, there needs to be access to economic stability and a just transition to the new clean economy. Ensure that workers in Environmental Justice communities whose livelihood is affected from a move to cleaner technologies have access to economic opportunities in that new clean economy and that local businesses continue to employ workers from that community.
9	Do not commit California to continuing Cap-and-Trade through the Clean Power Plan. Since carbon trading cannot be verified, ensure that the Clean Power Plan power purchases are from sustainable, renewable power plants.
10	Eliminate offsets. Actions and investments taken by industry to reduce emissions need to be reinvested in the communities where the emissions have occurred. Any benefits from greenhouse gas reduction measures must affect California first. In addition to California emissions, also consider activities that can reduce pollution coming from across the Mexican border, to reduce emissions in the border region. Do not pursue or include reducing emissions from deforestation and forest degradation (REDD) international offsets in the Scoping Plan.
11	Add AB 197 and SB 350 as a Known Commitments for this sector and remove "Develop a regulatory accounting and implementation methodology for the implementation of carbon capture, and sequestration projects" as a potential new measure. EJAC2-1
Coordination	
~~11~~12	ARB needs to examine ways to increase its partnerships with and oversight over air districts using its existing authority. Local air districts need to be held accountable to the same standards as ARB. Promises need to be documented and strictly enforceable. If an air district chooses to have stronger standards than ARB, that air district must have the power to enforce those stronger standards without interference from ARB.
~~12~~13	Stop "passing the buck" from agency to agency and fix the problems. All agencies need to take responsibility for all pollutants. Coordinate efforts among agencies when necessary, and among local governments and communities. Implement the following measures: a. Improve community and neighborhood level air pollution monitoring. b. Add EJ members to all agency boards and committees. c. Tier pricing for allowances for facilities in EJ communities, making it more expensive to pollute in those communities. d. Improve communications about air quality between polluters and schools and nearby residents, both for individual accidents and in terms of overall facility emissions. Develop a cooperative, productive discourse. e. Provide easily accessible and immediate notification to schools and nearby residents in the event of a facility accident; current notification is much too slow. Develop and make accessible tools like the real-time air quality advisory network (RAAN) phone application, so residents can access real-time air quality information at the neighborhood level. f. Establish better coordination between enforcement agencies. Expand air quality

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Industry		
	night enforcement so that all communities have around-the-clock enforcement to address off-hours violations.	
14	Develop a unified policy similar to (but better constructed than) CAPCOA's for trading GHG credits among districts. Delete the following sentence: "Where further project design or regional investments are infeasible or not proven to be effective, it may be appropriate and feasible to mitigate project emissions through purchasing and retiring carbon credits issued by a recognized and reputable accredited carbon registry." CAPCOA is creating a new carbon market that EJAC has raised concerns about, and it should not be authorized by being in the Scoping Plan.	EJAC2-2
Partnership with Environmental Justice Communities		
~~13~~15	Create a thorough air quality monitoring system and deputize the community to participate in that network through databases, apps, and community science. Fund a program to provide communities with the tools and training they need to participate. Identify the pockets not being monitored and also the hot spots. ARB must take a greater responsibility for monitoring. Ensure that all monitoring covers both greenhouse gas pollutants and criteria pollutants, to expand the state's databases and accurately characterize all communities, so that CalEnviroScreen can more reliably identify areas that qualify for funding. Make monitoring transparent and accessible.	
Long-Term Vision		
16	The Industry sector must present a vision of how California is transitioning to a clean energy economy, with clean businesses that will not harm disadvantaged communities. This vision must focus both on the environment and the economy, including the jobs and taxes that will come from a transition to a clean energy economy. For example, analyze the gaps between jobs lost in fossil fuel industry and jobs gained in cleaner industries.	EJAC2-3
17	Explore scenarios for maintaining local jobs when refineries shut down.	

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Letter
CT FF 30 SCPPA

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January 20, 2017 | Submitted Electronically

Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: SCPPA Comments on the Proposed 15-Day Amendments to the Cap-and-Trade Program and Mandatory Reporting Regulations

Thank you for the opportunity to once again provide comments to the Air Resources Board (ARB or Board) on changes proposed for the existing Cap-and-Trade Program (—the Program□) and Mandatory Reporting Regulation (MRR). These comments focus on the recently released first 15-day amendment packages for each regulation.

The Southern California Public Power Authority (SCPPA) is a joint powers agency whose members include the cities of Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Los Angeles, Pasadena, Riverside, and Vernon, and the Imperial Irrigation District. Our Members collectively serve nearly five million people throughout Southern California. Each Member owns and operates a publicly-owned electric utility governed by a board of local officials who are directly accountable to their constituents.

Each SCPPA Member has a duty to provide reliable power to their customers - many of whom reside in disadvantaged communities - at affordable rates, while also complying with all applicable local, regional, state, and federal environmental and energy regulations. Currently, SCPPA and our Members own, operate, or have binding long-term procurement arrangements with 38 generation and natural gas projects and three transmission projects, generating power in California or importing from Arizona, New Mexico, Utah, Oregon, Washington, Nevada, Texas, and Wyoming. This is in addition to individual, Member-owned or contracted and operated transmission, generation, and natural gas projects throughout the Western United States. All are funded through municipally-backed financing mechanisms, which often come with terms that complicate our Members' abilities to quickly respond to substantial policy shifts that require near-term implementation. Any such change in policy direction usually results in significant additional costs which must be borne solely by their customers.

The Program and MRR directly impact industry practices and market operations throughout the Western electricity grid. Therefore, it is of the utmost importance that the proposed changes to the regulations reflect well-structured and lasting policies that function in concert to achieve the statutory goals via the most cost-effective means. SCPPA and its Members have actively participated in ARB's public processes and have met continually with staff to discuss the complex and interrelated issues associated with these regulatory packages. As stewards of public funding, we look forward to continuing to work with ARB staff toward a final program design that can be feasibly implemented while achieving our shared interest in maximizing environmental and public health benefits for Californians.

SUPPORT FOR CONTINUATION OF THE CURRENT CAP-AND-TRADE PROGRAM

Though the proposed regulatory changes at hand assume an uninterrupted future existence of the Program, staff has been evaluating alternative options to achieve the 2030 Target Scoping Plan goals. SCPPA believes altering course now would be an even more costly and diversionary endeavor;

we support the continuation of the Cap-and-Trade Program post-2020. SCPPA believes that this market-based mechanism is the most cost-effective means of achieving GHG emissions reductions throughout the state. The Program offers the significant benefit of promoting and implementing Greenhouse Gas Reduction Fund projects and programs across the state – particularly in disadvantaged communities – that are designed to simultaneously provide economic and public health co-benefits. The Program as currently constructed also allows our Members to pass the value of allowance allocations directly to their customers. These benefits flow through to all of our Members' customers, including those in disadvantaged communities. The continuation of a well-designed Cap-and-Trade Program supports public utilities' ability to provide Californians with affordable energy while still maintaining a sustainable path towards the 2030 statewide GHG emission reduction goal.

PROCESS CONCERNS

As expressed in prior public comments and letters, SCPPA is concerned with the incomplete nature of these draft regulations. ARB staff has again flagged a number of potential areas for future 15-day changes. Though potentially within the scope of this rulemaking, such material changes are outside the spirit, and potentially letter of the law, as it relates to California's public processes. 15-day amendments should be limited to clarifications and non-substantive changes to the regulations when compared to the initial 45-day language. The scale and importance of the changes being proposed in this 15-day amendment package are historically out of line. Furthermore, highlighting these possible additional policy changes distracts stakeholders from providing comments on the actual proposed language changes—such time is already limited for full analysis.

Again, we stress the importance of providing a complete draft of the regulations and thoroughly vetting policy shifts with stakeholders to ensure the feasibility and collective interaction of all of the changes. This supports transparency and facilitates a fully-informed decision-making process. While many of the proposed revisions have been discussed broadly during a number of public workshops, most of the critically important details are just now being provided. These need to be evaluated on their own, as well as in relation to other aspects of the Program, MRR, and the numerous other regulations facing utilities – including the California Environmental Quality Act. Even now, a number of legislative and regulatory uncertainties lay ahead at both the federal and state government levels, many of which could drastically affect the energy policy landscape. CT FF 30-1

ARB's schedule for developing the 2030 Target Scoping Plan and updating the Cap-and-Trade Regulation coincide with ARB Board adoption of both actions, slated for April 2017. However, much of the data used in the Scoping Plan process would also be used as the basis for developing the post-2020 allowance allocations for the updated Cap-and-Trade Regulation. Unfortunately, this data has not yet been released. As a result, SCPPA believes that ARB should allow a reasonable amount of time after the proposed Scoping Plan is released (e.g., at least 90 days) to further develop amendments to the Cap-and-Trade Regulation in light of the conclusions made in the Scoping Plan process.

We support staff in its efforts to solicit well-timed stakeholder feedback. With that said, we believe that additional time for stakeholder review and consideration of the weighty proposals would benefit all involved in the refinement of the Program and MRR regulations. As 15-day language is released in the future, it is requested that ARB highlight the changes as compared to previously released versions of the regulation and present the regulation in its entirety (with clearly noted updates) for stakeholder review, including how the California Environmental Quality Act (CEQA) may be implicated as California seeks to meet ambitious climate change and renewable energy goals. This will support stakeholders in providing a more comprehensive analysis of all program components and the interactive effect amongst ARB's own policies as well as those of other agencies (e.g., the California Energy Commission's Renewables Portfolio Standard). In addition, SCPPA fully supports extended review times, as provided with the release of these amendments, and robust public discussions on any future modifications to the proposed provisions. CT FF 30-1 cont

PROPOSED REVISIONS TO THE CAP-AND-TRADE REGULATIONS

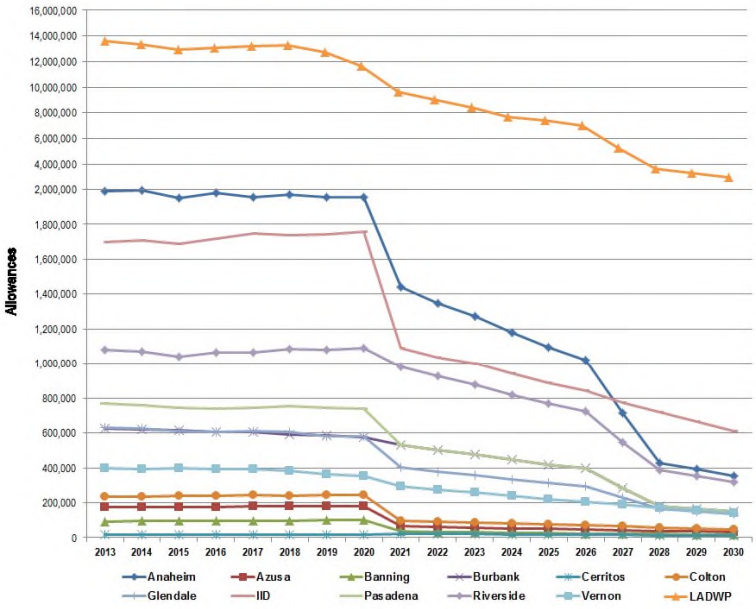
EDU Allowance Allocation Methodology. The ARB's proposed methodology for the allocation of allowances to electric distribution utilities (EDUs) is detailed in Attachment C in the Cap-and-Trade regulatory package. SCPPA and its members fully support ARB's proposal to base allocation on cost burden. We do, however, believe that the methodology could be further improved and offer comments on specific components of the methodology below.

Cost Containment. As noted above, SCPPA supports the proposed cost burden approach for determining allowance allocations. ARB staff shared its interpretation that cost burden should be based solely on implementation of the Program. We strongly urge ARB to consider the interactive effect of the Program with other state policies; in particular, the regulations should support efforts to minimize the overall cost impact to utility customers and avoid spikes or unnecessary increases in customer bills. Only with this holistic approach can the full cost impact of the State's policy goals be evaluated. Such an approach would provide a considerably more realistic view of the actual costs that POUs must pass down to customers as they work toward achieving emissions reduction targets while also addressing complementary policy goals such as electrification and an increasing Renewables Portfolio Standard.

Figure 1 below plots the trajectory for allowance allocations assigned to each SCPPA Member, showing the initial allocations in 2013 and extending out to the proposed 2030 allocations.[1] For some of our Members, the significant decrease between 2020 and 2021 – and even further, the 2020 allocation as compared to 2030 – could potentially have large customer bill impacts when weighed with anticipated cost increases to reflect increasing renewable integration, electrification infrastructure, and a host of other state and federal mandates. ARB should promptly engage stakeholders in development of a meaningful cost containment mechanism. As further discussed below, developing a workable modification to allowance allocations that would accommodate increased load due to transportation electrification efforts is a strong example of a programmatic change that could help alleviate the sudden cost impacts felt in 2021.

[1] This chart is based on allowance allocation data available on ARB's website. 2013-2020 data is drawn from this allowance allocation table, posted in February 2015, while 2021-2030 data is taken from the —2021-2030 EDU Allowance Allocation Spreadsheetll posted on December 21, 2016.

Figure 1: SCPPA Member Allowances [2013 -2030]



Concern with ARB Staff Proposals to Reverse Previous Policy Decisions Recognizing the Differences between Publicly-Owned Utilities and Investor-Owned Utilities. SCPPA and its Members are increasingly concerned with ARB Staff's concerted and multi-pronged efforts to treat POUs and IOUs as a single type of entity. They simply are not. The two utility types are fundamentally different in objectives, resource procurement mix, financial structures, and governance.

These differences are statutorily directed and were previously acknowledged by ARB when the Program was initially developed. Yet, there has been a consistent theme in this rulemaking process to prescribe uniform policies to these disparate entities.

We recognize the value and importance of having as even a playing field as possible across Program entities. However, treating public utilities the same as investor-owned utilities is not the way to achieve this goal. Just as there are differences in regional generation make-up that define the impact of the regulations on a particular utility and the different objectives amongst the state agencies (e.g., ARB versus CEC), the differences between IOU and POU customers cannot be understated. ARB should acknowledge the differences between POUs and IOUs, and should refrain from pushing POUs to an IOU Cap-and-Trade model. In the past we have noted several important examples of why such a shift is not needed and will cause undo costs and hardships under the Program without achieving any additional environmental benefits. We continue to raise similar points in this letter.

POU Consignment of Allowances. Attachment C in the Cap-and-Trade regulatory package states: Staff is also considering requiring POUs and co-ops to consign allocated allowances to auction and requiring that the auction proceeds be used for specific purposes. Requiring consignment would align the use of allowance value amongst investor-owned EDUs, publicly owned EDU, electrical cooperatives, and natural gas suppliers. Additional proposed amendments would be proposed in a subsequent 15-day regulatory proposal. [emphasis added]

SCPPA and its Members do not agree with the policy approach and reasoning presented in the attachment. We STRONGLY OPPOSE any modifications to the regulations to require POUs to consign

allowances to auction. ARB has historically exercised sound reason in its decision to exclude POUs from the requirement to consign allowance allocations to auction, as is required of IOUs: IOUs and POUs are neither structured nor governed the same way. This historic rationale is still valid.
A requirement for POUs to consign all allocated allowances could introduce sizable financial risks and resource needs that cannot reasonably be addressed, would be administratively inefficient, and would disproportionately affect some POUs more than others. Many POUs have limited staff to participate in the resource-intensive auction (carbon market) process, and do not have the infrastructure or financial resources to mitigate against financial exposure in the same way that IOUs can. ARB, in fact, stated in its October 2011 Final Statement of Reasons for the Cap-and-Trade Regulations (FSOR)[2]:
POUs and IOUs operate differently with respect to electricity generation. POUs generally own and operate generation facilities that they use to provide electricity directly to their end-use customers. In order to minimize the administrative costs of the program to the POUs, and recognizing that directly allocating the allowances to the POUs does not distort their economic incentive to make costeffective emissions reductions, we determined that it would be prudent to allow POUs to surrender directly allocated allowances without participating in the auction process. IOUs, on the other hand, have contracts with electricity generators that do not afford the IOUs the same level of control over the capital investments and operating decisions of the generation facility. We are concerned that the terms of these contracts could be adversely affected by allowing the IOUs to directly surrender allowances on behalf of their counterparties, which could lead to some foregone cost-effective emissions reductions. Instead, by requiring the IOUs to surrender the allowances at auction, the electricity generators will be sure to have a strong incentive to pass their GHG costs back to the IOUs, who will then be able to use their share of the auction revenue to reduce the ratepayer burden in a manner that is consistent with the goals of AB 32. [emphasis added]
As ARB is aware, POUs, including SCPPA's Members, are vertically integrated, meaning that they often own or operate much of their generation and transmission assets that serve customers. In the regulations adopted in 2011, as well as specifically noted in the October 2011 FSOR[3], ARB correctly acknowledged that some POUs would be disproportionately impacted if they were required to participate in the quarterly auction. Because POUs own and operate generation facilities, they have the direct compliance obligation for the assets under the Program. Due to long-term contracts with fossil generation including both coal and natural gas, some POUs, particularly SCPPA Members, would be required to have significant capital available (including transaction costs) to participate in auctions to purchase allowances that would be required for compliance. If auctions are undersubscribed, as demonstrated in this past year, or oversubscribed, POUs will face substantial financial risks that may impede their ability to meet compliance obligations dues to the financial uncertainties that result. POUs do not have shareholder funding to fall back on if there are auction challenges. Any additional cost burdens incurred by POUs to manage the Cap & Trade Program, including mitigating the aforementioned financial risks associated with the consignment requirement (assuming such mitigation measures even reasonably exist), may negatively impact POUs' ratepayers, while achieving no measurable incremental GHG reduction benefits.
Specified Uses of Allowance Value. In Attachment C and in past meetings, ARB also expressed concern with certain uses of allowance value. SCPPA believes this is an unjustified concern, and that the proposed amendments in Section 95892 provide sufficient direction on how POUs may use allowance proceeds. ARB acknowledged at the beginning of the program that it —does not have authority to appropriate funds. The use of revenue obtained from consignment of allowances is the responsibility of the California Public Utilities Commission (CPUC) for investor-owned utilities and the

[2] See pages 342 and 564 of the October 2011 Final Statement of Reasons for the Cap and Trade Regulations.
[3] See pages 578-579 and 580-581 of the October 2011 Final State of Reasons for the Cap-and-Trade Regulations.

governing Boards of publicly owned utilities.☐[4] SCPPA concurs that such decisions are fully under the authority of a POU's local governing board, and are not decisions to be made by ARB. The current regulations appropriately acknowledge this authority, and that any attempt to circumvent ARB's limited authority would be unlawful. SCPPA is willing to work with ARB after this current rulemaking is completed to see if there is common ground that can be found on this potential staff concern. However, ARB should consider offering additional clarification in the Final Statement of Reasons on what is meant by —non-volumetric☐ use of allowance value; though, any such clarification should not identify specific uses.

50% RPS Assumption within the Allocation Methodology. The proposed allowance allocation methodology assumes a straight-line path to a 50% RPS by 2030. While we appreciate the modifications to better align the Cap-and-Trade Program with the RPS Program (i.e., adoption of a retail sales-based approach), this is one assumption that does not adequately acknowledge the CEC's RPS Program construct. It is imperative ARB recognize that a 50% RPS does not directly translate to a utility having 50% of its portfolio comprised of zero-emitting resources; ARB should adopt modifications that reflect this reality. The current proposed methodology creates unnecessary additional reductions in allowance allocations. We strongly encourage ARB to consider the nuances of the RPS Program that base utilities' RPS targets on their historical contractual obligations and ability to procure unbundled Renewable Energy Credits (RECs). The CEC's RPS Program permits utilities to account for up to 10% of their RPS obligation using these unbundled RECs, which allow for purchasing the renewable attributes of a renewable source without necessarily delivering that resource to customers. Ultimately, ARB should ensure that any RPS assumptions adopted for calculating allocations do not require utilities to exceed the currently in-effect state mandates.

Transportation Electrification. We welcome staff's continued recognition of the need and commitment to assess potential modifications to EDU allocations to reflect increased emissions from the State's efforts to electrify the vast swaths of the California economy, starting with the transportation sector.[5] Staff notes the importance of —ensur[ing] any method used to calculate any allocation for increased electrification is as accurate and verifiable as the methods used to allocate for industrial sectors for product-based allocation.☐ While we agree that having "accurate and verifiable" data is important, this must be balanced with practical implementation constraints. It is critical to consider limitations on the availability of data and recognize the expected and real cost burdens that will be faced by electric utilities in collecting, managing, and submitting reports on such data. The timeframes in which various solutions could be implemented must also be considered. We encourage ARB staff to engage with stakeholders and other agency staff (in particular, those at the CEC) to identify possible solutions in an expedited manner.

Industrial Allocation Shift. SCPPA and its Members oppose ARB's proposal to shift industrial electric allocation value away from POUs and to a direct allocation methodology. This policy proposal is another example of ARB staff's attempts to push POUs into an IOU regulatory/policy model. Similar to the suggested future requirement that POUs consign their allowances, this proposal is problematic from both a policy and implementation perspective. SCPPA has repeatedly stated this position since the idea was first presented by staff. We have consistently maintained that position in all subsequent comments. The staff proposal, critiqued below, has been presented without a complete analysis or justification.

This change will encourage pass through of program costs to industrial entities, thus incentivizing them to reduce emissions, while direct allocation will provide emissions leakage prevention in line with existing industrial allocation policy. This change will also remove the potential inequity between IOU-customer industrial covered entities, which already see a GHG cost and receive distribution of

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[4] See pages 65-66 of the October 2011 Final Statement of Reasons for the Cap-and-Trade Regulations.

[5] As noted on page 4 of *Attachment C: 2021-2030 Allowance Allocation to Electrical Distribution Utilities*, released with the Cap-and-Trade regulatory package on December 21, 2016.

IOU auction proceeds to prevent against emissions leakage, and POU-customer industrial covered entities that may not be protected from emissions leakage.[6]

The inequity cited by staff is not valid for the vast majority of POUs. The generic language neglects to discuss the impacts on EDUs that serve significant industrial loads. SCPPA believes that in fact, the change will pass additional costs through to all industrial entities; and it will also result in costs being passed on to other POU customers. This shift will have a disproportionately high impact on EDUs who have significant amounts of industrial customers in their service areas, and will complicate local ratemaking (which should not be underestimated). For POUs with sizable industrial load, the dramatic and additive reduction in POU allowance allocations will result in a distinctly contradictory effect as compared to ARB's intended use of allowance allocations.

Placing emissions leakage prevention in line with existing industrial allocation policy at a time when material reductions are occurring in industrial allocations is counter-intuitive to the goals being presented. This policy proposal has not been supported by staff analysis, and will create loses for both the utility and its industrial customers, regardless of size. EDUs will lose allocation flexibility and revenue which has historically been used to protect the very industries that this policy is stated to help. As a result, the industrial entities in POU service territories will not only see a significant price increase in their particular rates, but will also see dramatically decreased allocations from which to draw a counter benefit. The critical points about this proposed structure are summarized as:

The allowances provided to industry to cover purchased electricity carbon costs will be significantly less than the allocation that is currently provided to EDUs to cover the carbon obligations for that electricity;

The staff proposal exchanges one potential inequity (IOU versus POU customers) for two known inequalities:

Regional GHG emissions profile — The benchmarking allocation methodology will create geographic winners and losers, something that has been sought to be avoided in previous benchmarking efforts. Namely, industrial customers served by EDUs with higher-emitting portfolios (typically located in Southern California where water resources are scarce and coal plant retirements are forthcoming) may see a more pronounced impact from this policy;

Differing electrical rate impacts depending on an industrial facility's size — Compliance entities will feel a different price of carbon than those not large enough to be in the program.

Any staff policy concerns that exist regarding unequal treatment of industrial entities in IOU versus POU service areas should be discussed in detail, including estimated differential cost impacts, with all relevant parties. ARB should not take action until such discussion has occurred, and a number of solutions have been publically evaluated. When coupled with the consignment proposal, the industrial allocation shift creates a potential double hit to POUs that has not been evaluated by ARB staff. Neither POUs nor industrial entities have sufficient information to fully analyze the extent of the compounded impacts that could realize as a result of this policy change.

RPS Adjustment. SCPPA thanks staff for its acknowledgement of concerns previously raised by utilities with respect to the RPS Adjustment. The decision to maintain the provision is a critical one for SCPPA Members as it safeguards against undue cost exposure and helps align the Program with other state energy policies and goals that are helping California achieve overarching climate change goals.

Nonetheless, SCPPA continues to have concerns with the treatment of directly delivered resources in light of staff's unease over potential double-counting issues related to the misreporting of —null‖ power. SCPPA believes that a workable solution exists and has collaborated with the Joint Utility Group (—JUG‖) to develop comments submitted on this matter. We look forward to continuing discussions with ARB Staff and other members of the JUG.

Reporting Requirements. SCPPA agrees that ARB's addition of Section 95803 Submittal of Required Information will help streamline required data submissions via allowing for electronic submission.

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[6] *Ibid.*

We concur that this change will facilitate timely interaction amongst reporting entities and ARB staff. It could also potentially reduce administrative costs and burden for both sides of the reporting process, which we fully support.

However, with respect to Section 95803(b), the default reporting response time of 10 calendar days is problematic. Given the uncertainty of what future requests may entail, and the nature of assuring quality data submissions, we recommend that ARB lengthen the default reporting timeline to at least 30 calendar days. Many reporting entities are increasingly resource-constrained; extending the default timeline will better support entities' ability to comply with the regulation while still ensuring that "good faith" efforts are made in a prudent fashion.

Reporting can often be an iterative process, requiring communication between the reporting entities and ARB staff to clarify what is needed for compliance. To this end, we also recommend that ARB staff consider adding language into the regulation that acknowledges the need for flexibility in such instances. The language could, alternatively, be added into the Final Statement of Reasons to express staff's intent without a specific regulatory provision.

Furthermore, we recommend that ARB staff evaluate various reports/data points to determine whether further consolidation is feasible; any efforts to reduce the amount of reporting – or align timelines for report submissions, where possible – would help minimize administrative burden and implementation costs for both ARB staff and reporting entities.

Federal Clean Power Plan Requirements. The draft regulations include a number of provisions related to the implementation of California's plan for complying with the Federal Clean Power Plan. We note that, in some sections, the regulation clarifies that the provisions are only applicable if the U.S. Environmental Protection Agency approves California's compliance plan. In others, ARB staff limits the applicability of the section to having federal approval of the Clean Power Plan by a date certain. For example, changes to the Program compliance periods would only apply if the CPP is adopted by January 2019. For consistency, and to ease future amendments to the regulation, we recommend that ARB align all provisions linked to CPP implementation with a date-certain approach. In addition, all compliance deadlines included in the MRR or in CPP-related changes to the Cap-and-Trade Program should be similarly timed. This will help streamline reporting requirements and align evaluation processes. Until the CPP is in full force and California's CPP compliance plan has been approved by U.S. EPA, ARB should ensure that compliance with the Cap-and-Trade Program (as modified after the adoption of this regulatory package) does not require entities with compliance obligations to spend additional funding on meeting provisions that solely address CPP implementation.

PROPOSED REVISIONS TO THE MANDATORY REPORTING REGULATIONS

Changes to Meter Data Requirements and the "Lesser of" Analysis. The proposed revisions to the MRR would remove the exclusion from conducting a "lesser of" analysis for grandfathered RPS contracts, dynamically tagged power deliveries, and untagged power deliveries, including EIM imports. This is a considerable shift from existing policy that will have unjustifiably large administrative impacts and, in some cases, prove extremely cost ineffective or infeasible to implement.

As SCPPA and its Members participated in lengthy discussions with ARB staff to support our position on this issue years ago, we raise the below points that we shared with ARB staff in January of 2014, which still hold true today:

The hourly data comparison would be unduly burdensome – especially for reporting entities with limited staff resources, and provide little value added.

Preparing and aligning hourly generation and schedule data for comparison is a manual process and as such would be prone to human error. Preparing the data is complicated and entails selecting only the contract-related e-tags from the database, aggregating hourly data from multiple e-tags, adjusting for time zone differences and adjusting the generating facility meter data to account for hours when one or more participants do not schedule their full share of the generation from jointly

owned facilities. Each case is unique; there is no one-size-fits-all methodology and there currently is no commercially available software application that can automate this process.
Hourly meter data may not be available, particularly for ―grandfathered‖ resources, day-ahead, or real-time transactions.
A ―lesser of‖ the hourly generation or schedule data requirement will tend to incentivize over-scheduling of certain resources, tying up valuable transmission capacity and increasing costs to California ratepayers.
A ―lesser of‖ the hourly generation or schedule data requirement can interfere with contractual terms, as the requirement implies that procuring parties may not get the full resource benefits for which they have contracted.
A ―lesser of‖ the hourly generation or schedule data requirement will result in erroneous values for a specified resource that is jointly owned or contracted for due to accounting for fractional shares.
A ―lesser of‖ the hourly generation or schedule data requirement is inconsistent with the methodology OATI will use to generate entity-level reports for ARB for independent verification purposes.
It does not appear that using ―substitute‖ power in the manner in which ARB staff indicates is consistent with the definition of ―substitute‖ power in the regulations, nor allowed by the Cap-and-Trade Regulation.
We appreciate staff's statement that it ―needs additional information from stakeholders to understand potential data implications,‖[7] and agree that there are several factors that must be considered before making adjustments to the existing provisions. Despite the clarification on the possibility for changes to the proposed language, SCPPA opposes the modifications presented in Section 95111(b)(2)(E) and strongly recommends that ARB engage all interested stakeholders in a discussion on this issue to improve understanding of the concerns shared by stakeholders and the potential downsides of implementing the regulations as proposed. As we note above, 15-day language is not intended to be a vehicle for substantial policy shifts, such as the modifications presented in this section.
Earlier Verification Deadline. As previously raised in written and oral testimony by a significant number of stakeholders, including SCPPA and its Members, the proposed one month shift of the verification deadline from September 1 to August 1 will severely hamper reporting entities ability to comply with the regulation. This does not allow for sufficient time to review data from the (limited pool of) GHG verifiers before submitting it to ARB. While ARB notes that it may revisit the proposed modifications in 2017, SCPPA believes that the change should be considered as early as possible, particularly given the strong opposition from stakeholders across-the-board during the September 19 Air Resources Board Meeting and the subsequent direction from ARB Chairman Mary Nichols, acknowledged by Executive Director Richard Corey, to adopt a compromise position.[8] We recommend that staff modify the proposal to a "halfway point" date of an August 15 deadline, if not maintain the currently effective September 1 date. If this issue is deferred to a subsequent workshop, SCPPA will continue to engage in discussions on this issue as they occur via ARB's public processes, but strongly opposes a switch to August 1st. We are interested in identifying solutions that address ARB staff constraints as well; one such approach that has been shared in the past could be a modification of the deadlines to incorporate phases for submission of verification reports from different entities.
Definitions for "Imported Electricity" and "First Point of Receipt." As staff surely will be making edits to the regulation for clarity and to correct typographical errors, we note that some clean-up is needed

[7] As provided on page 4 of the notice of availability and summary of changes for the Mandatory Reporting of Greenhouse Gas Emissions.
[8] As described in the transcript, pages 188-189, from the September 22, 2016 Air Resources Board meeting.
https://www.arb.ca.gov/board/mt/2016/mt092216.pdf

on the definitions for –imported electricity‖ and –first point of receipt‖ . SCPPA may offer specific comments on the content once updated language is provided in future iterations of the draft regulation. To avoid regulatory overlap, the language selected to address –imported electricity‖ and the practical application of this term throughout the regulations and Program implementation should allow for interstate commerce and utility flexibility.

PROPOSED GREENHOUSE GAS ACCOUNTING AND REPORTING METHODOLOGY FOR THE CAISO ENERGY IMBALANCE MARKET

As part of the Cap-and-Trade Program and MRR draft regulations, ARB proposes an interim methodology to account for GHG emissions from the California Independent System Operator's (CAISO) Energy Imbalance Market (EIM). ARB's proposal is intended to address its concern with inaccurate accounting of emissions attributable to secondary dispatches that happen as a result of primary dispatches to serve California load. Notably, CAISO is working on a longer-term solution to address this. CAISO efforts have garnered a significant amount of stakeholder support and would adequately address ARB's concerns. While the CAISO solution cannot be implemented immediately, CAISO staff has recently estimated that it will be available as early as the end of 2018. CAISO is expected to release its draft final straw proposal this month to address its long-term solution and discuss the merits of an interim bridge solution as a result of stakeholder comments submitted last December. We urge ARB to participate directly in CAISO's public stakeholder process and in the determination of a solution that reduces uncertainties impacting future EIM participation.

It seems premature to enact regulations that establish an interim methodology to address this issue, given the timing of CAISO's work and the fact that the EIM is still in its infancy. As the EIM is still a relatively new construct in energy markets, the true extent of the possible GHG emissions underreporting is unknown. In fact, ARBs preliminary analysis points to an extremely small underreporting – less than 0.1% of the overall program emissions.

The methodology being used seems to be inherently inaccurate and has the potential to significantly overestimate the GHG emissions associated with EIM transfers. The proposed reporting mechanism assumes that emissions from EIM transfers must equal the emissions that would have resulted if all transfers were considered as unspecified emissions. However, CAISO's analysis actually shows that EIM helps reduce grid-wide carbon emissions by facilitating efficient dispatch of renewable resources in support of clean energy policies while enhancing grid resiliency.

Before assigning a compliance obligation under the Cap-and-Trade Program, ARB should at least consider whether the applied unspecified emissions factor appropriately reflects the resource mix for units participating in the EIM, both for those opting to be deemed delivered to California and those in the overall EIM program. These are the only resources that would be available for imports into California or as secondary dispatch due to the EIM algorithm, and it is unlikely that the emission rate of generation controlled by these EIM entities exactly mirrors the emission rate of the entire western electric grid. To reflect improvements in this rate caused by expansion of the EIM, it should be regularly updated. Moreover, ARB should work with CAISO to fully evaluate the impacts of requiring EIM Participating Resource Scheduling Coordinators to report EIM transfers, as this could have an impact on future EIM participation.

Further consideration is needed to determine the effects of the proposal on allowance supply and pricing. ARB proposes to account for the –outstanding EIM GHG emissions‖ by retiring unsold allowances in the auction account. If this approach is an interim solution, offhand, it appears that the auction account would not be depleted; however, retirement of allowances may raise the price of allowances as the supply diminishes and will reduce the number of allowances that would have gone to the Allowance Price Containment Reserve. ARB has not provided information on how this proposal would impact allowance supply and prices and the proposal leaves substantial uncertainty regarding what would occur if there are insufficient unsold allowances to cover the calculated outstanding EIM GHG emissions.

CONCLUSION

Thank you for your time over the past year. SCPPA and our Members continue to seek forward progress on a variety of issues that have been raised over these months, but still remain unfinished as of this rulemaking package. We remain ready to constructively meet with ARB Staff and other agencies to work towards mutually agreeable solutions that best advance the State's climate change goals in an affordable manner for California ratepayers.

Respectfully submitted,

Tanya DeRivi
Director of Government Affairs

Sarah Taheri
Energy Analyst, Government Affairs

Panoche Energy Center 43833 W. Panoche Road, Firebaugh CA 93622

Letter
CTFF54
Panoche

April 28, 2017

Via Electronic Submittal: https://www.arb.ca.gov/lispub/comm/bcsubform.php?listname=capandtrade16&comm_period=2

Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95812-2828

Re: Panoche Energy Center LLC Comments on 2nd 15-dayAmendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation Released April 13, 2017.

On behalf of Panoche Energy Center LLC ("PEC"), we appreciate the opportunity to comment on the 2nd 15-Day Amendments package, released on April 13, 2017, which follow up on the initial 15-day package released on December 21, 2016, for the Cap and Trade Regulation (Regulation) proposed August 2, 2016. These proposed amendments are significant as they will shape the entire Cap and Trade program for the next decade or more.

PEC is still a Legacy Contract Holder and respectfully asks ARB to address this issue in an expeditious manner. Facilitating a solution is even more important to ensure California's Cap and Trade Program continues to be consistent with the principles of AB 32. It would also recognize that PEC has acted in good faith as a Legacy Contract holder and within the bounds of the Regulation for the past five years

As you know, PEC is a large natural gas peaking plant with a tolling agreement ("PPA") for the exclusive sale of electric power to Pacific Gas & Electric Company ("PG&E"). The PPA was executed, prior to AB 32 in March 2006 which, in part, qualified PEC as a "Legacy Contract" PPA. Since the beginning of the Program, PEC has requested Transition Assistance from ARB. Each year, ARB has granted PEC's request. Nothing has changed to alter ARB's decision-making in connection with PEC's contract status. Therefore, so long as the contract between PG&E and PEC remains unamended, and PEC continues to satisfy the other criteria previously established by ARB for transition relief, ARB should continue to work on a reasonable solution to this important issue.

At PG&E's sole discretion, the price of carbon was removed from PEC's variable energy dispatch price effective January 1, 2014 which has resulted in PEC's actual dispatch (and

associated emissions) being much higher than its anticipated dispatch. Without a price of carbon included in PEC's dispatch price, the facility has operated far more, resulting in:

(1) increasing local air pollution,

(2) the complete undermining of the regulatory "price signal" intended to be sent to consumers,

(3) increasing use of scarce water resources,

(4) increasing costs for PG&E ratepayers, and

(5) increasing costs of operation.

Such a situation, left unchecked should undoubtedly trigger an Adaptive Management Review.

Another key element of the historic Legacy Contract policy is that counterparties work to resolve the Pre-AB 32 contractual issues. Since the Cap and Trade Regulation's original adoption, PEC has continually sought in good faith to secure a just and reasonable contract amendment with its counterparty *on terms consistent with other Public Utilities Commission approved Legacy Contract settlements.* PEC has repeatedly approached its counterparty to negotiate a resolution directly and through the offices of the Public Utilities Commission, ARB, private channels, and others, all to no avail. Over the past five years, PEC has only sought an equitable and reasonable renegotiation of the terms of the Legacy Contract, but this has not been achieved due to our counterparty's complete lack of good-faith effort. Additionally, the proposed cessation of Legacy Contract relief would harm PEC and its bondholders, including public pension funds, and all other stakeholders (including PG&E ratepayers), except for PG&E who would continue to run PEC's facility without AB 32 compliance costs. The most recent15-day package proposes to continue this inequity.

A solution is still needed. There are several options available to ARB. One such solution was outlined in PEC's comments on the 1st 15-day amendment package[1], but others exist and PEC will continue to pursue an equitable resolution to this multi-year issue.

Eliminating the prior regulatory relief, as currently proposed, retains the status quo—proving zero incentive for PG&E to address this situation. Meanwhile the environment, the citizens of the San Joaquin Valley (a state-designated disadvantaged community), PG&E's ratepayers, and PEC's bondholders are negatively affected. There are no winners under the current situation, only losers.

To avoid these impacts, and for the reasons described in this letter, ARB should continue to work toward a solution as soon as possible to address the problem and to ensure the fundamental policies of the program are upheld without undue burden on Legacy Contract holders.

CTFF54-1

[1] https://www.arb.ca.gov/lists/com-attach/166-capandtrade16-BnYCYQdlWFQBZAdo.pdf

PEC urges ARB to act now. We have actively engaged at all levels of the ARB process and sought in good faith to find a solution for the better part of five years, now it is up to ARB to step in and fix this problem before additional local pollution is emitted as a direct result of its implementation. If you have any questions, please contact me at (781) 292-7007, or Robin Shropshire at (406) 465-2231, rshropshire@ppmsllc.com.

Sincerely,

/s/

Warren MacGillivray

cc: Mary Nichols – Chairman
ARB Board Members
Richard Corey – Executive Officer
Edie Chang – Deputy Executive Officer
Floyd Vergara – ISD Division Chief
Rajinder Sahota – ISD Assistant Division Chief
Jason Gray – Branch Chief
Mary Jane Coombs – Manager
David Allgood – CARB Staff
Eileen Hlavka – CARB Staff
Steve Cliff – Chairman's Advisor

AB 32 Environmental Justice Advisory Committee (EJAC)
Recommendations for Proposed 2030 Target Scoping Plan Update
March 30, 2017
Initial Recommendations prepared Aug. 26, 2016; revisions made Dec. 22, 2016 and March 30, 2017.
March 30, 2017 new text underlined, deleted text in ~~strikeout~~.

Letter EJAC3

Industry	
	Equity
1	State in the Scoping Plan that it is a priority to reduce emissions in EJ communities, and to ensure no emissions increases happen there, and specify the strategies that are achieving this. Through standardized metrics, ensure that emission reductions from AB 32 activities are being achieved, especially in EJ communities. Include an analysis on where/how GHGs are increasing and specify strategies to prevent and reduce those emissions, especially in EJ communities; these strategies include no trading, no offsets, and no free allowances in those communities. Continue OEHHA emissions study on EJ communities, including facilities with emissions increases that used offsets and received free allowances.
2	Use a "loading order" for Industry similar to the one that is used by the California Energy Commission for supplying demand, such as: (1) reduce fossil fuel use (extraction, operations, supply, feedstock source), (2) reduce emissions through efficiency (technology, innovations), (3) controls to prevent emissions increase. Always prioritize the approval and use of the most efficient and low-carbon technologies, facilities, and projects over high-polluting ones. This could be implemented for the LCFS.
3	Address localized impacts of short-lived climate pollutant emissions, such as black carbon from all sources.
4	A big design flaw of Cap-and-Trade is having an ambiguous economy-wide cap. Eliminate Cap-and-Trade, replace it with a non-trading option system like a carbon tax or fee and dividend program. In addition: a. Increase enforcement of existing environmental and climate laws, increasing penalties for violations in DACs. b. Establish a state run "Carbon Investment Fund" allowing the private financial sector to invest in Carbon Futures. Pay dividends through enforcement fines, permit fees and carbon tax receipts. c. Better coordinate climate pollution and local criteria pollutants programs. d. Place individual caps on emission sources, rather than using a market-wide cap. Set up a per-facility emissions trigger that will tighten controls when a certain level is reached. Include language in Scoping Plan on facility caps. e. Establish a moratorium on refinery permits. f. Set goal of 50% emissions reduction in Oil and Gas sectors by 2030. Aggressively reduce emissions from these sectors, including fugitive and methane emissions from extraction and production. g. Put emissions caps on the largest polluters. h. If Cap-and-Trade continues, do not give out more free allowances. i. Do not exempt biomass burning activities. j. Do not allow regulated entities to apply for California Climate Investments funding. k. Increase the floor price to the real price of carbon; use the highest price offered, not the lowest. Incorporate industry's externalized costs into the cost of carbon (as is done with the mitigation grant program at Port of Long Beach). Calculate the cumulative impacts so they can be mitigated. Ensure that polluting facilities are paying the societal costs of their emissions, rather than externalizing them.
5	The Scoping Plan Economic Analysis must consider carbon tax, command and control regulation, and Cap-and-Dividend or Fee-and-Dividend. Cap-and-Trade must be eliminated.

EJAC3-1
EJAC3-2
EJAC3-3
EJAC3-4

	Industry	
	The price of carbon must be increased, with the resulting funds invested in local communities to ensure all benefits from a greenhouse gas free future. Provide a full analysis of carbon tax and cap-and-tax.	EJAC3-5
6	Expand the definition of *economy* to include costs to the public (e.g., U.S. EPA social cost calculator). Include health care costs in social cost of carbon. Conduct an economic analysis that would account for the cost to public health (beyond cancer, respiratory and cardiovascular diseases) and environmental burdens from greenhouse gases. Include the Integrated Transport and Health Impacts Model (ITHIM) in the analysis. Ensure that ARB coordinates with other state agencies in this effort.	EJAC3-6
7	Ensure that the Adaptive Management tool is adequate for real-time monitoring and intervention. Provide real-time air data to communities from local emitters. There must be at least two EJAC members on the Adaptive Management work group. To demonstrate how the tool can help communities, complete an Adaptive Management analysis for Kern County.	EJAC3-7
8	To address tension between workers and community members who live in polluted areas, there needs to be access to economic stability and a just transition to the new clean economy. Ensure that workers in Environmental Justice communities whose livelihood is affected from a move to cleaner technologies have access to economic opportunities in that new clean economy and that local businesses continue to employ workers from that community. Include a just transition fund in the use of any climate funds.	EJAC3-8
9	Do not commit California to continuing Cap-and-Trade through the Clean Power Plan. Since carbon trading cannot be verified, ensure that the Clean Power Plan power purchases are from sustainable, renewable power plants.	
10	Eliminate offsets. However, if this recommendation is not accepted and offsets are used, they must offset the emissions in the area where the emissions occur. Offsets must be in the state; do not allow out-of-state offsets. Actions and investments taken by industry to reduce emissions need to be reinvested in the communities where the emissions have occurred. Any benefits from greenhouse gas reduction measures must affect California first. In addition to California emissions, also consider activities that can reduce pollution coming from across the Mexican border, to reduce emissions in the border region. Do not pursue or include reducing emissions from deforestation and forest degradation (REDD) international offsets in the Scoping Plan. ARB should commit to evaluate the emissions impacts of offsets and free allowances in EJ communities, including if Cap-and-Trade is extended/chosen, and then publish this study and consult with the EJAC.	EJAC3-9 EJAC3-10
11	Do not allow out-of-state forest offsets—offsets should apply to in-state urban forests.	EJAC3-11
~~11~~ 12	Add AB 197 and SB 350 as a Known Commitments for this sector and remove "Develop a regulatory accounting and implementation methodology for the implementation of carbon capture, and sequestration projects" as a potential new measure. Include detail in Scoping Plan of how AB 197 implementation will work to reduce emissions, especially for EJ communities.	EJAC3-12
13	Delete the word "unlikely" from the following sentence on page 55 of the Scoping Plan: Implement Adaptive Management to monitor for and address any unlikely increases in toxic or criteria pollutant emissions due to implementation of the Cap-and-Trade Program. Include ARB's response to the CEJA and OEHHA reports in the Scoping Plan and a commitment to prevent emissions increases, especially in EJ communities.	EJAC3-13
14	Commit to reducing oil. This includes a moratorium on new or expanded fossil fuel infrastructure, limiting oil and gas exports now to close that loophole, and placing quality	EJAC3-14

Industry	
	controls on feedstocks so as to not import extreme oil (tar sands, Bakken crude).
Coordination	
~~12~~ 15	ARB needs to examine ways to increase its partnerships with and oversight over air districts using its existing authority. Local air districts need to be held accountable to the same standards as ARB. Promises need to be documented and strictly enforceable. If an air district chooses to have stronger standards than ARB, that air district must have the power to enforce those stronger standards without interference from ARB.
~~13~~ 16	Stop "passing the buck" from agency to agency and fix the problems. All agencies need to take responsibility for all pollutants. Coordinate efforts among agencies when necessary, and among local governments and communities. Implement the following measures: a. Improve community and neighborhood level air pollution monitoring. b. Add EJ members to all agency boards and committees. c. Tier pricing for allowances for facilities in EJ communities, making it more expensive to pollute in those communities. d. Improve communications about air quality between polluters and schools and nearby residents, both for individual accidents and in terms of overall facility emissions. Develop a cooperative, productive discourse. e. Provide easily accessible and immediate notification to schools and nearby residents in the event of a facility accident; current notification is much too slow. Develop and make accessible tools like the real-time air quality advisory network (RAAN) phone application, so residents can access real-time air quality information at the neighborhood level. f. Establish better coordination between enforcement agencies. Expand air quality night enforcement so that all communities have around-the-clock enforcement to address off-hours violations.
~~14~~ 17	~~Develop a unified policy similar to (but better constructed than) CAPCOA's for trading GHG credits among districts.~~ Delete the following sentence: "Where further project design or regional investments are infeasible or not proven to be effective, it may be appropriate and feasible to mitigate project emissions through purchasing and retiring carbon credits issued by a recognized and reputable accredited carbon registry." CAPCOA is creating a new carbon market that EJAC has raised concerns about, and it should not be authorized by being in the Scoping Plan.
Partnership with Environmental Justice Communities	
~~15~~ 18	Create a thorough air quality monitoring system and deputize the community to participate in that network through databases, apps, and community science. Fund a program to provide communities with the tools and training they need to participate. Identify the pockets not being monitored and also the hot spots. ARB must take a greater responsibility for monitoring. Ensure that all monitoring covers both greenhouse gas pollutants and criteria pollutants, to expand the state's databases and accurately characterize all communities, so that CalEnviroScreen can more reliably identify areas that qualify for funding. Make monitoring transparent and accessible. Include language in Scoping Plan committing to improved air monitoring.
Long-Term Vision	
~~16~~ 19	The Industry sector must present a vision of how California is transitioning to a clean energy economy, with clean businesses that will not harm disadvantaged communities. This vision

EJAC3-14 cont'd

EJAC3-15

AB 32 Environmental Justice Advisory Committee (EJAC)
Recommendations for Proposed 2030 Target Scoping Plan Update
March 30, 2017

Initial Recommendations prepared Aug. 26, 2016; revisions made Dec. 22, 2016 and March 30, 2017.

March 30, 2017 new text underlined, deleted text in ~~strikeout~~.

Industry	
	must focus both on the environment and the economy, including the jobs and taxes that will come from a transition to a clean energy economy. For example, analyze the gaps between jobs lost in fossil fuel industry and jobs gained in cleaner industries.
~~17~~ 20	Explore scenarios for maintaining local jobs when refineries shut down. Include a just transition fund for workers.

EJAC3-16

Letter
CTSF21
Panoche

Panoche Energy Center 43833 W. Panoche Road, Firebaugh CA 93622

January 20, 2017

Via Electronic Submittal:
https://www.arb.ca.gov/lispub/comm/bcsubform.php?listname=capandtrade16&comm_period=1

Clerk of the Board

California Air Resources Board

1001 I Street

Sacramento, CA 95812-2828

Re: Panoche Energy Center LLC Comments on 1st 15-dayAmendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation Released December 21, 2016.

On behalf of Panoche Energy Center LLC ("PEC"), we appreciate the opportunity to comment on the 1st 15-Day Amendments package, released on December 21, 2016, to the Cap and Trade Regulation (Regulation) proposed August 2, 2016. These proposed amendments are significant as they will shape the entire Cap and Trade program for the next decade or more.

PEC respectfully asks ARB to amend the Regulation to continue Legacy Contract Relief for entities without an industrial counterparty as proposed by ARB staff in June 24, 2016[1]. We also request that allowances not be granted to entities where a cost burden pass through does not exist. These recommended changes will ensure California's Cap and Trade Program continues to be consistent with the principles of AB 32, and will recognize that PEC has acted in good faith as a Legacy Contract holder and within the bounds of the Regulation for the past five years. Our amendments provide suggested changes to the proposed allocation methodology that are included in the 15-day package.

HISTORY

PEC is a large natural gas peaking plant with a tolling agreement ("PPA") for the exclusive sale of electric power to Pacific Gas & Electric Company ("PG&E"). The PPA was executed, prior to AB 32 in March 2006 which, in part, qualified PEC as a "Legacy Contract" PPA. Another element of PEC's "legacy contract" is that it does not include a mechanism to recover the cost of its GHG emissions. Additionally, under the PPA, PG&E controls when and how much the facility runs, and thus controls the quantity of GHG and criteria pollutant (smogforming) emissions the facility emits. At PG&E's sole discretion, the price of carbon was removed from PEC's variable energy dispatch price effective January 1, 2014 which has

[1] https://www.arb.ca.gov/regact/2016/capandtrade16/appf.pdf

ARB's proposed Electrical Distribution Utility allocation methodology is presented in Attachment C of the 15-day package[2] with the actual allocation number provided in Attachment A (Section 95892). Attachment C states the following as fact in the background discussion:

"Electricity generators and importers face a compliance obligation for the GHG emissions associated with the energy they generate or import into California, and they may pass that cost on to the electrical distribution utilities (EDU) that supply the electricity to end-users."

The first statement is not true for Legacy Contract holders, such as PEC, which is precisely why ARB included allocation provisions in prior versions of the regulation.

"In developing the Regulation, ARB recognized that allocation to EDUs should "reflect the 'cost burden' associated with Program emissions costs that is anticipated to be borne by the ratepayers for each distribution utility" (ARB 2010B). Cost burden is the effect on ratepayers of the incremental cost of power to serve load due to the compliance cost for GHG emissions caused by the Program."

Whereas, the second statement has been the foundation for PEC's policy argument for the last five years—the cost of producing the electricity should be passed along to the EDU in question, in this case that EDU is PG&E. PEC's PPA does not contain a variable GHG emission cost component to cover the intermittent nature of its operations that coincide with a peaking power plant.

The EDU allocation numbers and methodology laid out in Attachments A and C continues the cost-burden approach. That approach is summarized in this sentence *"Cost burden would be calculated by estimating emissions for each year from 2021–2030 associated with generation from natural gas resources"*. PEC's PPA for natural gas fired generation extends past the current 2020 EDU allocation and the plant's operation will be directly impacted by the allocation scheme presented in this 15-day package. PG&E will be receiving allocations for PEC's fossil fuel fired generation, but PEC will still not be able to pass along the compliance costs of the program. If the price of carbon is not associated with this generation, it will be dispatched at a higher rate than a plant of its thermal efficiency should, resulting in increased local air pollution. This increase in criteria and toxic pollutants will occur in an area identified as disadvantaged by the State.[3] ARB staff presented a workable solution to address this situation, in the public workshop preceding the August 2, 2016 release of the regulatory package. This solution proposes to treat the few remaining Legacy Contract holders without an industrial counterparty the same as other non-power plant Legacy Contract holders.[4] The subsequently published proposed amendments failed to include that staff's recommended solution (without opportunity for public input), and now proposes to completely eliminate "Legacy Contract" status and regulatory relief for the remaining entities such as PEC. This 15-day Amendment Package continues this inequity and exacerbates the policy problem facing ARB. **PEC's costs are being calculated in PG&E's 'cost-burden' without PG&E actually having those costs**. If adopted without change, the current draft amendments would leave the PEC facility completely

[2] https://www.arb.ca.gov/regact/2016/capandtrade16/attachc.pdf
[3] http://oehha.ca.gov/calenviroscreen/report/calenviroscreen-version-20
[4] Staff's presentation at the June 24, 2016, workshop (slide 35) https://www.arb.ca.gov/cc/capandtrade/meetings/062416/arb_and_caiso_staff_presentations_updated.pdf, is included in Appendix F to the Initial Statement of Reasons – https://www.arb.ca.gov/regact/2016/capandtrade16/appf.pdf.

resulted in PEC's actual dispatch (and associated emissions) being much higher than its anticipated dispatch. This disconnect, lack of a carbon price in PEC's variable energy dispatch price, is in direct conflict with the program's foundational policies. Fundamentally, because *PEC cannot pass the costs associated with its GHG emissions along to PG&E*, those costs (the intended AB 32 "carbon price signal") are not included in PG&E's bids into CAISO for PEC's energy production ("dispatch price"). The ratepayers are not seeing the cost burden of PEC's emissions, in conflict with the Program design. Without a price of carbon included in PEC's dispatch price, the facility has operated far more, resulting in:

(1) increasing local air pollution,

(2) the complete undermining of the regulatory "price signal" intended to be sent to consumers,

(3) increasing use of scarce water resources,

(4) increasing costs for PG&E ratepayers, and

(5) increasing costs of operation.

Another key element of the Legacy Contract regulation is that counterparties work to resolve the Pre-AB 32 contractual issues. Since the Cap and Trade Regulation's original adoption, PEC has continually sought in good faith to secure a just and reasonable contract amendment with its counterparty *on terms consistent with other Public Utilities Commission approved Legacy Contract settlements.* PEC has repeatedly approached its counterparty to negotiate a resolution directly and through the offices of the Public Utilities Commission, ARB, private channels, and others, all to no avail. The structure of ARB's Legacy Contract Relief granted to PEC did not incentivize and may have dis-incentivized our counterparty from negotiating a settlement in good faith. Over the past five years, PEC has only sought an equitable and reasonable renegotiation of the terms of the Legacy Contract, but this has not been achieved due to our counterparty's complete lack of good-faith effort. Additionally, the proposed cessation of Legacy Contract relief would harm PEC and its bondholders, including public pension funds, and all other stakeholders (including PG&E ratepayers), except for PG&E who would continue to run PEC's facility without AB 32 compliance costs. The 15-day package proposes to continue this inequity. PEC opposes the ARB's proposed allocation to PG&E on the basis of potential and significant environmental quality impacts.

ARB has made it clear that their preferred solution is a contractual fix between the two counterparties such that going forward the cost of the program would be included in the price of the facility's electricity. But early on ARB recognized that such a fix required good faith renegotiations, and absent of this a regulatory solution was required. This is the situation we find ourselves in now. Unless ARB addresses this issue immediately within the regulatory arena, or the compliance costs are rightfully passed along to PG&E's ratepayers for the emissions created when it runs PEC's facility, this situation will continue unabated for years to come. Such a situation should undoubtedly trigger an Adaptive Management Review.

PROPOSED SOLUTION

Both Attachment A and C ignore this continuing Legacy Contract issue. We request that ARB address this issue in the next 15-day package and before this inequity is permanently codified.

exposed to the price of AB 32 compliance, stranding those costs with PEC, and would continue the ongoing environmental and economic consequences described above.

There is still an opportunity for ARB to correct this situation, and a way to move forward with a specifically tailored, holistic solution. In light of the unsuccessfully Legacy Contract renegotiations, PEC requests that ARB amend the regulatory language to include the June 24, 2016, staff workshop proposal in a future 15-day amendment package[5].

In addition to PG&E receiving allocations for the emissions associated with PEC's facility without a cost-pass through obligation, ARB erred in its assignment to PG&E for having Natural Gas cost burden associated with the replacement of Diablo Canyon's zero GHG electricity. PG&E has committed to the following[6]:

"Pacific Gas & Electric (PG&E), International Brotherhood of Electrical Workers Local 1245, Coalition of California Utility Employees, Friends of the Earth, Natural Resources Defense Council, Environment California, and Alliance for Nuclear Responsibility (together, the parties) have developed a joint proposal to retire PG&E's Diablo Canyon Power Plant at the close of its current operating license period and replace it with a portfolio of greenhouse gas (GHG)-free resources."

This commitment should be applauded, but it should not entitle PG&E to an additional and very large set of allowance allocation. ARB's allocation methodology comparison, starting on page 4 in Attachment C clearly states "The proposed method accounts for retirements of coal plants and the Diablo Canyon nuclear facility by assuming that these facilities are replaced by natural gas-powered electricity after they retire." *This assumption is not accurate and further reflects PG&E obtaining significant allowances without the accompanying cost burden— 4,925,396 tons worth.* PEC is opposed to this allocation as unwarranted and inconsistent with the cost-burden approach used for other electrical allocations.

There are no legal impediments that prevent ARB from implementing PEC's request. Because the staff proposal was included in the Initial Statement of Reasons for the proposed amendments, modifying the proposed amendment to include staff's proposal in a future 15-day package complies with law. Likewise, the recent Court of Appeal decision in litigation between PG&E and PEC and the earlier arbitration award, both acknowledge the limited contractual scope of that dispute, and explicitly state that nothing written in those decisions in any way limits ARB's power to resolve the issue of PEC's stranded costs in order that the PEC facility be run consistent with CARB policy to protect the environment and the public.

The prior regulatory relief, set to be eliminated, and the current proposed amendments (failing to address PEC's issue and providing unwarranted allocations to PG&E) provided no incentive for PG&E to address this situation, while the environment, the citizens of the San Joaquin Valley (a disadvantaged community), PG&E's ratepayers, and PEC's bondholders are would be negatively affected. There are no winners under the current proposal, only losers. CTSF21-1

To avoid these impacts, and for the reasons described in this letter, ARB should not adopt the amendments as proposed, but instead should either incorporate the June 24, 2016, staff workshop

[5] Numerous references to a second 15-day amendment package in Attachment A: https://www.arb.ca.gov/regact/2016/capandtrade16/attacha.pdf
[6] https://www.pge.com/includes/docs/pdfs/safety/dcpp/MJBA_Report.pdf

proposal constructed specifically to address the problem outlined below or take other actions to ensure the fundamental policies of the program are upheld without undue burden on Legacy Contract holders.

CTSF21-1 cont'd

PEC urges ARB to act now. We have actively engaged at all levels of the ARB process and sought in good faith to find a solution for the better part of five years, now it is up to ARB to step in and fix this problem before additional local pollution is emitted as a direct result of its implementation. With at least one future 15-day amendment package remaining, ARB still has a chance to bring this conclusion. If you have any questions, please contact me at (781) 292-7007, or Robin Shropshire at (406) 465-2231, rshropshire@ppmsllc.com.

Sincerely,

/s/

Warren MacGillivray

cc: Mary Nichols – Chairman

ARB Board Members

Richard Corey – Executive Officer

Edie Chang – Deputy Executive Officer

Floyd Vergara – ISD Division Chief

Rajinder Sahota – ISD Assistant Division Chief

Jason Gray – Branch Chief

Mary Jane Coombs – Manager

David Allgood – CARB Staff

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