

August 11, 2011

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Subject: Comments of Environmental Defense Fund on Proposed 15-Day Changes to the AB32 Capand-Trade Regulation

Mr. Cliff and Ms. Sahota,

Please accept these comments on the proposed 15-day changes and the underlying cap-and-trade regulation to reduce greenhouse gas emissions pursuant to AB32, the Global Warming Solutions Act of 2006. We submit this letter with the understanding and expectation that it will be considered by the staff and Board prior to final consideration of the regulation.

Environmental Defense Fund ("EDF") supports the California Air Resources Board's ("CARB") most recent actions to improve the efficacy of the regulation, including, but not limited to, shifting the start date of compliance obligations to 2013, improving CARB's enforcement authority, clarifying offset standards, and taking additional steps to flesh out provisions for protecting public health and the environment. Notwithstanding the comments made in this letter and our recommendations for clarification and modification, we believe this regulation will deliver significant benefits to the state of California. EDF wholeheartedly recommends the regulation be adopted by the Board without delay.

#### **Introduction and Brief Summary of EDF's Comments**

The science on climate change continues to be clear: greenhouse gas emissions threaten our way of life and are already showing signs of having dramatic impacts on public health and ecosystems. From increasingly exceptional droughts, to widening prevalence of disease and pests, to rising sea levels across the planet, climate change is a present-day threat that is becoming worse.

The solutions needed to limit greenhouse gas emissions from our energy and transportation systems are well known and identified appropriately in the AB 32 Scoping Plan. California's long-standing environmental and energy programs have yielded considerable experience with many of these solutions. However, to reduce emissions significantly - to 80% below 1990 levels by 2050 – robust, long-term and innovative solutions on a much broader scale are needed. While California is well-positioned to pioneer many of these innovative solutions, they must be replicated across the globe quickly and effectively.

EDF believes that reducing greenhouse emissions is of paramount importance, and it must be done in a way that protects the public health while allowing our economy to prosper. To achieve this aim, a combination of policies, incentives and other mechanisms will be necessary to reduce emissions, including the use of market based systems like the cap-and-trade regulation currently proposed by the CARB.

Since EDF originally co-sponsored AB 32 in 2006, we have worked diligently to assist with implementation of the law and have provided detailed comments on CARB's reporting rule, cap-and-trade rule development white papers (2008 and 2009), the Preliminary Draft Regulation (2010), and the Proposed Regulation (2010 and 2011). As with our previous comments, this letter will provide both substantive recommendations on potential regulatory changes and requests for clarification. Our comments fall under eleven topic areas, indicated by the table of contents below:

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1. Modification of the program compliance dates is a valid method to accommodate the time needed to get the final details right. CARB must maintain the timeline to achieve the emissions cap that includes putting transportation fuels and natural gas emissions into program starting in 2015.

The AB 32 cap-and-trade program is a critical part of California's overall emissions reduction strategy. EDF supports the recent modification of the program compliance dates for two primary reasons. First, by maintaining the market based framework for emissions reductions (albeit shifted to 2013), CARB has preserved an important market signal to inspire innovation and emissions reductions throughout California and beyond. Second, by ensuring CARB has the time it needs to put in place a rigorous administrative oversight package of strategies prior to the start of the market, including market monitoring, oversight, simulation and enforcement, the modification supports the overall environmental integrity of the program .

Of course, modifying the start date of compliance obligations under the cap-and-trade regulation can impart uncertainty, especially if regulated entities begin to anticipate additional modifications to compliance timelines. While this remains a possibility, the decisions made by CARB thus far bode well for a stable marketplace with a reasonably certain regulatory playing field.

Accordingly, EDF supports the cap-and-trade timetables as modified in the 15-day changes, while recommending that the ultimate environmental goal—no more than 1990 levels of emissions by 2020—is not modified. Additionally, EDF recommends that notwithstanding the modification of the compliance start date from 2012 to 2013, CARB must continue to develop the necessary regulatory infrastructure to include transportation fuels and natural gas in the second compliance period starting in 2015.

2. CARB's current approach to adaptive management of the AB 32 cap-and-trade program needs more detail and commitment. The program should be focused on a range of environmental impacts, including climate, air and ecosystem impacts, and should be designed to mitigate observed impacts as well as proactively prevent future impacts that are likely to occur. EDF has included specific ideas for the adaptive management program, and we strongly recommend that the program be in place no later than when facilities begin taking action to meet cap-and-trade compliance obligations.

EDF has submitted a comment letter with other environmental NGO's in the 15-day changes comment period making the high level point immediately above and expanding on the overall recommendations. We respectfully request CARB consider those comment in this overall rulemaking.

3. Offsets - CARB should adopt more high quality protocols for offset credit development and use in the cap-and-trade program, with emphasis on land-based greenhouse gas reductions. Additional guidance for submitting new protocols to CARB for consideration is also necessary.

EDF continues to support the general provisions for the inclusion of high-quality offsets in the AB 32 cap-and-trade program. Offsets offer tremendous potential to inspire innovation in sectors of the economy, including agriculture, non-capped industrial operations, and forestry, that are large sources (or stores) of greenhouse gases but that lack the necessary emissions measurement systems for inclusion in the cap-and-trade program.

To unleash this innovation and to allow for a diverse array of high quality credits to be available for purchase by regulated entities, CARB should approve additional project types for credit generation.

To this end, EDF recommends CARB staff identify high quality offset credit protocols and submit them for adoption by the board as soon as possible. Over the course of the last three years EDF has embarked on two distinct projects to develop new high quality protocols: (1) land-based / agricultural GHG reductions and (2) community-based GHG reductions<sup>1</sup>. In addition to yielding reliable offset credits for the AB32 cap- and-trade program, these projects can provide important environmental and economic co-benefits.

In the land-based project arena, EDF is focusing on projects associated with rice cultivation, wetland restoration, nitrogen fertilizer use reduction and soil carbon sequestration in rangelands and grasslands. We rely on the use of state-of-the-science, peer-reviewed models that have been explicitly calibrated with empirical data (such as the DNDC model) to quantify greenhouse gas emissions consequences of land management practices. Land-based offset projects can restore degraded ecosystems, create new habitat for wildlife, reduce negative impacts from farming, and provide a new source of revenue for local farmers. The potential to implement these types of land-based offsets projects within California is substantial.

In the community-based project arena, our work has focused on the aggregation of emissions reductions in overburdened communities, either for crediting as offsets or allowance set-asides.

Based on the multiple benefits that can be achieved by offsets, and the great potential to locate these projects in California, EDF recommends CARB staff prioritize high quality agricultural protocols for adoption in the cap-and-trade program. Additionally, to the extent that high quality protocols for emissions reductions that occur in disadvantaged communities can be developed, EDF recommends that CARB pursue them.

CARB should develop additional guidance for protocol development for use in the cap-and-trade program, in particular for use of modeling to calculate emissions reductions. In addition to adopting more high quality protocols, EDF reiterates a prior comment we made on the Preliminary Draft Rule in January 2010 that CARB provide additional clarification to inform project developers of the steps needed to

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<sup>&</sup>lt;sup>1</sup> Depending on the method for the community-based reductions, these may not quality as offsets, but may be suitable as separate mechanisms

bring new credit protocol ideas to the agency for consideration, development, and eventual adoption. Guidance on the use of models for calculating emissions reductions would be particularly useful since models are becoming increasingly accurate, yet complex, and are likely to take an active role in credit development for high quality agricultural projects in the future.

4. Offset usage limit – EDF supports CARB's clarification of the usage limit as a balancing of interests, properly within the state's rulemaking authority, though further consideration should be given to the need for robust offset supply

In Section 95854(b) of the 15-day changes document, CARB clarifies what was likely an identical requirement in the prior version of the regulation that 8 percent of an "entity's compliance obligation for the compliance period" can be satisfied by compliance instruments subject to a quantitative usage limit (for example - offsets). Although this does not appear to be a substantive change to the rule from the prior version, it does clarify the quantitative usage limit.

In our January 2010 letter sent to CARB on the PDR, (referencing an April 2009 EDF letter on the same subject), we recommended CARB "consider allowing entities to compound the offsets limit across all prior compliance periods starting in 2012" and urged the board to "interpret the limit in a manner that would allow for broad inclusion of offsets in the program." Our views on this aspect of the program have not changed. We realize that CARB is attempting to find a balanced position between leveraging the beneficial aspects of offsets while still inspiring reductions in capped sectors of our economy.

While we acknowledge this decision to be within the agency's authority, we request that CARB consider the results of our recent study in which we stochastically modeled the economic benefits associated with using offsets in the program.

Our modeling exercise evaluated the effect of offsets on the chance that the allowance reserve pool would be accessed for price control. We find that as more offsets become available, the probability that the reserve pool would be accessed (at prices starting at \$40 per ton) drops significantly. Put another way, the availability of offsets in the program at the proposed 8 percent level will likely decrease allowance prices to levels below the prices set by CARB for allowances in the reserve pool. As the allowed use of offsets goes down, the chance the reserve pool will be accessed goes up.

We examined three scenarios for offsets explicitly, and found the following:

- At the proposed 8 percent quantitative limit for using offsets, there is a 15 percent chance the reserve pool will be accessed.
- At a 4 percent quantitative limit for using offsets, there is an 89 percent chance the reserve pool will be accessed.
- If no offsets are allowed in the program, the proposed allowance reserve is not likely to be sufficient to keep prices below \$40 per ton.

The results of the modeling study can be found at:

http://www.edf.org/documents/11902\_EDF.AB%2032offsetsmodelingmemo.Aug2011.pdf.

We also observe another significant benefit of offsets beyond cost containment. Since the reserve pool is populated with emissions allowances from future compliance periods and offsets are composed of present day reductions (or vintage reductions having occurred in the past), avoiding the use of the allowance pool (due in part to offsets availability) can be seen as achieving present day program benefits from current actions rather than as promises of actions yet taken.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Of course, this observation is also be counterbalanced by the impact of high allowance process for stimulating investments for present day reductions.

Offset liability - CARB should develop additional mechanisms to retain environmental integrity of the offset market while also removing market suppression forces created through offset liability provisions

In the 15-day change document, CARB makes substantial changes to the sections related to offsets, including invalidation and verification. Those section changes are primarily focused on making the regulation more clear and readable, yet miss an important issue related to liability and the potential impact of the liability provisions on the credit market.

As written, EDF is very concerned by the portion of the draft regulation which imposes front-line responsibility for credit reversal and invalidation on the purchasers of credits, (i.e. buyer liability). While EDF does support the requirement that any credit which is determined to be invalid, either through reversal or invalidation, is replaced with a certified emission reduction credit – the current approach to make buyers responsible for making up the credit is likely to suppress the overall market without furthering environmental integrity when compared to alternative designs. Buyer liability makes offsets non-homogenous, which will hurt the liquidity of the market. Financial entities will likely provide credit replacement insurance products, but because the market cannot calculate the risk that ARB will invalidate a credit, this insurance will be expensive and inefficient. The cost of the insurance will increase the costs of offsets—thereby increasing costs of emission reductions for the entire program, and for Californians. Because smaller projects will likely be the most expensive to insure, buyer liability will also discourage the types of offset projects which often have the greatest environmental co-benefits for California communities. Other frameworks have been suggested that will guarantee the environmental integrity of offsets without these unnecessary costs and without threatening the viability of the market.

In January 2010, our comment letter to CARB³ forwarded the idea by recommending CARB develop a program that mirrored the previously envisioned federal program whereby a built-in program for issuance of offsets was created. In that letter we discussed that CARB could require 1.05 tons of offset credits to be surrendered for every ton of compliance obligation – with the extra 5% placed in an account that is available for surrender if offset credits are later reversed.⁴ As the risk of reversal for offsets became clearer, or the size of the account grew or shrunk, the percentage of additional offsets that CARB required covered entities to submit could be adjusted. This approach to ensuring market integrity while also removing potential barriers to credit development is one which CARB should still reconsider, at a minimum.

6. Offset registries – CARB must maintain the integrity of the offsets program through careful review of registries prior to their acceptance into the program and rigorous application of conflict of interest principles. Clarification of registry duties for quality control and assurance of project documents is also needed.

EDF believes that having multiple high quality offset registries operating with the cap-and-trade program will benefit the program as a whole. And, as evidenced by changes to the offsets registry sections in the 15-day change regulation, CARB is purporting to loosen some of the overall requirements applicable to project registries to enable wider participation. These changes include reductions in required insurance, (section 95986), reduced record retention for sequestration projects, (section 95988), tolerance for company subdivisions to act as registries (section 95986), and clarification to the services required for review of verification opinions (section 95977). In general, EDF supports these changes to allow for registries to perform important market functions, but we also caution against allowing sub-standard registries into the

<sup>&</sup>lt;sup>3</sup> EDF comments on PDR, January 11, 2010, Page 38

<sup>&</sup>lt;sup>4</sup> This account would be designed similar to the current forest buffer pool within the regulation.

program or creating a system where credit developers can go registry shopping to find lax rules or less-than-rigorous registry oversight.

Offset credit registries play an important role in ensuring overall the environmental integrity and market fluidity of the cap-and-trade program, and in minimizing the staff-intensive operations CARB must perform. As registries are allowed to participate however, CARB must be careful to ensure they meet the highest standards for competence and do not possess conflicts which may undermine their ability to perform their designated market function with impartiality and objectivity. To achieve this, the Executive Officer and CARB staff have the duty to perform an up-front analysis of whether the registry meets the necessary provisions to be included in the program – including review of staff competence, experience and internal procedures.

EDF has interacted, at one level or another, with three of the primary registries that exist today in the voluntary carbon market. Based on this experience, EDF is confident that more than one of the registries that exist today can meet the important role that CARB seeks - though steadfast application of the principles for registry review prior to acceptance into the program is needed.

CARB needs to apply rigorous conflict of interest principles to registries – EDF is a strong proponent of the use of registries and their function under the rule. However, registries should not be allowed to have a financial stake in the projects they accredit – especially if that stake has the potential to impact registry impartiality. Rather, registries should perform a market function without acting as a market participant. With regard to changes to section 95986(c) - allowing subdivisions of parent companies to act as registries – a potential unrestricted conflict of interest may arise under the rule because consulting services are not included in the list of prohibited activities in section 95986(d)(3). Accordingly, CARB will need to be extremely careful when reviewing subdivision registries and evaluating walling off procedures in place to ensure complete impartiality by the subdivision registry is retained. In the alternative, CARB could add consulting to the list of prohibited activities within section 95986.

Clarification of registry duties for quality control and assurance of project documents is needed - In Section 95977, the proposed 15-day changes clarify the services that registries must perform with regard to checking project verification statements. In the new language, registries must evaluate statements for "completeness and to ensure it meets the requirements of section 95977.1(b)(3)(R)(4.)(a.)." In 95977.1, requirements include submission of an Offset Verification Plan, the detailed comparison of the data checks, the issues log, any qualifying comments on findings, and calculations performed in 95977.1(b)(3)(Q). However, the changes do not yet make it clear what registries must do to: 1) evaluate this information for accuracy or 2) evaluate it to make sure the required boxes are checked and paperwork is filed without regard to the accuracy of the information included in it.

Of course, having registries act as additional reviewers of submitted project information may increase the integrity of the system as a whole, but may also add costs onto the registry system overlay. While EDF supports the additional rigor and evaluation, CARB should make clear the requirements on registries either way, ensuring a level playing field for registries and carbon credit developers.

### 7. Regulatory enforcement and oversight - EDF supports the proposed improvements to the regulation

Throughout the development of the cap-and-trade program EDF has supported the development and use of strong enforcement provisions and market oversight to prevent activities (such as price manipulation and fraud) that can undermine the efficacy and public trust in the program. Where applicable, EDF has also urged CARB to develop provisions that open up the regulation to information disclosure, with appropriate provisions for public viewing and transparency. These provisions will ensure the market oversight and market monitoring committees achieve their goals<sup>5</sup>.

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<sup>&</sup>lt;sup>5</sup>Although the market monitoring committees have not been formalized by the appointment of members or committee organizing documents, EDF's comments are built on the premise that such committee formation will

In the proposed 15-day changes, CARB's efforts to clarify enforcement and oversight were obvious, including provisions for:

- Requirements for emissions reporting attestations and penalties for fraud
- Disclosure of direct and indirect corporate associations
- Waivers of sovereign immunity for Indian tribes
- Disclosure of voluntary bidding associations and voluntarily associated entities
- Disclosure of allowance clearing service entities
- Disclosure of beneficial holding relationships
- Clearer definition of violations related to false statements
- Clearer definition of penalties for violations
- Reporting of trading activity and the offsets credits used by regulated entities (included in the pre-15 day draft)

In general, these expanded provisions in the 15-day change document create significant new safeguards by ensuring that CARB has enough information at its disposal to pursue violations with civil penalties, seek out additional reductions (replacement credits) as needed, and ensure the regulation works without fraud or manipulation. Furthermore, with the incorporation of a regimented enforcement tracking system and market manipulation oversight board, CARB and its appointed officers will have enough information to be able to detect and ameliorate fraudulent transactions that may occur within the credit trading market prior to credits being surrendered for compliance. Such provisions also serve as a strong deterrent to fraud and malfeasance. EDF strongly supports these proposed improvements.

8. The AB32 market monitoring and oversight committees are an important component of a strong regulatory enforcement program, and should also include tracking of market conditions and assumptions to ensure the overall program is working as designed.

We support the proposed regulation inclusion of numerous provisions to ensure overall transparency and public access to information sufficient to answer questions about market performance, yet additional monitoring and oversight is needed. EDF therefore supports CARB's proposal to establish market monitoring and oversight committee(s) as an essential element for public confidence in the program. In addition to detecting, responding to, and preventing activities (such as price manipulation and fraud) that can undermine the efficacy and public trust in the program, EDF recommends CARB vest the committee(s) with a broad range of important responsibilities to ensure the overall program is working as designed.

There are many important responsibilities the market monitoring and oversight committee(s) should take on, including, but not limited to the following:

- Evaluating leakage risks and assumptions used to determine free allowance allocation quantities for
  protection of trade-exposed energy intensive industries. At a minimum, the overall evaluation of risk
  and the degree of protection needed to ameliorate it should be revisited prior to the start of the
  second program compliance period.
- Evaluating whether windfall profits are being generated due to the current allowance allocation structure and performance benchmarks used as the basis for allocation calculations within individual industry classes. While CARB has stated that benchmarks will remain unchanged through the course of the program, it is important to be at least open to revisiting benchmarks that are causing perverse consequences. One example of a potential consequence of concern is an overly generous benchmark for heavy crude oil that may lead to increased processing of dirtier feed stocks.

occur as a matter of course. If market monitoring committees are not formed, some or all of the comments made in this letter on market enforcement may be modified to represent a stronger need for regulatory oversight and information disclosure.

- Evaluating whether existing regulatory provisions for offset liability (in the case of credit invalidation or reversals) are causing unintended consequences on the development and availability of offset project credits within the AB32 cap-and-trade market. Such impacts may arise if, for example, third party mechanisms for insurance or liability relief are not developed or are unnecessarily expensive. Additionally, the committee(s) should evaluate whether other barriers to market access exist for project developers that do not further environmental integrity or program rigor.
- Coordinating with CARB staff responsible for implementing the cap-and-trade adaptive management strategy to inform staff of emerging or existing monitoring conditions that are indicators of potential or observed impacts on environmental quality.

While EDF recognizes that some of this efforts outlined above may be undertaken by CARB staff, market oversight and monitoring committee(s) will be steeped in information associated with market operations and trends, and will therefore be a valuable source of information. We urge CARB to make sure the committee(s) have adequate staff support and a clear delineation of responsibilities throughout their existence.

9. Large facilities should not escape requirements to surrender emissions allowances for under-reporting pursuant to section 95858. CARB should consider changing the underreporting trigger level from a generally applicable 5 percent, to a graduated percentage based on the amount of facility emissions. EDF recommends 5 percent for facilities with annual emissions less than one million metric tons CO2e, and 2.5 percent for facilities with annual emissions greater than one million tons per year.

The regulatory additions for enforcement and oversight noted above would tend to increase the efficacy and transparency of the regulation. However, EDF notes that the 15-day changes on under-reporting (Section 95858) may have the opposite effect.

In the newly proposed section 95858, if a facility that has already surrendered its compliance obligation (in a previous compliance period) is discovered to have under-reported its emissions by less than 5 percent of its total emissions, there is no obligation to surrender additional compliance instruments to make up for the emissions difference. However, for the state's largest emitters with between 3 and 4 million tons per year (3 facilities), or between 4 and 5 million tons of emissions per year (3 facilities), 5 percent underreporting may amount to 150,000 to 250,000 tons of CO2e emissions. By comparison, 250,000 tons is more than the total emissions of about half of the proposed regulated stationary sources covered by the cap-and-trade program. In a more conservative scenario, a facility with 1 million tons of emissions (about 30 in all within California) would only have to under-report by roughly 2.5 percent to exceed the 25,000 metric ton threshold by which all other facilities become subject to the regulation.

Of course, since emissions verification is based on a targeted risk-based procedure and does not require each and every source of emissions at a covered facility to be validated, the derivation of a percentage value for the amount of emissions that is underreported at a facility cannot be deemed wholly accurate with regards to the facility emissions report as a whole. Accordingly, it strikes EDF as improper to assign a one-size-fits-all value to what constitutes acceptable under-reporting.

In addition to requiring facilities to surrender allowances equal to the amount of their verified emissions, EDF also recommends CARB reexamine whether the 5 percent threshold in Section 95858 is appropriate for California's largest facilities (such as those that emit greater than one million tons annually). The amount deemed to be underreported is likely to exceed 25,000 tons of CO2e per year if the underreported percentage is only 2.5 percent, half of the proposed limit. Accordingly, EDF recommends CARB consider modifying

section 95858 to apply the 5 percent limit to facilities with less than one million tons of emissions a year on average, and a 2.5 percent limit to facilities with greater than one million tons of annual emissions.<sup>6</sup>

# 10. Allowances allocated to electrical distribution utilities should be used for the protection of ratepayers (Section 95892(a)) and similar protections should be included for natural gas customers in the second compliance period.

In the 15-day changes document, CARB added a provision requiring allowances allocated to electrical distribution facilities be "used exclusively for the benefit of retail ratepayers of each such electrical distribution utility, consistent with the goals of AB 32, and may not be used for the benefit of entities or persons other than such ratepayers." EDF supports the inclusion of this section, and it should not be removed without ratepayer protection provisions in place. Additionally, when retail natural gas emissions are incorporated into the program, similar provisions should be implemented.

Although greenhouse gas reductions will help facilitate a transition to lower carbon sources of energy and improved system-wide efficiency, such changes may incur significant costs. Additionally, since utilities are managing their own auction mechanism within the program, it is appropriate for CARB to give guidance (in collaboration with the California Public Utilities Commission) on how the allowance allocation revenue will be used. Accordingly, EDF supports the inclusion of the new language in Section 95892(a), which offers such guidance, and ensures that ratepayers who will ultimately feel the impact of the incurred costs will be protected. Similarly, as we state in our letter on the Preliminary Draft Regulation, we believe significant measures must be taken to minimize regressive economic effects on consumers of natural gas products (small businesses, residents, etc.) when they are included in the rule.

Some question has arisen about the legality of section 95892(a) with regard to CARB's ability to issue guidance or regulation on how allowance proceeds can or should be used. Although EDF leaves that answer to the agency and the legislature, we observe that the text of AB 32 supports the regulation's current language, wherein under AB 32 CARB shall "adopt regulations governing how market-based compliance mechanisms may be used by regulated entities subject to greenhouse gas emission limits ... to achieve compliance with their greenhouse gas emissions limits."

## 11. Increasing the forward crediting / auction can be an important modification, as long as it is not turned into a form of an implicit borrowing.

EDF continues to support the programmatic design of a market with free allowance distribution at the outset and a transition to a system that auctions a majority of allowances over the next compliance periods. In support of this design, it is worthy to note that a recent study by UC Merced showed that even in a free allocation scenario, cap-and-trade is more effective at stimulating innovation than other carbon pricing mechanisms, (i.e. carbon taxes).<sup>8</sup>

EDF supports the proposed increase of the advance auction from 2 percent to 10 percent, as long as this advance auction cannot be turned into a form of an implicit borrowing. Although these advanced emissions allowances can only be used in the credit period from which they were purchased (thus leading to price discovery of that period), the extra amount of emissions available for trading at an early time makes the presence of a robust allowance tracking system at the outset even more important. We do not foresee

<sup>&</sup>lt;sup>6</sup> Regardless of the requirement to surrender additional credits under 95858, if a facility is found to have not surrendered allowances sufficient to cover its verified emissions, it must be required to do so.

<sup>&</sup>lt;sup>7</sup> Cal. Health and Safety Code 38570 (c)

<sup>&</sup>lt;sup>8</sup> Chen, Tseng, "Inducing Clean Technology in the Electricity Sector: Tradable Permits or Carbon Tax Policies?", The Quarterly Journal of the IAEE's Energy Economics Education Foundation, Volume 32, Number 3 (2011)

significant problems with allowing a larger percentage of allowances to be auctioned in this pool and believe that the forward auction will provide benefits beyond that of simple price discovery, such as raising additional funds for energy efficiency investment and community benefits.

12. The regulatory provisions against resource shuffling would be benefited from additional explanation on types of activities covered, how it would be enforced, and the level of oversight that is likely to be needed.

In the 15-day changes document at Section 95852(b)(1), CARB includes a provision against resource shuffling associated with out-of-state energy generation. Conversations with CARB staff indicate that such prohibitions may also apply to out-of-state methane and biogas production and transmission into the state during the second program compliance period. Such resource shuffling is treated as a fraudulent action and may carry significant penalties. Within the regulation definition at (245), resource shuffling "means any plan, scheme, or artifice to receive credit based on emissions reductions that have not occurred ..."

EDF agrees that resource shuffling may be a serious concern for California, both for out-of-state electricity and for natural gas (Phase II). If regulated entities are allowed to take actions that reduce compliance obligations in California and those actions are the sole result of shifting where the electricity is delivered, (without a change to the Western Interconnected Grid resource mix), the overall reductions achieved by the program may be compromised. Of course, the use of anti-shuffling provisions should be counterbalanced by the complexity it adds to the program and CARB's ability to monitor and enforce it. CARB must also evaluate, to the extent it has not already done so, the ability of this provision to affect electricity generation balancing and delivery in the Western Interconnected Grid and potential disincentives for in-state entities to divest long-term contracts with high-emitting energy generation.

We are still evaluating the current language to understand how each of these issues might play out, especially CARB's staffing and market monitoring capacity. Accordingly, EDF recommends CARB release additional explanatory information, prior to rule adoption, specifying the types of activities covered (with hypothetical examples), how it would be enforced, and the level of oversight that is likely to be needed. Such information would be valuable for reducing the need for enforcement if it clears up ambiguities that exist among covered entities and would provide more public confidence about the operations of this new provision.

Again, thank you for your consideration of the comments on the proposed 15-day changes to the cap-and-trade regulation.

If you have any questions or concerns regarding the comments made in this letter, please contact me at toconnor@edf.org or (415) 293 – 6132.

Sincerely,

Tim O'Connor

Director, California Climate and Energy Initiative

**Environmental Defense Fund**