



BP America, Inc

**Ralph J. Moran**  
**1201 K Street, Suite 1990**  
**Sacramento, CA 95814**  
**(916) 554-4504**

DATE: January 11, 2010

**Via Email**

Kevin Kennedy  
California Air Resources Board  
1001 I Street, P.O. Box 2815  
Sacramento, CA 95812

Subject: CARB Preliminary Draft Regulation for a California Cap and Trade Program

Dear Kevin:

BP America, Inc submits these comments on the Preliminary Draft Regulation for a California Cap and Trade Program (PDR).

We have previously expressed our concern about an overall AB32 program that relies too heavily on direct regulation in place of a market-based program. These preliminary draft regulations increase our level of concern in that for the relatively small proportion of the program that is made up of a market-based approach, there is significant divergence from the accepted capability and intent of a cap and trade system, insufficient use of cost control mechanisms and design elements that introduce flexibility for complying entities and liquidity into the market, and elements of the program that can lead to micromanagement of the market.

Given the current state of the California economy, the fact that an already very efficient California energy production system will not have available large quantities of lost cost emission reduction opportunities and will instead have to undergo significant transformation to meet the GHG emission reduction goals, and the likelihood that few, if any, other trading programs will be linked to the California program in the early years of the program – we believe CARB must redouble its efforts to introduce cost control and flexibility into the program.

While our concerns about the elements of the PDR are described in detail in the following pages, our primary recommendations can be summarized as follows:

- Abandon any consideration of the use of lifecycle accounting and/or lifecycle emissions in the cap and trade program

- Retain the 2015 phase-in of fuel emissions into the cap and trade program
- Do not create differential compliance obligations for emissions attributable to biomass combustion depending on the source of the combustion. All biomass combustion must carry the same surrender obligation and should be considered a carbon neutral process
- Reconsider the restrictive quantitative limits on the use of offsets
- Do not create a requirement for CARB to approve offset projects that have already been approved by an internationally accepted entity
- Maintain the 3 year compliance periods without initial true-ups
- Streamline the requirements for linkage and list in the final regulation which specific trading programs and offset programs California expects to link to starting on day one
- Do not substitute the use of ill-conceived, arbitrary price collars for a well designed market with adequate cost control and flexibility
- Reconsider elements of the trading program oversight that reduce flexibility and liquidity.

#### *Lifecycle Emission in a Cap and Trade Program*

Page 40 of the PDR discusses 4 options for calculating the surrender obligation for transportation fuels in the cap and trade program. Option 1 is the only method that is compatible with the generally accepted capability and intent of a cap and trade system. Options 2, 3 and 4 (which consider including various portions of the fuel lifecycle and/or indirect land use change) should be dropped from consideration.

In addition to going beyond the accepted capability and intent of a cap and trade system, the inclusion of lifecycle emissions (in whole or in part) for fuel in a cap and trade system would introduce great complexity into the program, differentiate a single sector and source of emissions, and would increase costs to California consumers.

The objective of a well-designed cap and trade system is to send a broad, consistent price signal across the economy – letting the market decide how and where to most efficiently reduce emissions. This objective is one that is inviolable in the maintenance of a well-designed system. A cap and trade system is not designed to target action in specific emission sectors or to alter decision-making in specific sectors – that is the focus of complementary measures. With very limited exceptions, a cap and trade program is meant to cover the direct emissions that occur within the jurisdiction of the program - in a way that applies an equal cost of carbon across all sectors and all sources of emissions.

The use of lifecycle accounting (LCA) for fuel emissions violates the objective of a consistent carbon price applied to all emissions because it singles out a specific sector for

discriminatory treatment, and further, singles out only specific products within a specific sector for this discriminatory treatment. CARB apparently has no intention to include lifecycle emissions for other sources of emissions under the cap and trade system. To treat other sectors similarly would require CARB to include lifecycle emissions from the carbon footprint of all manufactured goods imported to California, including cars, EV batteries, solar panels, computers, cement, food, clothing, etc.

Moreover, CARB's consideration of LCA options 2, 3 and 4 is discriminatory within the fuels sector itself in that there is no consideration of equal treatment of all fuels within this sector. In the PDR, CARB singles out gasoline, diesel and biofuels for consideration of the inclusion of LCA (including indirect land use change). CARB is not considering including the lifecycle of fuel production and transport for electricity, hydrogen or other non-liquid fuels – or the lifecycle impacts of vehicles and batteries associated with these fuels.

BP is not suggesting that CARB should consider including lifecycle emissions from these sources, for as we have stated, the inclusion of LCA in a cap and trade program violates several key principles of a well designed cap and trade system. However, the fact that CARB is not considering treating these sources on an equal footing, and is instead considering a program design that is discriminatory to emissions from a single sector, and from only certain emission sources in that sector, is alone cause for our strong and persistent opposition.

The inclusion of life-cycle emissions also violates another key emissions trading principle: accurate data. A key criteria for evaluation of the suitability of an emissions source for inclusion in a cap and trade system is the ability to accurately monitor and verify those emissions. Given the fungibility of crude oil or product that is imported to California or moved around the global system, it would be virtually impossible to verify these emissions to any degree of accuracy. This is in part why the Low Carbon Fuel Standard makes use of a default value for the lifecycle of conventional fuels. The EAAC committee, in their recently released report, acknowledges the difficulty in obtaining the information necessary to account for these emissions. Moreover, any attempt to utilize a carbon factor instead of actual emissions defeats the purpose of a cap and trade program, violates the important principle in a trading system that a ton is a ton, and raises trades issues in that imports would be treated differently than in-state production.

Use of life cycle emissions calculations for activities that occur outside of California's borders will be exceedingly difficult to implement due to the lack of adequate data to verify emissions. The state of California would be compelled to make adjustments for external emission reduction programs and/or to attempt to verify whether these external systems have an equivalent impact as AB32. Moreover, use of LCA raises serious federal and international trade issues that should be addressed by the US Federal Government, not the State of California. For these reasons, use of LCA in emissions trading schemes is contrary to well accepted international best practice.

CARB, California policy makers and California consumers should be concerned about the effect of this potential decision on the cost of the implementation of AB32. As this design consideration would increase the required volume of emission reductions, it would necessarily increase the cost of compliance in the state. California consumers would be

paying a price for goods and services that reflects not only the carbon footprint of in-state GHG emissions, but a price that reflects the emissions and manufacturing practices of other states and countries. Unlike the use of offsets, where the reduction of emissions in other states and countries would reduce the cost of the program to California consumers, the inclusion of lifecycle emissions in a cap and trade system would result in California consumers seeing increased costs of goods and services in order to pay for emission reductions outside the state – with no environmental or economic benefit to Californians. Given the significant concerns about the potential economic impact of AB32, we question the wisdom of implementing such a design element.

We understand the desire to influence “mist” or “shadow” emissions that are attributable to consumption in California but which occur elsewhere. We believe the best way to address these emissions is by continued engagement with other states and nations to urge action to address climate change. California cannot address climate change alone – and must not enact policy that attempts to do so – especially that attempts to do so in a way that unfairly discriminates against emissions sources and that burdens California consumers with the cost of emissions and practices of other jurisdictions.

#### *Potential Inclusion of Fuel Deliverers in 2012*

The PDR discusses the option of including fuel providers in the cap and trade system in 2012 as opposed to the 2015 date prescribed by the Scoping Plan. BP believes it would be a mistake to accelerate the inclusion of fuel emissions in the cap and trade program. The Scoping Plan laid out the rationale for phasing in these sources beginning with the second compliance period in 2015. We believe the reasoning laid out by staff for the phase-in was and is sound - and still applies. Therefore there is no need to consider accelerating the inclusion of these emissions.

As staff has articulated, for various reasons there will be little effect on fuel use resulting from a carbon price imposed through cap and trade – in the initial years of the program. Instead, the majority of emission reduction in the transportation sector in these years will occur as a result of complementary measures such as the tailpipe standards and the LCFS. As it will take some time for these complementary measures to take effect, it is wise to phase-in the inclusion of these emissions in a cap and trade program. Moreover, as these emissions will eventually make up a large part of the market for allowances, it is wise to allow the market to develop in order to ensure adequate liquidity so that regulated parties will have some degree of certainty that in order to continue to provide adequate supplies of fuel, this large number of allowances will be reasonably available in the market.

#### *Treatment of Emissions from Combustion of Biomass*

The PDR implies that it will impose different surrender obligations for the emissions from biomass combustion depending on whether the biomass is used for transportation fuel or for power. The PDR states that there will be no surrender obligation for emissions from biomass combustion in stationary sources. However, as described in the fuel section, as well as in our comments above, CARB is considering a much different surrender obligation for biomass combusted as transportation fuel – including not only direct emissions, but lifecycle emissions and indirect land use change. This differential treatment is not only highly discriminatory, but makes no sense from an environmental or economic viewpoint.

The treatment of emissions from biomass combustion in a stationary source considered in the PDR reflects the traditional, and we believe, correct treatment of biomass combustion. This treatment acknowledges the fact that the combustion emissions are essentially equal to the carbon sequestered during the production of the biomass – and therefore the production/growth of biomass and its eventual combustion is considered a carbon neutral process. There should be no surrender obligation for emissions attributable to biomass combustion – from direct, indirect, or lifecycle emissions - whether from stationary or mobile sources.

### *The Use of Offsets*

Aside from the decision to implement a broad, well-designed market-based approach to address climate change in California, CARB’s approach to the use of offsets is one of the most important decisions to be made in implementing a program that both meets the environmental goal of AB32 - and that is cost effective. Given the unquieting concerns about the potential economic impact of AB32, the current state of California’s economy, the fact that significant emissions reductions in an already very efficient California energy production system will require long-term transformation, and the likelihood that California will be linking with few or no other cap and trade programs over the near term, we believe it is more important than ever that CARB seriously reconsider the enforcement of strict quantitative limits on offsets. Instead, California should look to incorporate the maximum use of design elements that control costs while maintaining the environmental integrity of the emission reduction goal. The broad use of offsets is just such a design element.

The use of offsets that are real, additional, permanent and verifiable is a win-win-win for California consumers, for environmental integrity, and for the potential to position California to meet its challenging, longer term, emission reduction goals. Offsets are a win for consumers because they can provide lower cost emission reductions, thereby reducing impact on consumer prices. Offsets are a win for environmental integrity because while offsets can be viewed as a cost containment mechanism, they do so while maintaining the environmental integrity of the emissions reductions target. Every offset, so long as it meets rigorous standards, results in a quantifiable, equivalent reduction of GHG emissions. In this way, the use of offsets is vastly preferable to other cost control mechanisms (for example, a safety valve) where the environmental integrity of the system is more difficult to uphold.

BP’s recommendations on the broad use of offsets are consistent with those offered by the Market Advisory Committee (MAC) of the California Air Resources Board – a blue ribbon committee of experts assembled to advise California policy makers on the design of a market-based GHG-reduction program. The MAC concluded that “*offsets should be allowed as part of the overall cap-and-trade program*” and that such a program “*should reject geographic or quantitative limitations on offset credits so as to maximize the opportunity to reduce GHG emissions at the lowest cost*”<sup>1</sup>.

---

<sup>1</sup> Recommendations for Designing a Greenhouse Gas Cap and Trade System for California, Recommendations of the Market Advisory Committee to the California Air Resources Board, June 30, 2007

The economic benefits of the broad use of offsets are substantial and real. In an analysis of the Lieberman-Warner Climate Security Act of 2008, the U.S. EPA concluded that the unlimited use of offsets results in a reduction in the cost of emission allowances of 71%. Conversely, USEPA concluded that if offsets are not allowed, the cost of emission allowances would increase some 93%<sup>2</sup>. More recent USEPA analysis of the Waxman-Markey American Clean Energy and Security Act of 2009, concluded that “the availability of offsets under the WM-Draft significantly influences the allowance price”, and that “without international offsets, the allowance price would increase 96 percent”<sup>3</sup>. Charles River Associates (CRA) performed a peer-reviewed analysis of the role of offsets in implementing AB32. CRA concluded that the broad use of offsets in California could reduce program costs by 80%, minimize economic loss to the state by up to \$40 billion/year by 2035, and prevent the loss of over 300,000 jobs resulting from leakage<sup>4</sup>. Given the concerns about the economic impact of AB32, the concerns about the current state of the California economy, and effect that offsets can have in reducing program costs, it is difficult to understand why CARB persists in enforcing severe limits on the use of this important cost control element.

Industry, consumers and policymakers in California should be particularly concerned about the competitive issues surrounding limits placed on the use of offsets in the implementation of AB32. Jurisdictions such as California, with a very efficient energy production portfolio and the high proportion of emissions from the transportation sector, will benefit most from a broad offset policy. California’s efficient production of energy means there will be fewer short-term opportunities to achieve cost effective emission reductions from these sources than will be available from less efficient production in other states and countries. In the transportation sector, it is a widely held view that material emission reductions in this sector are more challenging and expensive to come by in the short term. Moreover, as has been pointed out by many analyses, the cost of doing business in California is significantly higher than in other states, so California will benefit from the use of offsets produced outside of the state. California’s Economic and Technology Advancement Advisory Committee (ETAAC) concluded that the cost of doing business in California is 23 percent more expensive than the national average and that these extra costs come on top of the 32 percent higher cost burden U.S. manufacturers face when competing internationally<sup>5</sup>. For these reasons, California will benefit from a higher short- to mid-term reliance on the use of offsets while the market works to further transform our energy systems.

Federal level proposals as well as proposals in other countries recognize the benefits of the use of offsets and allow their use in a way that goes far beyond the severe restrictions that California is considering. For example, the current Waxman-Markey discussion draft

---

<sup>2</sup> EPA Analysis of the Lieberman-Warner Climate Security Act of 2008  
***S. 2191 in 110th Congress***  
March 14, 2008

<sup>3</sup> EPA Preliminary Analysis of the Waxman-Markey Discussion Draft The American Clean Energy and Security Act of 2009 in the 111th Congress 4/20/09

<sup>4</sup> The Role of Offsets in Enhancing the Cost-Effectiveness of AB32, April, 2008

<sup>5</sup> Economic and Technology Advancement Advisory Committee, Technologies and Policies to Consider for Reducing Greenhouse Gas Emissions in California, A Report to the California Air Resources Board, February 2008

would allow the use of some 2 billion MT per year of offsets (approximately split evenly between domestic and international offsets) – which roughly translates to approximately 30- 40% of total program allowances. In contrast, the PDR contemplates restricting the use of offsets by regulated parties to meet something on the order of 4% of their compliance obligation.

Many concerns over the use of offsets are based upon a presumption that offsets will not be real, additional, permanent and verifiable. We believe this is valid but eminently solvable concern with ongoing or planned efforts within California, the Western Climate Initiative, and internationally to address and resolve this issue.

Others have proposed the use of strict limits on the use of offsets in order to focus emission reductions in-state. Here, it is important to clear up a misperception about the use of offsets in California. Some stakeholders, and apparently some staff, believe that unless the use of offsets is severely limited, that many or most emission reductions can or will occur outside of the state of California. It is important that those who prescribe strict quantitative limits on the use of offsets understand that this is not the case. In fact, even if no quantitative limits on offsets were enforced, a minimum of 80% of AB32 GHG emission reductions will occur within the state – due to the fact that 80% of emission reductions are prescribed by direct measures on sources. Therefore, it is not necessary to use strict offset limits in order to ensure that vast majority of emission reductions take place within the state. If CARB is already directing where and how emission reductions occur for some 80% of necessary reductions (i.e. in-state), is it really necessary for CARB to concern itself with further directing where the emission reductions occur in the market – and in doing so forgo use of a cost control mechanism that could potentially cut in half the cost of market portion of AB32?

The Scoping Plan’s current limit on the use of offsets defined by 49% of required reductions, we believe, is a severe and unreasonable limit on its own – and will result in specific consequences for the state – as described above. Unfortunately, we believe that staff have exacerbated the severity and consequences of this limit by their very troubling interpretation of this 49% limit – an interpretation which essentially cuts in half what was already, we believe, an unreasonable limit.

Page 12 of the Proposed Scoping Plan discusses the fact that “the 2020 target of 427 MMTCO<sub>2</sub>E requires the reduction of 169 MMTCO<sub>2</sub>E, or approximately 30 percent, from the state’s projected 2020 emissions of 596 MMTCO<sub>2</sub>E (business as usual)”. BP is concerned that the illustration of the 49% limit as contained in the appendices of the Proposed Scoping Plan (C-22, Figure 2) is grossly inconsistent with what has long been acknowledged and described as the required reductions to meet the 2020 goal – i.e. 169 MMTCO<sub>2</sub>E.

Figure 2 on page C-22 instead appears to use the 2012 emissions level as a baseline and intends to apply the 49% limit to the difference between 2012 emission levels and the required pathway to 1990 levels. This Figure 2 method would obviously come up with a different, much lower, level of required reductions because it does not take into account “business as usual” growth.

If CARB chooses to impose a 49% of required reductions limit on the use of offsets – it must be consistent with what has long been acknowledged and described as the required emission reductions for the state to reach its 2020 goal. That is, the difference between the projected “business as usual” emission level for a year compared against the compliance pathway to the 1990 baseline. For the year 2020, this difference (or required emission reduction) has been documented to be 169 MMTCO<sub>2</sub>E. To do otherwise erroneously assumes that no action on the part of regulated entities will be required to avoid emissions that would otherwise have occurred due to population or economic growth.

For these reasons, we urge CARB to incorporate the broad use of real, additional, permanent and verifiable offsets. From an environmental or economics standpoint, there is no valid reason to limit the use of offsets either geographically or quantitatively. CARB should estimate, document and acknowledge the undeniable tradeoff that any imposed limit on the use of offsets, either quantitative or geographic – raises the cost of the emission reduction program. This increased cost will affect the ability to reach the increasingly challenging longer term emission reduction targets at a cost that is acceptable to society.

Regarding the approval of offset project and credits, we urge CARB to avoid setting up an approval process for offset credits that have already been approved by an accredited entity.

With respect to verified offset credits that later prove invalid, the regulation should state explicitly that regulated parties who purchased these credits in good faith will be subject only to the purchase of replacement compliance instruments and shall not be subject to enforcement or non-compliance penalties.

#### *Compliance Periods*

BP strongly advocates for maintaining the three year compliance periods originally contemplated by CARB. Longer compliance periods, such as a three year compliance period, are an extremely important element in contributing to the compliance flexibility of the program. A three year compliance period gives regulated parties the ability to smooth out variations in operations and the economy, borrow from future years within a compliance period as necessary, and perhaps most importantly, gives regulated parties the time to put in place the significant projects that will be necessary in order to make significant emission reductions in an already very efficient energy production system.

CARB has stated as a reason for considering moving to a one year compliance or requiring annual partial true-up, the potential for some entities to go bankrupt during the compliance period, creating challenges for CARB in collecting emission allowances from these entities. We question whether this potential issue rises to a level of requiring a change in design that will greatly reduce the compliance flexibility for the great majority of regulated entities who continue to operate, act in good faith, and fulfill their compliance obligations.

CARB should estimate the potential for bankruptcies within the compliance period, the potential number of allowances that may present collection problems and evaluate the number of effected allowances versus the size of the market. CARB should then, in a transparent manner, weigh the potential collection problems against the removal of flexibility for the great majority of market participants. CARB should also consider and

evaluate what other enforcement/collection mechanisms might be available to them that would preclude the need to restrict this important flexible compliance element.

### *Price Collars*

BP believes that a well-designed, broad, liquid cap and trade system, which contains adequate cost control measures from the onset of the program, greatly reduces the need for use of price collars. Price collars can undermine the integrity of the emission reduction target, introduce large distortions in the market, penalize early actors, chill innovation and introduce an arbitrary element into the market.

We are concerned that the consideration of the use of price collars is in fact recognition that the cap and trade system – as well as the entire California program, does not contain adequate cost control measures. The consideration of the use of price collars is also a recognition of the fact that because it appears unlikely that other western states will have a cap and trade program in place by 2012, and that California may be unable to link with any other state, regional, national or subnational programs, resulting in a trading market that is narrow and illiquid.

A well-designed market is the best determinant of the price of carbon necessary to facilitate technological innovation and deployment of advanced technologies. Rather than attempting to control the market through the introduction of price collars, California should make full use of cost control elements that reduce costs while maintaining the environmental integrity - from the start of the program.

### *Linkage*

Another way to broaden the opportunity for low cost emission reductions and increase market liquidity is through linkage to other trading systems. We are glad to see the PDR acknowledge the benefits of and the need to link to other programs. However, we are concerned with what appears to be a highly complex and bureaucratic set of criteria for allowing linkage to other trading systems.

The current state of discussions about implementation of trading systems in other western states, coupled with the highly exclusive California linking criteria leads to concerns that few or no trading partners will be linked with California at the onset or in the early years of the trading program – or perhaps at all. This is highly concerning to us and should be of great concern to CARB and to policy makers in California. In response, the PDR should move to streamline the criteria for linkage and provide much more transparency on what programs are being considered for linkage. The next draft of the regulation must contain a list of state, regional, national or sub-national programs that are being considered for linkage along with the prospects and hurdles to linkage with each. The final regulation must contain a list of the programs that will be linked to the California program on day one.

### *Market and Trading Rules*

Design of the trading market should be focused on allowing for adequate oversight while ensuring flexibility and market liquidity. We are concerned that several of the contemplated design elements could reduce flexibility and compromise market liquidity.

We would express caution about implementing restrictions on who can purchase allowances. We understand the concern expressed by some that parties without a compliance obligation could work to manipulate the market and cause havoc to the system. However, we believe the great majority of these players participate with the intention and result of providing a service that increases the liquidity of the market. We believe it is possible to put in place controls that adequately prevent market manipulation by these non-obligated entities. An example of such a control is restricting unlimited banking or carryover of allowances across compliance periods by non obligated parties.

With regard to purchase limits of allowances, BP does not support the enforcement of quantitative limitations on the holding of allowances by obligated parties because this can reduce compliance flexibility and preclude compliance plans that may include purchase of California allowances (or compliance instruments) for use in other, linked trading systems, or advanced purchase of allowances for future year/compliance period obligations. CARB should be careful to not preclude flexibility in compliance plans for regulated parties.

As there is currently limited detail on market and trading rules in the current PDR, BP anticipates providing more detailed comments on these important design elements in the next draft of the regulation.

#### *Definitions*

Definitions 48 (Electricity deliverer) and 50 (Electricity Importer) require clarification. It appears that the term “Electricity Provider” is not used anywhere in the body of the document – rather only within the definition of “Electricity Provider”. The definition of “Electricity deliverer” appears intended to capture both in-state generators and importers of electricity. Page 26 of the PDR discusses who has the compliance obligation - and refers to Electricity deliverers, but seems to go further than definition #50 in that it includes or implies that importers are further defined as the first to place power on the California grid. We are concerned that the definition of “Electricity Importer” is broader than the definition implied in the discussion of Point of Regulation – and that there is the potential for these terms to be used interchangeably and capture as regulated parties – entities who may meet the definition of “Electricity importer” but that do not put power on the grid. We request that these definitions and discussions are clarified.

#### *Distribution of Allowance Value*

Though we will reserve detailed comment until such time that the draft of the PDR contains detail on this matter, in general, we urge CARB to use allowance value to avoid leakage resulting from California industry that is energy intensive and trade exposed as a result of the regulations – and to benefit the GHG emissions reduction environmental goal of AB32.

When and if non-obligated parties are compensated with allowance value, compensation should be accomplished through revenue generated by public auction of allowances – and not through granting of allowances directly. Compensation through the granting of allowances raises the possibility that large numbers of allowances may be delayed in being made available to the market – compromising market liquidity.

Please don't hesitate to contact me should you have questions regarding this correspondence.

Sincerely,

Ralph J. Moran  
Director, West Coast Climate Change Issues  
BP America, Inc.

cc (via email): Mary Nichols  
Michael Gibbs