BP America, Inc.

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Via Email
Steve Cliff
California Air Resources Board
1001 I Street, P.O. Box 2815
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Subject: Proposed First Update to the Climate Change Scoping Plan:
Building on the Framework

Dear Steve:

BP America, Inc. submits these comments on the Proposed First Update to the Climate Change Scoping Plan (the Update), dated February, 2014. We believe the Update is vitally important and that its primary objectives can be boiled down to the following:

1) Ensure the current program is on track
2) Start the conversation about whether or how the state proceeds with a post 2020 GHG reduction target.

Get the Current Program Right

As a global leader in implementation of climate change policy, the state is in uncharted territory when it comes to the implementation of comprehensive policy to reduce GHG emissions. We believe that the first objective of the Update should be to ensure that the current program is on track. We are concerned that the Update provides little evaluation or analysis of the current program and seems to focus primarily, in very general terms, on how to proceed post 2020. Some of the most important information that will need to be considered when evaluating future emission reduction targets regards how or whether the current program is working – or not. Without this evaluation, decisions about future targets are likely to be ill-informed, rely on anecdotal or incomplete information, and therefore susceptible to carrying forward design flaws of the current program.

A conversation about a post 2020 program is important, but first the state must ensure that they are getting the current program right. Getting the current program right means it is:

- Meeting the environment goal of GHG emission reductions
- Delivering real GHG emission reductions

- Ensuring reductions are met at lowest cost
- Allowing the economy to grow and/or remain strong
- Providing a positive example that is scalable /replicable both domestically and internationally

CARB is to be commended for taking on the huge challenge of designing and starting up this comprehensive program that by many accounts is currently operating without major glitches. Given the fact that the state has designed a first-of-its-kind program - this is undeniably a significant accomplishment. However, many aspects of the program remain controversial, unproven, untested, suboptimal, potentially expensive, and unnecessary to meet the GHG reduction target.

While it may be early in the process to fully and accurately determine the effectiveness of each and every measure, what is clear is that the greatest contribution to emission reductions to date has come not from any designed program measure, but rather from the economic slowdown starting in 2008 – and the lack of a full recovery of the state's economy. We are concerned that the contribution of the economic slowdown, the relatively short period of time that the program has been up and running, and the fact that the full scale program will not be implemented until 2015, all serve to mask the potential inefficiency and cost of certain design aspects of the cap and trade program and complementary policies.

For this reason we urge CARB to undertake an ex-post review of the realized costs and benefits of existing policies, with a commitment to remove policies that are deemed non-complementary or that have a disproportionately high cost of carbon. We would like to see to the Update undertake a top to bottom review of all major aspects of the program, focusing in on leveraging, controversial and costly elements of the program's design.

Questions that we believe need to asked and answered include:

- What has been the cost of the program to date including analysis of the cost effectiveness of each measure in terms of $/ton GHG?
- Is the program delivering the lowest cost emission reductions possible?
- What are the elements of the program that potentially raise costs and are they truly necessary?
- Does the program get the mix of markets vs. direct measures right?
- Are regulators or the market better equipped to choose the mix of technologies that can deliver, long term, sustainable, cost effective, deep emission reductions?
- Is the current program making best and highest use of a well-designed market-based approach?
- What is likely to be the true cost of the program and of each measure in terms of $/ton GHG?
- Are market rules unnecessarily constraining market efficiency?
- Could the program be achieving more cost effective emission reductions if it relied more heavily on a well-designed market?
- Is each complementary policy achieving actual, incremental emission reductions – when coupled with the cap and trade program – or is it just determining how or where the emission reductions that would otherwise have occurred – will occur.

- Does each complementary policy reduce costs or increase the cost of achieving emission reduction targets?
- Is the current program making adequate use of cost control mechanisms such as offsets before considering alternatives?
- Are the considerations and concerns that led to low quantitative limits on the use of offsets still valid?
- Are the numerous information requests of regulated entities, such as reporting of corporate associations, really necessary?
- Is the program properly focused on the century-scale challenge of addressing climate change or is focus diverted by the desire to achieve co-benefits that could perhaps be better achieved by separate policies?

Focus on the Goal: Reducing GHG Emissions

Many of the activities undertaken to comply with AB32 will likely result in co-benefits of various kinds. These co-benefits will come in the form of reduced air emissions of traditional pollutants, new jobs, savings from energy efficiency as well as other types of co-benefits. It is important that, as a state, we acknowledge, measure and document these co-benefits – and where possible and consistent with the most cost effective GHG reduction solution – seek to maximize these benefits. However, we can not, nor should we, let the achievement of these co-benefits drive GHG policy design.

Addressing climate change will not be easy nor will it be cost-free. It will require not only great advances in technological innovation, but also strict focus on effective policy, and resolve on the part of the public to accept the cost and lifestyle adjustments that will be necessary. It will also require sustained "permission" from citizens and voters to allow policymakers to continue to pursue policies that result in benefits that are spread globally while (possibly substantial) costs are concentrated locally. Viewing climate change policy development as an opportunity to expand additional environmental or social regulation will greatly increase the potential for the program to be both expensive and unsuccessful.

We are concerned that the current program, and discussions by policymakers on the program's objectives, focus too heavily on benefits and objectives unrelated to GHG reduction. We believe that achieving these co-benefits is the aim of many of the more controversial, costly, and potentially ineffective elements of the AB32 program. To be successful in achieving its primary objective, the AB32 program must focus on this primary objective – reducing GHG emissions at lowest cost - and not on desirable, though secondary benefits or effects such as:

- Reducing co-pollutants
- Producing revenue
- Producing "green jobs"
- A requirement that GHG emission reductions occur in California
- Allowing policymakers to pick and choose where and how emission reductions occur

Achieving co-benefits is both desirable and beneficial but this should not drive design of the program.

Fixing the Current Program
While fixes to the program will depend on answering many of the questions posed previously in this document, we believe there is sufficient experience with this and other programs to offer the following broad suggestions for improving the current program:

- Cap and trade should be the backbone of the current program – not a backstop.
- Complimentary policies should be phased out and the market should be relied on to deliver lowest cost reductions.
- Seek lowest cost reductions – wherever they occur – so long as they are real, additional, verifiable and permanent. This means greater use of well-designed markets and cost containment elements – like offsets – without geographic limitation.
- Support the establishment of a deep and liquid market by removing unnecessary transactional and administrative constraints such as holding limits, applying surrender merit orders and voluminous informational reporting requirements (including corporate associations unrelated to the program).
- Avoid market distortions – if Mrs. Smith gets a rebate check for fueling her electric vehicle, then Mrs. Jones should get one too for fueling her gasoline vehicle – or neither should.
- Do not pick winners and losers – let the market decide.

Use of Offsets in the Current Program
BP has commented on many previous occasions on the important of the role of offsets. Given the unquieting concerns about the potential economic impact of AB32, 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 other cap and trade programs over the near term, we believe it is more important than ever that CARB seriously reconsider the imposition of strict quantitative limits on offsets. Instead, because climate change is a global problem that requires a global solution, and because California will continue to be negatively impacted if others don't act, CARB should look to incorporate the maximum use of design elements that control costs while maintaining the environmental integrity of the emission reduction goal. The use of offsets is a clear example of such a design element.

Currently, the very restrictive quantitative limit on the use of offsets is compounded by what appears to be a cumbersome, bureaucratic and potentially very exclusive process for approving both offset protocols and individual offset projects. CARB staff should move expeditiously to approve additional offset protocols and to approve projects within already approved protocols for both domestic and international offsets.

In order for offsets to provide their full cost containment benefit, they must be available to the market. In addition to the previously mentioned concerns about quantitative limits and a time consuming approval process, there is also the potential that even if offsets are available, some regulated entities may not be inclined or able (for whatever reason) to make use of offsets – a development that can affect all market participants. CARB should monitor the quantity of offsets used as compared to the allowed limit, and create a system to carry over to new compliance periods and distribute amongst all market participants, the ability to use offsets unused by the overall market in a previous compliance period.

Lastly with regard to offset use in the current program, California must acknowledge that they cannot solve climate change alone – others must follow. Leadership is about much more than in-state emission reductions – it is about encouraging action by others and recognizing and crediting that action when it occurs. Solving climate change is not about reducing California's GHG emissions – it as about reducing GHG emissions period. To this end, the state, in its current and any future program, must move expeditiously to encourage and accept international offsets that are real, additional, permanent and verifiable. There is no better place to start on this front than working with our closest trading partners, like Mexico, to encourage and accept CARB-quality carbon offsets. Ongoing and upcoming discussions between the governments of California and Mexico provide a golden opportunity for tangible and substantive agreements and progress to be made on this front. As Berkeley economist Severin Borenstein has said, "It's time to make our Global Warming Solutions Act about global solutions"[1].

Post 2020 Conversations

Much is at stake in the state's consideration of whether or how to proceed with climate policy post 2020. Reaching post 2020 targets will require nothing less than a fundamental transformation in the way that California produces and uses energy - with significant uncertainty as to the cost and availability of the technology necessary for that transformation to occur.

According to the Update, achieving post 2020 emission reduction targets that put the state on a path to achieving 2050 goals "will require that the pace of GHG emission reductions in California accelerate significantly. Emissions from 2020 to 2050 will need to decline several times faster than the rate needed to reach the 2020 emissions limit."[2] It has been estimated that the pace of post 2020 emission reductions will need to be <u>five times</u> that of the current program. Moreover, these future, much deeper emission cuts will likely (and hopefully) occur during a period of economic growth in the state rather than during the period of economic contraction the state has experienced during much of the current program.

It is also important, in these discussions of a post 2020 program, to acknowledge what has changed since the state undertook AB32 back in 2006 – and how these changed circumstances should be factored into the state's decision as to how or whether to proceed post 2020. These changes include:

- The fact that few other states have followed California's lead – and none to the degree of the California program. Additionally the assumption that a broad-based federal program would be in place by now has proven untrue.
- The state's economy is improving and hopefully will continue to improve – so an economic slowdown will not contribute to ease in attaining emission reduction targets in the future.

[1] Severin Bornstein, Blog post 4/7/14, Energy Economics Exchange, University of California at Berkeley, Haas School of Business

[2] Proposed First Update to the Climate Change Scoping Plan: Building on the Framework, February, 2014. Page 37 and Figure 6, page 38.

- Advanced technology has not developed as was expected back in 2006 – with battery and fuel cell technology, low carbon biofuels and carbon capture and storage as key examples.
- The pace of emission reductions required of a potential post 2020 target will be many times that of the current program

The stakes are therefore much higher, and the potential for significant impact to consumers and the state's economy much more pronounced in a post 2020 GHG reduction program – with the deep emission cuts envisioned. We believe the involvement of the legislature in these decisions is vital and that these decisions must be made with the aid of rigorous, dispassionate and impartial analysis of the costs, impacts, benefits and alternatives for moving forward. CARB and the Update have important roles to play in equipping the California legislature to make an informed decision on behalf of the state's citizens.

We believe CARB and the Update can plan an important role in the state's decision by providing the necessary analysis including:

- A full analysis of the cost of the program to date including analysis of the cost effectiveness of each measure.
- A robust analysis of the cost of reaching mid-term or long term targets, including the cost effectiveness of each proposed measure.
- An analysis of the impact of the state's program on avoiding the adverse impacts of climate change.
- A review and analysis of the state of readiness and the cost of the technology needed to achieve deep emission cuts.
- An analysis of the impact on California industry, including leakage, from a program that requires deep cuts in GHG emissions – both with and without a critical mass of other jurisdictions following California's lead.
- An analysis of the dynamics of innovation and whether regulation or market forces are most effective at driving innovation.
- If addressing climate change is the goal – are there things the state can be doing that demonstrate leadership – short of unilaterally adopting deep GHG emission reductions?
- Analysis as to whether regulatory triggers can be put in place such that adoption of more expensive measures are conditioned on some critical mass of other jurisdictions undertaking similar action.
- Is the need for cost containment mechanisms, such as offsets, more or less important under a program with deep emission cuts and how can/should the use of these mechanisms be expanded?
- Can state goals be more efficiently achieved by relying more on market mechanisms (where the market rather than policymakers pick winners) rather than on more command and control regulation?

The Importance of a Market-Based Approach

As previously stated, the stakes are high in the state's determination as to how or whether to move forward on climate change. We believe there are several alternatives to moving forward, and showing leadership, short of a virtual unilateral approach that includes deep emission cuts.

Identification and evaluation of alternative approaches to state action post 2020 should start with the recommendations offered earlier in this document. We expect that alternative approaches will include but not be limited to:

- Pursuit of only lower cost, high benefit activities, such as technology incentives (rather than technology forcing regulations), in the absence of action by a critical mass of other jurisdictions
- A requirement that more expensive measures or deeper emission reductions would require participation by a critical mass of other jurisdictions.
- A program focused on encouraging and recognizing international action
- A comprehensive GHG reduction program

As the state moves forward in considering these alternatives, when considering the alternative of a comprehensive program to achieve deep cuts in emission, we urge the state not to simply continue with the current program. We have detailed both the problems and the potential problems with the current approach. We believe more problems would be clearly manifested in the much more accelerated cuts required by a post 2020 target – without the 'assistance' of an economic slowdown.

In considering and weighing alternatives for moving forward, for the alternative that considers implementation of a comprehensive program, the state should consider in their scenario design, use of a program that relies more heavily on a well-designed market-based approach. While a market approach is an element of the current AB32 program – the current market-based approach (or the cap and trade) is only a minor contributor to the total emission reductions required by 2020. In fact, the state's cap and trade program has been referred to only as a backstop to the performance of the myriad command and control measures that make up the bulk of the AB32 program. By 2020, California's GHG reduction program- whether it be the program to maintain the 2020 goal or an expanded program - should be far along the way toward relying on a market as the primary mechanism for GHG emission reductions.

BP believes a market-based approach to addressing climate change is not only the most efficient and cost effective – but also the only approach that incorporates the need to find a globally scalable solution recognizing the global nature of the issue of climate change. A market-based approach, such as a cap and trade system, is also the only policy alternative that provides the assurance of meeting a specific emissions reduction target - and does so while delivering this outcome at the lowest cost – ultimately allowing more emission reductions to be achieved. A market-based approach to addressing climate change recognizes that the most efficient emission reduction strategies will change over time as markets and technologies evolve and develop. A market-based approach, such as a cap and trade system, can react quickly to evolving technologies and new approaches in a way that a command and control regulatory approach simply cannot.

A primary objective of a market-based, GHG-reduction program should be to establish a broad, consistent price for carbon across the widest segment of the economy as is practicable. A broad, consistent carbon price will result in the fairest, most effective and

most efficient reduction of GHGs and will best distribute the economic burden and increasing opportunities for low-cost abatement measures. A broader market, including one designed to easily integrate into an eventual regional or federal system, will reduce the impact of leakage and will increase the incentive and marketplace for innovation. That's why the aspiration of such a system should be an economy-wide, market-based program, while recognizing that it may take some time to achieve a fully economy-wide approach.

While some amount of direct regulation, or command and control regulation, can be justified on a limited basis, going forward the state should acknowledge the transitional nature and shortcomings of the current approach that relies heavily on command and control. A command and control system is not scalable – regionally, nationally or internationally. Because climate change is a global problem that requires a global solution, we need a program that has the potential to be scaled into a large program that will create a common carbon currency. It is simply not possible to design command and control systems that meet these objectives. Senate Energy and Natural Resources Chairman, Jeff Bingaman, a champion for serious climate change policy in the US Senate, said,

> *… if you think of the size and complexity of the energy system we are trying to change, direct regulation on a plant-by-plant basis is very impractical. It will also likely be more expensive to consumers, because it is economically inefficient to squeeze reductions from some sources when those same reductions can be found elsewhere far cheaper.*[3]

Senator Bingaman's conclusions apply to command and control regulation not only on a plant-by-plant basis – but on a sector-by-sector basis as well.

The Importance of Better Use of Cost Containment Measures Going Forward - Offsets
Owing to many of the issues already raised in this document, pursuit of deep GHG emission reductions in a post 2020 program will be a much greater challenge than achieving the current 2020 target. We have also previously suggested that the state should consider the many alternatives to showing leadership on the issue of climate change – short of adopting virtually unilateral deep emission cuts. If the state decides to pursue deep emission cuts with a comprehensive program, it must do so with its eyes wide open to the costs and the risks of implementing such a program. It must also do so with as streamlined, focused and well-designed policy as is possible. Policymaker preferences as to how to reach targets and which emission reductions are preferable to others must give way to the desire to meet the target at lowest cost – letting a well-designed market choose winners. We believe that there will be a choice between meeting the targets at lowest cost – and allowing policymakers to choose the pathway that they believe is most desirable. Likely, both will not be able to occur.

One of the program elements that we believe will require serious re-evaluation going forward is the current very limited use of cost containment mechanisms – namely 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

[3] Speech to NDN, Finding the Path Forward on Climate Legislation, July 9, 2008

most important decisions to be made in implementing a program that both meets the environmental goal and is cost effective.

The ability of regulated entities to use offsets to meet a portion of their compliance obligation is an essential part of a well-designed cap and trade system. Moreover, an essential part of the design of an offset program should be a rigorous approach to ensure that the emission reductions allowed in the offset program are real, additional, permanent and verifiable.

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 cost containment mechanisms, 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. Lastly, as the public's acceptance of the cost of the program will likely be the factor that determines California's ability to meet ambitious post 2020 goals, the ability of offsets to reduce program costs will contribute to the potential of meeting longer term emission reduction goals.

The use of offsets that are real, additional, permanent and verifiable create societal benefits in a cap and trade program by maintaining the environmental integrity of the emission reduction target while reducing the social costs of the program. In addition, the use of offsets:

- expands types of emission reductions to areas which may not be envisioned by regulators
- bring economic co-benefits to communities
- bring particular value in the short term by providing the ability to deliver short-term reductions while allowing technological advancements in capped sectors to help deliver more material, longer-term reductions
- create a class of carbon-reduction entrepreneurs who would otherwise not be engaged in helping to address climate change

Concluding Thoughts

Finally, we would like to offer several generalized considerations that we hope will be incorporated in the Update and help guide the state's decision as to how or whether to move forward post 2020. We believe these insights will aid these state in tackling this challenging issue and in coming to the best decision for the state. These considerations include:

- Competition and market forces are the primary drivers of innovation – not regulation.

- It is not reasonable to expect that policymakers can or should determine the precise mix, or recipe, for technologies that will achieve deep cuts in GHG emissions far into the future.
- Where and how innovation occurs is often unpredictable – policymakers must avoid picking winners and losers.
- There is peril in taking a preferred view of the distant future and designing policy today to meet that view.
- An example of the quandary that comes from policymakers picking winners is in the state urging large private bets and investments in research, development and deployment in advanced, low carbon biofuels while at the same time making clear that, in the state's view, electric vehicles and not biofuels, are the future of light duty transportation.
- Will California be climate policy internationalists or isolationists? Being a leader requires not only encouraging action by others but also recognizing and crediting it when it occurs.
- Real, effective leadership is more important that in-state programs and in-state emission reductions.
- It isn't necessary to penalize conventional energy in order to encourage alternative energy. The state and the world will need both for decades to come.
- The state's program has to be successful in order to provide leadership. Success means not only achieving emission reduction targets, but doing so at an acceptable and sustainable cost.
- Unlike as is the case with the state's vast experience with addressing conventional pollutants, the benefits of actions to address climate change are not local – they are spread globally while the costs are focused locally.

We would be happy to discuss the above generalized considerations – or any of the suggestions contained in this document - in more detail. Please don't hesitate to contact me should you have questions regarding this correspondence.

Sincerely,

Ralph J. Moran
Sr. Director, Governmenta & Public Affairs
BP America, Inc.

cc (via email): Richard Corey
Edie Chang
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