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Ms. Mary Nichols
Chairperson
Air Resources Board
1001 "I" Street
Sacramento, California 95814

Electronic submittal: http://www.arb.ca.gov/lispub/comm/bclist.php

Re: Comments on Cap and Trade Program Regulation (July 25, 2011, Proposed 15 Day Modification)

Shell Oil Company (Shell) believes that governments should shape policies that can address climate change and meet the energy challenge. Adoption of a predictable regulatory framework with a clear long-term Green House Gas (GHG) reduction objective that creates certainty for the marketplace and encourages continued investment in energy and jobs is essential.

Although Shell prefers a national market based program to address climate change, we understand that California has a state mandate to reduce its GHG emissions to the 1990 level. As a result, California is in a position to provide a precedent-setting model to address the energy challenge and climate change. Shell believes a cap and trade program for stationary sources that introduces a cost for emitting CO2 and is designed to deliver a measurable reduction is the model that will allow California to meet its GHG reduction goals in the most cost effective manner. Shell has supported the development of an effective cap and trade program for stationary sources and has worked with ARB in developing the cap and trade regulation. Our goal is a well designed cap and trade program that helps California transition to a low carbon future in a cost effective and balanced manner that can align with, or be replaced by a federal program.

Shell recognizes and appreciates the positive changes made in the July amendments. In particular we note the change that will "phase in" auctions and compliance obligations to provide the added time to develop the necessary infrastructure and compliance tools to ensure that entities are able to comply. We are especially appreciative of the responsiveness of ARB's staff to meet and work with us on issues significant to Shell on such a compressed timeline.

Despite the positive changes in the July amendments, Shell believes that the amended cap and trade regulation falls short of creating a program that balances GHG reductions with the need to provide an adequate transition period and prevent leakage. The value of an adequate transition period is to prevent unnecessary economic disruptions or short term costs in order to safeguard the vitality of the California economy. Accordingly, Shell recommends the following amendments to address these shortcomings.

1. Delete the simple barrel methodology refinery benchmarking methodology and replace it, beginning in the first period, with a benchmarking methodology that recognizes complexity of refineries such as the EII based methodology proposed by WSPA. The proposed simple barrel benchmarking methodology for refineries is an over simplification that does not accurately represent the carbon efficiency of a refinery and should not be used, even as an interim solution. It is contrary to ARB's objectives to minimize leakage and provide adequate transition periods.

2. Further revise the offset liability provisions to expand the Forest Buffer Account concept to create a compliance buffer account for all offset credits and amend the offset credit invalidation period to expire when ARB's accepts a second verification.

3. Incorporate provisions to a) review the energy, environment and economic implications of including transportation fuels under the cap and b) review the regulations to ensure a level playing field for all transportation fuels. These reviews should be completed by January 2014.

4. Incorporate provisions to a) establish monitoring indicators and criteria for changing the program based on the indicators by June 2012 and b) overall program review of the cap and trade regulation by March 2014 and in March 2017.

5. Continue to work with stakeholders to provide a consistent mechanism to provide variances to address compliance issues that arise that are beyond the control of the entities and to resolve disputes.

6. Provide allowances to those entities that have fixed-price long-term contracts with no ability to pass through the cost of carbon. The utilities receiving allowances on their behalf have no incentive to negotiate with those entities that entered contracts prior to the rules being adopted. Likewise, in bilateral contracts that do not include the utility as counterparty, the advantaged party has no incentive to renegotiate.

Shell remains fully committed to continue working together with ARB to develop an effective cap and trade program. Much progress has been made to date. However, it is essential that the regulation address the key issues we have outlined above. A well designed cap and trade program can achieve significant GHG reductions and become a template for others to follow.

Further details on these recommendations are attached. If you have any questions, please contact Minnie Tsunezumi at (925) 313-3735.

Sincerely,

SMO'Neill

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Cc:

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Shell's objective is a well designed cap and trade program a) that helps California transition to a low carbon future in a cost effective and environmentally balanced manner with adequate transition period to prevent unnecessary economic disruptions or short term costs and b) that can align with, or be replaced by a federal program. The program must be designed to minimize uncertainty to avoid significantly disadvantaging investment decisions for California businesses. Shell believes that the cap and trade regulation, as amended in the July 25, 2011, *Proposed 15 Day Modifications,* is does not achieve these goals. Shell recommends the following amendments to address the shortcomings.

1. **Delete the simple barrel methodology refinery benchmarking methodology and replace it, beginning in the first period, with a benchmarking methodology that recognizes complexity of refineries such as the EII-based methodology proposed by WSPA. The proposed simple barrel benchmarking methodology for refineries is an over simplification that does not accurately reflect the carbon efficiency of a refinery and should not be used, even as an interim solution.**
   The simple barrel methodology should not be used to allocate free allowances for refineries for the following reasons:

   a. Simple barrel methodology is not accurate. It does not accurately represent the carbon intensity of all products produced by a refinery.
   Refineries vary significantly in the types of feed (crude and intermediate inputs) to the refinery, the finished and intermediate products produced, the on-site consumed products produced and the process units used to produce the products. Some refineries are designed to produce more transportation fuel products from heavier crude than others, thus deriving full advantage from our oil resources. Some refineries are designed produce intermediate products that require further processing at another facility. Some refineries produce products that are used internally for the refinery operations such as electric power, steam, hydrogen and low BTU gas (Flexigas), while other refineries purchase these products from 3rd parties. The proposed simple barrel methodology is too simple and does not account for all these differences. It does not accurately represent the carbon intensity or energy efficiency of a refinery.

   b. Simple barrel methodology incentivizes results that are contrary to the objectives for providing free allowances. It encourages leakage and does not provide a transition period.
   The objectives of providing free allowances to industry are 1) to minimize leakage and 2) to provide adequate transition period to prevent unnecessary economic disruptions or short term costs. The proposed simple barrel methodology is contrary to these objectives. The use of the simple barrel methodology will result in a wide range of differences in percentage of free allowances allocated to a refinery relative to the refinery's emissions. During the first compliance period in which the average industry sector reduction is approximately 4%, some facilities will receive only partial free allowances and must either reduce emissions or purchase compliance instruments in amounts equivalent to 5 to 10 times greater than the average sector reduction of 4%. At the same time other refiners will face no emission reduction or are given excess allowances to sell. Rather than providing a smooth transition period, this methodology would create disparate conditions that spur abrupt changes for some facilities and could add pressures that encourage leakage. Additionally, because the simple barrel methodology advantages simple refiners and the use of light crude, it could incentivize leakage with importing of more light crude into California while exporting California domestic crude. This could also have the negative side effect of increasing the overall cost to produce clean products. In some cases, it may cause California refiners to reduce rates and/or import more products. Some argue that leakage would not occur by

the use of simple barrel methodology as an interim method for the first compliance period because two years is insufficient time to make changes. During this interim period or period of uncertainty, refiners may delay investment decisions in California or alternatively divert capital investment to their portfolio outside of California. While it takes refiners 4-5 years to permit and execute large capital projects, refiners can make crude and product import and export and throughput decisions in a relatively short period of time.

c. It is not an effective template for others interested in cap and trade to follow.
The simple barrel approach is a technically flawed methodology that results in large disproportionate allocations that could spur abrupt changes for some facilities. It does not provide for sufficient transition period to reduce industry emissions in a cost effective manner, nor is it consistent with the European Union. It also provides windfall profits to simple refiners, and is inconsistent with ARB's stated objectives. Given these significant shortcomings, CARB has not created a cap and trade model that will likely to be followed by others.

d. It does not encourage investment in California.
Refiners have made investments to meet the California's clean fuel standards while continuing to meet California's transportation fuel needs. Many of these investments increased complexity of these refineries and are necessary to keep California's refineries competitive with refineries in other states as well as across the globe. The simple barrel methodology disadvantages complex refineries and penalizes these past investments. The lack of certainty in the rulemaking effort thus far continues to jeopardize industry investment decisions that are being made today, but won't be completed for 5 or 10 years. It does not encourage future investments to modernize and improve California's energy infrastructure and could cause discretionary capital investment to be moved to other states or regions of the globe in which the petroleum markets are growing or where more regulatory certainty is provided.

Therefore, Shell recommends that

i. The simple barrel methodology for refineries be deleted and
ii. Beginning with the first period, use a benchmarking methodology that recognizes complexity of refineries, such as the EII based methodology proposed by WSPA.

2. **Further revise the offset liability to expand the Forest Buffer Account concept to all offset credits and amend the invalidation period to expire when ARB's accepts a second verification.**
As proposed, the liability for offset credits that have been issued but later invalidated by ARB is placed on the buyer of the credit. Shell believes the risks associated with such invalidation and penalties will inhibit the development of the offsets market and the innovations and pioneering GHG technologies that offsets can drive. We appreciate ARB's efforts to establish criteria and limitations to the invalidation process and to promote development of insurance products. However, we believe more is necessary to address this issue. Shell supports and recommends the following two amendments proposed by IETA.

a) Expand the Forest Buffer Account concept to create a compliance buffer account for all offset credits.
ARB has a precedent for administering a compliance buffer account with the Forest Buffer Account. Credits subject to an unintentional reversal will remain valid, and ARB will retire credits from the Forest Buffer Account. A similar thought process is behind IETA's proposed compliance buffer account, where invalid offsets will remain in circulation, but the system will be made whole through the retirement of offsets from the compliance buffer account. The proposal also allows ARB to pursue the responsible party in instances of egregious error or fraud to prevent issues of moral hazard. This is a fair and workable model.

b) Allow the invalidation period of expire upon the date of ARB's acceptance of the second verification.
As proposed, the regulation includes an eight year statute of limitations for the invalidation of offsets that may be reduced to 5 years, if a project undergoes a second verification within 3 years of issuance of credits. We believe the invalidation period should be lifted as soon as the second verification is accepted by ARB.

3. **Incorporate provisions to a) review the energy, environment and economic implications of including transportation fuels under the cap and b) review the regulations to ensure level playing field for all transportation fuels. These reviews should be completed by January 2014.**
Shell believes that different regulatory approaches to CO_2 reduction are suited for different sectors. While we believe that market mechanisms such as cap and trade work most effectively for power and large industrial facilities, for road transportation, we believe different measures that independently target the fuel supplier, the vehicle manufacturer and the driver work best. There are already two programs in place that are intended to reduce GHG from fuels- the federal Renewable Fuel Standard and the California Low Carbon Fuel Standard. Including transportation fuel in the cap and trade program will add another layer of regulation. Additionally, by including transportation fuels in the cap, it will nearly double the emissions subject to this regulation. Shell believes that before imposing an additional layer of regulation, ARB should further evaluate the impacts of including emissions from fuels in the cap and trade program in 2015 on energy availability, the environment and economics. In addition, further review is necessary to ensure a level playing field for all transportation fuel, including a level playing field for electricity used for transportation fuel and fossil fuel used for transportation fuel. The review should be completed and presented to the Board by July 2013 to allow sufficient time to modify the regulation as necessary and provide entities' with sufficient planning time.

4. **Incorporate provisions to a) by June 2012 establish monitoring indicators and criteria for changing the program based on the indicators and b) overall program review of the cap and trade regulation by March 2014 and in March 2017.**
The cap and trade program touches the majority of California's economy. A well designed cap and trade can achieve significant GHG reductions and drive innovations but design flaws in a cap and trade program could cause significant economic and/or environmental damage. There are many elements in this cap and trade regulation that have not been tested by other cap and trade programs. To ensure that we are able to detect any problems early and take corrective action promptly, Shell believes it is critical that key indicators of both a) market operations and b) California's energy and economic health be identified and monitored routinely. A provision should be added to the regulation requiring that these indicators and the criteria for any changes that may be driven by the analyses of these indicators be clearly established by June 2012. Such criteria are essential to provide businesses with certainty on what conditions, how and when the regulations may be changed. Shell additionally believes that a provision should be included requiring an overall program review of the cap and trade regulation to be completed and presented to the ARB Board by March 2014 and in March 2017.

5. **Continue to work with stakeholder to provide a consistent mechanism to provide variances and resolve disputes.**
This regulation and the other AB32 regulations will apply to many facilities that have not previously been subject to ARB's regulations. These regulations also provide significant discretionary authority to the Executive Officer. Shell is committed to our goal of full compliance with environmental regulations. However, we believe there will be situations where legitimate differences in interpretations and assessment of circumstances may require variances to address compliance issues that arise that are beyond the control of the entities or dispute resolution, which are best handled by an independent reviewer. Shell

recognizes that ARB currently disagrees with this position but requests that ARB continue to work with stakeholders to provide a consistent mechanism to resolve this issue.

6. **Forward term contracts at fixed prices should receive free allowances.**
Section 95811 requires generators and importers of electricity into California to account for the CO2 emissions associated with their power production and imports. Shell understands the need to include emissions from the power sector under the cap and trade program. However, for generators located within, or connected to the California Grid that entered forward term contracts at fixed prices, this requirement will create an economic loss that was not accounted for at the time the transaction was executed.

   To address these losses, Staff has included a recommendation in the "Notice of Public Availability of Modified Text and Availability of Additional Documents" that bilateral contract negotiations would provide the best resolution. Shell respectfully disagrees and requests that CARB reconsider this recommendation. The number of free allowances associated with the outstanding contracts that could and should be distributed to the contract holders is minimal; however the economic impacts are significant. Directing bilateral parties to renegotiate when there is no incentive for the advantaged party to so do virtually guarantees the disadvantaged party will be penalized. Shell urges ARB to provide free allowances to those entities that entered fixed price long-term contracts and have no ability to recover the cost of carbon.