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April 28, 2014

Via web: http://www.ARB.ca.gov/lispub/comm2/bcsubform.php?listname=proposed-sp-ws&comm_period=1

Ms. Edie Chang
Deputy Executive Officer
California Air Resources Board
1001 I Street, Sacramento, CA

Subject: Comments on Proposed First Update to the Climate Change Scoping Plan

Dear Ms. Chang:

Chevron has been a California company for more than 130 years and is the largest Fortune 500 Corporation based in the state. We have participated in ARB's stakeholder engagement process since the adoption of the 2008 Scoping Plan in order to make the program workable for California, while meeting the goals of AB 32. We appreciate the opportunity to provide comment on the Proposed First Update to the Climate Change Scoping Plan ("Proposed Update").

Chevron is very disappointed in the lack of rigor and the few changes in response to stakeholders' feedback, exhibited in the Proposed Update. We continue to have concerns with the Proposed Update beginning with those raised in response to the prior discussion draft regarding the lack of analysis of 2020 measures. Chevron, in addition to many other commenters, requested a sound scientific and economically analytic approach with focus on actions needed to achieve the 2020 target. Evaluation of these efforts is necessary in order to improve on the performance of the initial suite of policies. It can point to whether existing policies should be modified or eliminated, and whether new policies should be developed. In the face of near industry consensus, the Proposed Update makes no improvements in these areas. Our prior comments are attached as they remain unanswered.

Chevron is further concerned that the Proposed Update does not incorporate economic studies of technical feasibility of a post 2020 goal and adds unrealistic new mandates for the Low Carbon Fuel Standard. Chevron recommends that the state revamp its post 2020 approach in a separate multi-stakeholder effort following a principled approach based on "Beyond AB 32: Post-2020 Climate Policy for California" by Dr. Todd Schatzki and Dr. Robert Stavins.

California has previously indicated the desire to show leadership in addressing the climate problem, while balancing the economic health of the state's economy. As it moves forward, with more costly actions required to achieve emission reductions, if California wants to maintain a balance between these goals, it will need to continue to refine its policies to learn from past performance and account for actions beyond its borders.

Economic Review is Critical

The Proposed Update does not provide a thorough economic analysis of the post-2020 measures or policies. It indicates that the assessment of economic impacts for "the long-term regulatory portfolio" is complicated by regulatory and climate uncertainty and insufficient information on the performance and cost of existing AB 32 measures.[1] ARB staff response to these comments included the observation that such analysis is difficult to parse in a $2 trillion California economy. In addition, ARB staff has indicated that there are no concrete measures upon which to base an economic evaluation. Given the implications of these post-2020 measures, it remains critical that this be done.

The Proposed Update includes six references to studies that explore potential measures which were in the October version, plus the addition of a new paper from Lawrence Berkeley National Laboratory (LBNL).[2] The LBNL report, released October 2013, models three detailed scenarios, two of which identified technologies that could meet the 2030 goals. The LBNL report offers an opportunity for ARB to evaluate the potential economic consequences of a mid-term goal. The LBNL report identifies post-2020 policy scenarios for each GHG-emitting sector. It concludes that additional policies will be necessary to achieve the 2050 emission reduction target identified in recent Executive Orders[3]. The policy scenarios and the model (California Greenhouse Gas Inventory Spreadsheet) developed by LBNL could provide a reasonable set of assumptions that can be used to estimate the potential macro-economic impacts of achieving the 2030 mid-term target envisioned by ARB.

A prospective economic impact assessment is critical to inform post-2020 climate change policy decisions including recommending measures, a post-2020 goal and the proposed reduction trajectory.

At a minimum, Chevron recommends that ARB develop an economic analysis of post-2020 measures based on the LBNL report.

More Stringent 2030 LCFS Targets are Unreasonable when the Current LCFS Program's 2020 Target is Infeasible.

The LCFS discussion proposes a new 15 -20% CI reduction by 2030. If the current 2020 target of 10% proves infeasible, which appears likely, it seems unreasonable for ARB to adopt a plan

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[1] ARB, *Proposed First Update to the Climate Change Scoping Plan*, February 10, 2014, pp. 136

[2] Greenblatt, *Estimating Policy-Driven Greenhouse Gas Emissions Trajectories in California: The California Greenhouse Gas Inventory Spreadsheet (GHGIS) Model; Ernest Orlando Lawrence Berkeley National Laboratory*; October, 2013.

[3] "None of the scenarios are able to meet the 2050 GHG target of 85 MtCO2/yr, with emissions ranging from 188 to 444 MtCO2/yr, so additional policies will need to be developed for California to meet this stringent future target." *Estimating Policy-Driven Greenhouse Gas Emissions Trajectories in California: The California Greenhouse Gas Inventory Spreadsheet (GHGIS) Model*; Ernest Orlando Lawrence Berkeley National Laboratory; October, 2013.

for an even more aggressive, and probably equally infeasible reduction target. Moreover, ARB staff are embarking on an analysis of alternative policies, based on key factors such as fuel availability, to establish a more realistic LCFS compliance curve. It is premature to develop post-2020 goals until the current program is fixed and based on the realistic availability of low CI options, and the next review on its feasibility has been completed.

The Proposed Update should address issues that have emerged to date (i.e., technical feasibility, economic impacts, progress toward expected production of low carbon fuels), to inform changes to the existing regulations that may be necessary simply to achieve the 2020 emission reduction mandate. Analysis of these issues may also inform possible post-2020 policy strategies. In any event, the ARB should not embark on new, fixed targets until further progress has been made on current requirements. This is especially important given ARB's admission that "we must continue working to figure out the right mix of policies and incentives for increasing reductions in the carbon content of transportation fuels. (p. ES-6)"

Chevron recommends that ARB remove any reference to LCFS reduction obligation beyond 2020.

<u>Post 2020 Plans Must Consider Global Context</u>

California emits less than 1% of global GHG emissions. Therefore, California's actions cannot mitigate global greenhouse gas levels without participation by all key nations in meaningful solutions. Pursuing post-2020 targets such as the goals already under discussion in the Governor's Executive Order will require deep and broad changes across California's infrastructure, housing, buildings and societal behavior. Prior to making recommendations on any future goals, California must not only evaluate the impacts of its actions on its own economy, it must also consider strategies that to make meaningful progress on global GHG emissions. Progress can only be achieved if the goals and actions taken by California encourage broader action from outside our borders and limit impact on our economy

Prior to undertaking a plan for post-2020, the Update must include commercial feasibility, scalability, and economic impacts analysis to account for the results of ARB's recommendations. Any meaningful approach to considering post-2020 pathways must at a minimum adhere to the following principles: In a recent report entitled "Beyond AB 32: Post-2020 Climate Policy for California", dated January 7, 2014, Dr. Todd Schatzki and Professor Robert N. Stavins offer advice on how ARB should approach post-2020 climate policy setting. Their report includes several recommendations that would help accomplish the dual goals noted above, including:

1. California should avoid firm long term emission targets – preserve flexibility to adjust targets based on emerging cost-benefit information;
2. California's post-2020 GHG and short lived emissions programs must be conditional on substantial action by other jurisdictions. A conditional policy can promote action by others and will reduce the likelihood that California will incur large economic impacts without any real environmental benefit.
3. Legislation must only authorize the most cost-effective state policies. Given today's economic reality, pursuing less than cost effective policies would only serve to further isolate California from potential partners. Other jurisdictions will not choose to follow excessively costly programs which will fail over the long term. For example, establishing sector based targets result in higher costs for all compared to a well-designed cap and trade or other market mechanism. Market-based approaches such as Cap and trade

programs are more efficient and less costly than direct measures because they allow flexible compliance.

4. Linkages with other large jurisdictions are critical to establish a cost effective approach. California is one of the most energy efficient states in the country. The marginal cost associated with cap and trade is much lower than that of direct regulations such as the low carbon fuel standard (LCFS).[4]
5. California must display true leadership by establishing incentives for innovation. Market incentives for innovation in low carbon technologies are critical to meet potential post 2020 goals. Programs which pick preferred existing technologies discourage research, development and innovation on new technologies.
6. Cap and trade programs must include measures to address trade exposure. In a patchwork of differing programs, more stringent programs and unnecessary auctions create competitive disadvantage resulting in leakage of investment, growth and ultimately jobs from California.
7. Long term cost containment programs must be developed with a hard price cap and other mechanisms that are assured to contain costs.

Chevron recommends ARB revamp California's approach to post 2020 planning adopting the recommendations described above.

Conclusion

In closing, while California has demonstrated its leadership in adopting and implementing AB32; California cannot by itself mitigate global greenhouse gas levels without participation by all key nations in meaningful solutions. Pursuing post-2020 targets such as the goals already under discussion in the Governor's Executive Order will require deep and broad changes across California's infrastructure, housing, buildings and societal behavior. Prior to making recommendations on any future goals, California must not only evaluate the impacts of its actions on its own economy, it must also consider strategies that are necessary to make meaningful progress on global GHG emissions. Progress can only be achieved if the goals and actions taken by California encourage broader action from outside our borders and limit impact on our economy.

Sincerely,

(submitted via email)

Michael Rubio
California Government Affairs

Attachment

cc: Richard Corey, ARB
Dr. Steven Cliff, ARB

[4] Boston Consulting Group, *Understanding the Impact of AB 32*, June 2013