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President

August 18, 2016

via e-mail at: rsahota@arb.ca.gov

Ms. Rajinder Sahota
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: WSPA comments AB 32 2030 Target Scoping Plan Update Concept Paper

Dear Ms. Sahota:

The Western States Petroleum Association (WSPA) is a non-profit trade association representing companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California and four other western states. WSPA appreciates this opportunity to provide comments on the Air Resources Board's (ARB) 2030 Target Scoping Plan Update Concept Paper, dated June 17, 2016. It is our understanding that this document is intended to solicit input from stakeholders on the various policy options that should be evaluated by ARB and the Brown Administration in defining a path to achieve the Governor's proposed mid-term (2030) greenhouse gas emission reduction target. Our below letter outlines WSPA's concerns with the concept paper:

1) Implementation of post-2020 policies will require statutory authority;
2) ARB should evaluate a least-cost scenario;
3) ARB's proposed policy scenarios should account for expenditure of auction revenues
4) ARB's proposed policy scenarios require further detail ;
5) Concept paper claims success before program has been tested;
6) Emphasis on co-pollutant benefits is misplaced;
7) WSPA remains concerned with ARB's outcome-oriented approach to Scoping Plan economic analysis

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Implementation Requires Statutory Authority

WSPA maintains that AB 32 does not authorize the Governor or the ARB to establish a greenhouse gas emissions limit that is below the 1990 level and that would be applicable after 2020. Furthermore, pursuant to California Health and Safety Code Section 38551, ARB may not rely on Executive Orders that purport to

extend or expand the scope of AB 32. ARB's draft 2030 Scoping Plan Concept Paper is inconsistent in its response to these statutory limitations. On one hand, ARB acknowledges that certain policy elements must be included in each concept because they are expressly required by statute.[1] We agree with this conclusion. However, other elements are clearly designed to achieve climate policy "pillars" and a mid-term emissions reduction target which have not been authorized by statute. While ARB may continue to develop and analyze the hypothetical post-2020 scenarios outlined in this document, it cannot proceed to implement any of them in the absence of new statutory authority.

ARB Should Include a "Least Cost" Scenario ("Concept 5")

Existing climate law explicitly requires ARB to adopt regulations "to achieve the maximum technologically feasible and cost-effective greenhouse gas emission reductions" from targeted source categories.[2] Any consideration of future reductions beyond the scope of existing programs and regulations should be subject to this same statutory standard. Accordingly, the range of policy scenarios evaluated by ARB should include a least-cost alternative in which future emission reductions would be achieved principally, if not exclusively through a Cap & Trade program. However, the June 17, 2016 document contains no such scenario. In addition, given the transformational implications of the Governor's 2030 target, ARB should evaluate a least-cost policy pathway in order to better characterize the feasibility and sustainability of the various alternatives.

ARB's Own SRIA Supports a Least Cost Policy Approach

In its Standardized Regulatory Impact Assessment (SRIA) for Proposed Amendments to the Cap-and-Trade Regulation dated April 1, 2016, ARB estimated that the proposed amendments would impose costs "averaging a cumulative $5.23 billion annually across all covered industries." This cost represents ARB's preliminary best case estimate, preserving Cap & Trade as a central feature of a post-2020 program. ARB further stated that the cost of pursuing alternative sector-specific measures to achieve future emission reduction targets would likely

[1] "For example, each scenario must include at least a 50 percent RPS because that is required under SB 350, Clean Energy and Pollution Reduction Act of 2015." ARB 2030 Target Scoping Plan Concept Paper, page 17.
[2] Health and Safety Code section 38560: "The state board shall adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective greenhouse gas emission reductions from sources or categories of sources, subject to the criteria and schedules set forth in this part."

be higher than a Cap & Trade-based approach.[3] By extension, coupling aggressive sector-specific measures to a Cap & Trade program as contemplated in ARB's Concept 1 can be expected to increase the cost of meeting future emission reduction targets. Thus, these features in Concept 1, and Concepts 2 and 3 which rely exclusively on sector based measures would not meet the requirements of existing climate law and should not be considered as viable post-2020 program scenarios.

As noted by the Department of Finance (DOF) in response to ARB's SRIA, ARB's economic impact analysis assumes a range of allowance prices from $15-$72 in 2020 to $25-$117 in 2030. The DOF notes that the "SRIA assumes that each $10 increase in allowance price translates to certain increases in energy prices, such as roughly 10 cents per gallon of gasoline or diesel."[4] This analysis offers some preliminary insight into the cost-effectiveness of the Cap & Trade program relative to other policy options, but the ranges are too large to support useful economic forecasts, and they do not match the scenarios covered in ARB's 2030 Target Scoping Plan Concept Paper. In order to provide more constructive information to the public and to policymakers, ARB should include in the evaluation of each draft concept a meaningful range of potential allowance prices and their impact on energy prices, consistent with the approach outlined in the SRIA and the DOF response.

NERA Report Identifies a Least Cost Scenario

WSPA supports the comments submitted by the California Manufacturers and Technology Association (CMTA), dated August 8, 2016, which reference a separate report prepared by NERA Economic Consulting.[5] The NERA report is specifically intended to 1) identify a range of policy scenarios that ARB has proposed could achieve the Governor's 2030 target and 2) evaluate the potential impacts of those alternatives on California's economy and its households. NERA evaluated different combinations of emission reduction measures and how variations in the focus of scoping plan scenarios could affect the cost to reduce GHG emissions. The report includes a default scenario that is consistent with ARB's "Concept 1" ("ARB SP"), a second scenario that focuses on the Low Carbon Fuel Standard "LCFS Driven" and a scenario that relies more heavily on Cap & Trade ("Market Driven"). NERA also modeled variations on each of these scenarios using publicly available information to test the cost sensitivity of certain policy design choices (e.g., use of offsets). NERA reported the following findings:

[3] ARB SRIA, page 26: http://www.dof.ca.gov/Forecasting/Economics/Major_Regulations/Major_Regulations_Table/documents/Cap-and-Trade_DF-131.pdf
[4] http://www.dof.ca.gov/Forecasting/Economics/Major_Regulations/Major_Regulations_Table/documents/Finance_Comments-ARB_Cap-and-Trade_SRIA_2016.pdf
[5] Economic Impacts of Major California Climate Change Goals, NERA Economic Consulting, August 2, 2016.

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- Achieving the required 2020 and proposed 2030 emission reduction targets by relying on the transportation measures in ARB's Scoping Plan instead of Cap & Trade nearly doubles the cost to households in the near term ($1,200/yr. vs. $740/yr.) and triples the cost to households in the long term ($3,100/yr. vs. $1,100/yr.).

- Losses in gross state product (GSP) would more than double under the ARB's current SP policy option as compared to the Market Driven option (nearly $110 billion/yr. vs $40 billion/yr. by 2030).

- Declines in "job equivalents", a measure of potential impacts on employment, would more than double by 2030 under the ARB SP scenario relative to the Market Driven scenario (1,600,000 vs. 570,000 respectively).

> In addition to these findings, the NERA report concludes that in each scenario, eliminating the use of offsets would result in an 80-100% increase in allowance prices, which translate to additional losses in household income of approximately $300 by 2020 and $300-$450 by 2030.
>
> The NERA analysis demonstrates that a post-2020 program which relies primarily on Cap & Trade, while minimizing the role of complementary policies such as LCFS, can achieve the same emission reductions at a fraction of the cost. In the context of ARB's statutory mandate, NERA's "Market Driven" scenario is a reasonable representation of "the maximum technologically feasible and cost-effective greenhouse gas emission reductions" in that it relies on the GHG emissions market to differentiate among competing technologies to achieve the lowest possible cost of compliance. This policy approach in turn projects reduced costs that would be borne by the economy at large and possibly, those passed along to consumers.

The 2030 Scoping Plan Concept Paper discusses ARB's preference to minimize costs in several places. We agree with this sentiment, but are concerned that it is not reflected in the 2030 Scoping Plan Concept Paper. Specifically, ARB did not include a maximally cost-effective policy scenario among the potential scenarios it proposes to evaluate in the 2030 Scoping Plan Update. This omission is not only at odds with current climate law, but it withholds critical information that should be considered by stakeholders, the Department of Finance, the ARB Board and the Legislature in evaluating post-2020 climate policy options. ARB should add a fifth concept for evaluation in the Scoping Plan Update that is similar to NERA's "Market Driven" scenario.

ARB's Proposed Policy Scenarios Should Account for Expenditure of Auction Revenues

As part of the evaluation of policy options to achieve future emission reduction targets, ARB should account for GHG emission reductions achieved through expenditure Cap & Trade auction revenues. These reductions should be reflected as credits against the state's future emissions reduction targets obviating the need for some of the measures contemplated in this document.

ARB's Proposed Policy Scenarios Require Further Detail

ARB's proposed policy concepts are limited to outlines of potential policy combinations with little detail provided on the assumptions underpinning individual policies. In the absence of additional information on the individual policies and at least preliminary analysis of the feasibility and cost effectiveness of each concept, it is difficult to provide substantive commentary on this document. For example, certain baseline assumptions, such as achieving 1.5 million zero emission and plug-in hybrid vehicles by 2025 and reductions in the carbon intensity of transportation fuels exceeding 10% defy market trends and forecasts. The absence of supporting documentation also undermines the credibility of ARB's policy concepts.

Bearing these concerns in mind, WSPA offers the following preliminary comments about each concept:

- **Concept 1:** ARB's discussion of Concept 1 articulates the demonstrated benefits of reliance on Cap & Trade as a mechanism for achieving emission reductions, including "access and incentive to identify the lowest cost GHG emission reduction opportunities across the economy." (Page 22). This is the only policy concept that includes a Cap & Trade element and it is attached to the current litany of prescriptive sector-specific policies which, if expanded as envisioned in this concept, are likely to undermine Cap & Trade benefits by *limiting* compliance flexibility and *increasing* compliance costs. As noted above, WSPA recommends that ARB add a separate concept that relies more heavily on a Cap & Trade program less encumbered by sector-specific complementary policies.

- **Concept 2:** Concept 2 doubles down on the wrong approach: greater reliance on command and control measures for industrial sources to the exclusion of market-based measures. This concept sacrifices the compliance flexibility and cost containment opportunities embedded in the Cap & Trade program. In addition, the prospect of "continuous program adjustments" in the absence of a statewide emissions limit creates long term uncertainty for in-state industrial entities and, as noted by ARB's own Executive Officer[6], is likely to promote emissions leakage and discourage future business investment in California.

[6] Letter from Richard Corey, ARB Executive Officer, to Jack Broadbent, Bar Area Air Quality Management Air Pollution Control Officer, dated September 17, 2015.

- **Concept 3:** Concept 3 suffers from the same fundamental problem as Concept 2 (exclusive reliance on sector-specific regulatory measures), and envisions more aggressive penetration of zero and near zero vehicle technologies along with an increase in the LCFS carbon intensity (CI) target. Existing data on fleet turnover rates and forecasts that indicate limited availability of low-CI feedstock and infrastructure necessary to achieve the current 10% LCFS mandate by 2020, call into question the feasibility of this scenario. As demonstrated in the NERA report, policies of this nature are many times more costly than a Market Driven scenario.

- **Concept 4:** While a carbon tax may be considered an effective policy instrument under ideal circumstances, unless priced correctly, such an approach would not ensure achievement of a future emissions reduction target.

On balance, ARB's discussion of these concepts appears to favor Concept 1. We agree that a well-designed Cap & Trade program would be an essential element of a sustainable post-2020 program. We also agree with ARB's statements during its October 2, 2015 workshop on 2016 amendments to the Cap & Trade regulation that Cap & Trade should play a much more prominent role in a post-2020 program in comparison to the suite of measures implemented to achieve the 2020 target required by AB 32.[7] However, we do not believe this approach is adequately described in the suite of scenarios included in the June 17, 2030 Scoping Plan Concept Paper.

This deficiency should be remedied before ARB proceeds with analysis of potential 2030 policy pathways. We look forward to ARB's draft so that we can provide more substantive comments on post-2020 policy scenarios with the benefit of additional information.

June 17, 2030 Scoping Plan Concept Paper Claims Success before the Program Has Been Tested

ARB's claim that existing AB 32 policies have already promoted economic growth overstates the actual progress attributable to these programs. Key policies such as Cap & Trade are significantly back-loaded. The California economy has only sustained one full compliance period at the least stringent and impactful cap level. A recession occurred at the beginning of the program, the effects of which are observable in the state's own emissions inventory with a significant drop in emissions from 2009-2011.[8] The LCFS is currently only reducing fuel carbon intensity by 2% and must ramp up to 10% in only four years. The benefits and costs attributable to the state's Renewable Portfolio Standard (RPS) lag behind the actual delivery of renewable electricity as the utilities' contracts are executed and the cost recovery from these contracts is approved by the California Public Utilities Commission. Based on available data and the many uncertainties surrounding future implementation of the state's

[7] ARB staff presentation: *Discussion Workshop for Cap-and-Trade Regulation 2016 Amendments*, October 2, 2015, slide 10.
[8] See: http://www.arb.ca.gov/cc/inventory/data/graph/bar/bar_2014_scopingplan.png

AB 32 programs, it is premature to conclude that these programs are now growing the California economy and will continue to do so in the future.

Emphasis on Co-Pollutant Benefits is Misplaced

The primary purpose of AB 32 is to reduce GHG emissions, not to achieve "co-pollutant" emission reductions. ARB's September, 2008 supplemental Public Health Analysis for its Draft Scoping Plan indicates that GHG emissions have no direct public health impacts.[9] Moreover, ARB's October, 2010 Co-Pollutant Emission Assessment concluded that "California's existing programs to meet federal air quality standards will provide the majority of emissions reductions in each community."[10] This latter document further states that emissions increases at the statewide, regional, or local level due to the Cap & Trade regulation are not likely. These ARB analyses dispelled concerns over potential increases in co-pollutant emissions as well as assumptions that communities could significantly benefit from additional co-pollutant reductions resulting from source-specific GHG emissions controls.

Despite these conclusions, the 2030 Scoping Plan Concept Paper makes multiple references to potential co-pollutant benefits from "reduction of other pollutants that adversely impact public health" (page 21) without reference to ongoing, aggressive implementation of myriad state and local air quality programs developed expressly for this purpose.

ARB's own research and findings confirm that existing stationary and mobile source programs will continue to deliver significant regional and local emission reductions for decades to come, even in the absence of GHG emission reduction measures. Thus, ARB's exclusive attribution of co-pollutant benefits to future climate policies perpetuates the misunderstanding that sector-specific GHG reduction policies are necessary to achieve further reductions in criteria pollutants and air toxics emissions.

Moreover, ARB's continued failure to draw clear distinctions among GHG, criteria and air toxics program benefits promotes misplaced advocacy against expansion of market-based GHG programs, despite the fact that these programs could achieve GHG emission reductions at a fraction of the cost of command and control programs without compromising limits on criteria pollutants or toxic air contaminants.

WSPA requests that ARB clarify in future documents and public forums that participation in market-based GHG programs will not relieve regulated entities of their obligations under existing criteria pollutant and air toxics programs and that implementation of market based programs will not compromise the regional and local public health benefits attributable to these programs.

WSPA Remains Concerned with ARB's Proposed Approach to Scoping Plan Economic Analysis

As WSPA noted in our February 29, 2016 comments on ARB's proposed approach to the economic impact analysis, we are concerned that ARB is starting with predetermined policy targets and a predetermined set of pathways to achieve those targets. This approach does not allow for an assessment of the relative cost-effectiveness of various alternative pathways or the individual measures or controls each pathway entails. The proposed models (E3 PATHWAYS and REMI) do not project the development of markets, nor account for variability in market conditions, including fluctuations in the technology market and in the general economy, and how such conditions will affect the pace and scope of technological developments, societal acceptance and associated costs. ARB's view of markets seems to suggest that outcomes can be dictated by policy choices without regard to these unknowable circumstances. Absent this kind of feedback loop, the economic analysis becomes a results-oriented exercise that does not focus on what is possible or likely, or in the best interest of the state and its residents.

Since the rate of GHG reductions needed to achieve the Governor's proposed 2030 target is more aggressive than the reductions required under AB 32, and California is still largely on its own in regulating GHG emissions, cost-effectiveness considerations are of paramount importance in defining California's post-2020 climate programs.

Accordingly, the 2030 Target Scoping Plan Update should be informed by careful and thorough consideration of a reasonable range of policy options that reflect economic and societal realities. ARB's economic advisors and other third party experts should play a prominent role in the selection of inputs and analytical tools to establish the credibility and objectivity of the process and the results. A hastily developed proposal to make transformational changes in a non-transparent fashion threatens the credibility of the entire program. The inevitable high costs associated with policies that disregard the most cost-effective alternatives will further discourage other jurisdictions from following California's lead and further disadvantage our economy without meaningful environmental results.

WSPA appreciates ARB's consideration of our comments and we look forward to your responses. If you have any questions, please contact me at this office, or Tom Umenhofer of my staff at (805) 701-9142 or email tom@wspa.org.

Sincerely,

[9] California Air Resources Board, *Climate Change Draft Scoping Plan*: Public Health Analysis Supplement, September 2008, p. A-13.
[10] Proposed amendments to the Cap and Trade regulation, Appendix P, page P-125, posted October, 2010.

cc: Richard Corey - ARB
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