

Comments pertaining to the Environmental Justice Advisory Committee's meeting of July 30, 2008<sup>1</sup> and the AB 32 Draft Scoping Plan<sup>2</sup>

Submitted by Ken Johnson<sup>3</sup> (unaffiliated) to EJAC (copy to ARB and ETAAC) on August 4, 2008

To the Environmental Justice Advisory Committee:

I have a number of questions (enumerated below) and concerns about ARB's implementation of AB 32. Many of these issues have been addressed in my previous communications with ARB, but these matters are also within the purview of the EJAC's advisory responsibilities under AB 32. ARB has generally been non-responsive to questions about the meaning and legal interpretation of AB 32, and I encourage the EJAC to communicate with ARB on these issues to bring them within the scope of the "open public process" called for by AB 32, and to clearly establish the legislative policy foundation for ARB's regulatory strategy.

#### Maximum emission reductions

Sec. 38560 of AB 32 states the following:

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.

This mandate requires that (1) the rules and regulations adopted by ARB pursuant to AB 32 be technologically feasible and cost-effective, and (2) subject to these limitations and other criteria and schedules, the rules and regulations should achieve maximum reduction of greenhouse gas emissions. The language does not require that the rules and regulations be "maximally feasible" or "maximally cost-effective"; it only requires that they be feasible and cost-effective. The maximization condition applies to emission reductions.

The Sec. 38560 mandate sets AB 32 apart from other regulations such as the U.S. SO<sub>2</sub> trading program, which did not achieve and was not required to achieve maximum feasible and cost-effective reductions of SO<sub>2</sub> emissions. Its cap-and-trade system provided no incentive for emission reductions beyond the minimal cap requirement, even though the quantifiable health and environment benefits of additional emission reductions would have exceed abatement costs by at least an order of magnitude.

The AB 32 maximum reduction mandate has relevance to incentive-based policies (e.g., monetary incentives such as carbon fees, price floors, and feebates). For example,

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<sup>1</sup> [<http://www.arb.ca.gov/cc/ejac/meetings/meetings.htm#archive>]

<sup>2</sup> [<http://www.arb.ca.gov/cc/scopingplan/meetings/archive-scopingmtgs.htm>]

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had the SO<sub>2</sub> program been constructed to create market incentives for further emission reductions, there may have been no need for supplemental regulations such as the (now-defunct) Clean Air Interstate Rule. In the context of climate policy, GHG emissions will need to be further reduced by an order of magnitude after 2020, and the notion that such reductions can be achieved through continual CAIR-type regulatory or legislative intervention is antithetical to a “market-based” regulatory approach under which market incentives would drive further emission reductions.

At the June 30 EJAC meeting I submitted the following two questions for ARB staff and the EJAC:

(1) Does the AB 32 statutory requirement for maximum emission reductions have any legally operative meaning, in the sense of requiring CARB to do anything more than what it would do if there were no such requirement?

(2) What does the Acid Rain program portend about the ability of Cap-and-Trade to achieve “the maximum technologically feasible and cost-effective greenhouse gas emission reductions”?

These questions were not answered. ARB staff indicated that there was insufficient time to respond, but they may have misunderstood the questions. The first question is very narrow in scope: It is not about “feasibility” or “cost-effectiveness”; it only pertains to the requirement for maximum emission reductions. The question does not ask what the maximum reduction mandate means or what it requires; it only asks whether the mandate has any operative meaning and imposes any additional requirement.

In my prior correspondence<sup>4</sup> with ARB about the Sec. 38560 mandate I have raised a number of related questions (which have also been unanswered). ARB’s regulatory strategy should be based on a clear understanding of the underlying legislative policy; and in keeping with the open public process called for in Sec. 38560, ARB should clearly communicate to the public and stakeholders (including the EJAC) how it is interpreting and implementing Sec. 38560.

### Cost effectiveness

AB 32 specifies a cost-effectiveness metric (Sec. 38505(d)), but leaves ARB discretion in defining “cost-effective” in the adjective sense, as the term is used in Sec. 38560. The following questions pertain to the cost-effectiveness evaluation methodology proposed by ARB in the Draft Scoping Plan (page 56):

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<sup>4</sup> This topic is addressed in my comments for the June 3, 2008 Economic Analysis Technical Stakeholder Work Group Meeting: [<http://www.arb.ca.gov/cc/scopingplan/economics-sp/meetings/meetings.htm> – see “Ken Johnson”]. My prior correspondence with ARB on this matter is archived online [<http://ssrn.com/abstract=1080608> – click the Download link].

(3) Does ARB’s proposed cost-effectiveness evaluation methodology effectively define “cost-effective” (in the context of Sec. 38560) to mean “sufficient only to achieve the statewide greenhouse gas emissions limit in 2020”?

(4) Would ARB’s proposed cost-effectiveness standard have any influence on the emission reductions achieved under AB 32?

### Price floor

There are deep divisions between the EJAC and ARB regarding the relative merits of cap-and-trade and a carbon fee. The EJAC and ARB appear to view these as mutually exclusive, incompatible policy alternatives, but a carbon fee could be implemented as a price floor in the context of cap-and-trade.

A carbon fee is, in essence, a fixed-price sale of emission allowances. A price floor would similarly impose a fixed *minimum* allowance price, but there would be a limit on the number of allowances sold, and if all available allowances are sold then the price would be allowed to rise in response to market demand.

I discussed the merits of a price floor in my recent comments to ARB relating to the Draft Scoping Plan<sup>5</sup>, and in earlier workshop comments<sup>6</sup>. The Board has received guidance relating to a price floor in a CBO report<sup>7</sup>; and the Market Advisory Committee<sup>8</sup> encouraged CARB to consider enforcing a price floor, noting that “A price floor has the attraction of giving investors certainty that the price of emission allowances would never fall below a specified level. ... a price floor would reinforce environmental integrity and the value of clean investments.”

This guidance notwithstanding, the Draft Scoping Plan makes no mention of a price floor, and staff comments at the July 17, 2008 Scoping Plan Workshop<sup>9</sup> only served to perpetuate and reinforce the misconception that carbon fees and cap-and-trade are mutually exclusive and incompatible policy options. A question for ARB is the following:

(5) Does ARB recognize that a carbon fee, implemented as a price floor in the context of cap-and-trade, would provide greater certainty of achieving the AB 32 emission limit than either a carbon fee or cap-and-trade

<sup>5</sup> [<http://www.arb.ca.gov/cc/scopingplan/spcomment.htm> – See AB 32 Program Design Comments, #19 (Johnson, Ken).]

<sup>6</sup> April 25, 2008 Program Design Technical Stakeholder Work Group Meeting

[<http://www.arb.ca.gov/cc/scopingplan/pgmdesign-sp/meetings/meetings.htm> – see “Ken Johnson”]

<sup>7</sup> presented at the May 28, 2008 Informational Board Workshop on Policy Tools for the AB 32 Scoping Plan [<http://www.arb.ca.gov/cc/scopingplan/meetings/archive-scopingmtgs.htm> – see “CBO Summary of Policy Options ...”]

<sup>8</sup> [[http://climatechange.ca.gov/market\\_advisory\\_committee/index.html](http://climatechange.ca.gov/market_advisory_committee/index.html)]

<sup>9</sup> [<http://www.arb.ca.gov/cc/scopingplan/meetings/archive-scopingmtgs.htm>]

operating alone; and will the final scoping plan at least identify a price floor as a regulatory option?

### Cost minimization

Sec. 38562(b)(1) of AB 32 stipulates that the regulations should be designed to “minimize costs”, and a fundamental question is how the cost-minimization goal can be reconciled with the emissions-minimization goal of Sec. 38560. The statute clearly requires that emission reductions should at least be achieved in such a manner that the *same* reduction level could not be achieved at significantly less cost or with greater benefit to California. The question is whether *additional* emission reductions should be incentivized in the event that such additional reductions would be feasible and cost-effective, but would increase costs.

Sec. 38562(b)(1) and Sec. 38560 might appear to be in conflict if “costs” are interpreted in the restrictive sense of meaning only near-term costs to regulated entities for achieving the 2020 emission limit. But from a longer-term perspective, incentives for early action in advance of post-2020 regulations could *reduce* long-term regulatory costs, because emissions will sooner or later have to be reduced by an order of magnitude below the 2020 limit irrespective of whether they are achieved through early action.

The greater short-term costs of early action could be dwarfed by the avoided long-term costs of a very rapid and precipitous reduction in GHG emissions that may be required without such action. Price instruments such as carbon fees or a price floor, which could be employed to incentivize early action, can theoretically be over five times more cost-efficient than inflexible caps for achieving long-term emission targets<sup>10</sup>. Thus, incentives for early action could be instrumental in both achieving maximum emission reductions pursuant to Sec. 38560, while also minimizing long-term costs pursuant to Sec. 38562(b)(1).

The following questions relate to cost minimization and early action:

(6) Should the “costs” referred to in Sec. 38562(b)(1) be construed as meaning only the near-term regulatory costs of achieving the 2020 limit, or do they also include long-term costs of achieving continued emission reductions after 2020 (pursuant to the goal of climate stabilization)?

(7) Should the “early action” referred to in Sec. 38562(b)(1) be construed as meaning only action pursuant to achieving the 2020 limit, or might it also encompass action pursuant to post-2020 reduction goals?

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<sup>10</sup> Policy Options for Reducing CO2 Emissions, Congressional Budget Office, February 2008  
[<http://www.cbo.gov/ftpdocs/89xx/doc8934/toc.htm>]

### Cap-and-trade linkage to WCI and other jurisdictions

In a preview of the economic analysis results to be released later this month, ARB has stated that overall savings from implementation of the Draft Scoping Plan are expected to exceed costs. Much of the AB 32 compliance cost will comprise investments that will feed back into the California economy, creating opportunities for local businesses and job growth. Furthermore, California would accrue ancillary benefits (health, fuel economy and energy security) that accompany GHG emission reductions. But if the AB 32 compliance obligations can be met by making emission reductions outside of California (in lieu of in-state reductions), then most of the benefits associated with out-of-state reductions would not accrue to California. Individual regulated entities or emission traders could benefit from the lower cost of out-of-state emission reductions, but the California economy as a whole would incur lost benefits.

AB 32 clearly states that the legislative policy objective is to “minimize costs and maximize the total benefits *to California*”, Sec. 38562(b)(1) (emphasis added). Sec. 38570(b) further stipulates the following requirement: “Prior to the inclusion of any market-based compliance mechanism in the regulations ... the state board shall ... Maximize additional environmental and economic benefits for California, as appropriate.” The statute’s emphasis on statewide costs and benefits (as opposed to trading gains and losses) leads to the following questions:

(8) To the extent that the total statewide benefits of GHG emission reductions exceed costs, can linkage with the WCI (and ultimately other jurisdictions) be reconciled with the statutory requirements of AB 32, specifically Sec. 38562(b)(1) and Sec. 38570(b)?

(9) More fundamentally, would there be any economic policy rationale for such linkage when benefits exceed costs?

### Statewide greenhouse gas emissions limit

This is a repeat of a question that I submitted for the April 4, 2008 Program Design workshop<sup>11</sup>. (The staff response did not specifically answer the question.)

(10) How can out-of-state offsets and trading (which can have the effect of importing other states' and countries' emissions to California) be reconciled with the AB-32-mandated "Statewide greenhouse gas emissions limit", which the statute defines as "the maximum allowable level of statewide greenhouse gas emissions in 2020" (Sec. 38505(n))?

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<sup>11</sup> [<http://www.arb.ca.gov/cc/scopingplan/pgmdesign-sp/meetings/meetings.htm>]