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California Energy Commission
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Re: Docket No. 08-OIR-01
1516 Ninth Street
Sacramento, CA 95814-5512

Re: Docket No. 08-OIR-1 – Comments on Revised Regulatory Language

Dear Commissioners,

This letter presents comments on the Draft Revised Regulatory Language ("Draft Language") revised by Commission staff on October 30, 2008. Before I begin, I think it relevant to point out that although I am submitting these comments in my capacity as CEO of California Renewable Energies LLC, I am an attorney and have been a member of the California Bar for 35 years. Therefore, when I reviewed the Draft Language and other documents I refer to herein, I did so with the eye and experience of someone who has reviewed legislation and regulations as a professional for many years.

In addition, I would like to express my opinion, made in an earlier email to Commission staff, that the 10-day period the Commission has given stakeholders to make comments on the Draft Language is not long enough given the importance of this issue and the need to review several other documents, including state laws and plans, in order to properly analyze the place of sustainability in the implementation of AB 118.

Furthermore, as described in detail in this letter, the Draft Language takes liberties with the statute by adding and subtracting words and concepts that the legislature clearly did not intend. Therefore, in order for stakeholders to properly comment on the Draft Language, it should have been presented side by side with the corresponding language from the AB 118. Otherwise, it is very easy to miss the changed words. Given that I prepared this letter under time stress, I am concerned that I missed important variations from the statute which would have been apparent if the language from the two documents had been placed side by side.

As a general comment, please note that the document on which we are asked to comment was presented in the September 9, 2008 Workshop. Therefore, it was prepared before the meltdown of both the California and national economies. We in California have tremendous challenges to generate jobs and income from taxes. One of the express purposes of AB 118, even before the economic crisis, was to provide economic stimulus and development for the state. See Section 1 (g) of the Act which finds and declares that:

> "Research, development, and commercialization of alternative fuels … in California have the potential to strengthen California's economy by attracting and retaining clean technology businesses, stimulating high-quality job growth, and helping to reduce the state's vulnerability to petroleum price volatility. Research, development, demonstration, and deployment of alternative and renewable fuels … will also result in new skill and occupational demands across California industries."

It has been my opinion during these sustainability proceedings that not enough emphasis or attention has been paid to the economic and developmental benefit aspects of the statute and to what alternative fuels could be produced and available in the state in the short to medium term. Producing biofuels in California using feedstocks grown in-state on existing marginal cropland would provide much needed economic stimulus. Given the grave nature of our economic challenges as well as vulnerability to petroleum price volatility, I would ask that these issues be fully considered and addressed when drafting the final regulations.

I would also like to point out that the process which we had been led to believe would be followed in determining the regulatory language has not been followed. In the Sustainability Working Group meeting in August, 2008, stakeholders commented on how difficult it was to understand how the sustainability language would be applied to real-life projects instead of in the abstract. It was decided at that time that there would be another Working Group meeting to present case studies to concretize the application of the regulations. Then stakeholders could make their comments when they understood what the language meant as a practical matter. However, no Working Group meeting was convened to present case studies. As a result, we are making comments in a vacuum.

Finally, some stakeholders reading these comments might want to dismiss them out of hand based on their assumption that I have written this letter because, as a member of private industry, all I care about is potentially receiving money and not the environment. That assumption would be completely wrong. I am a member of E2 and the NRDC. I founded California Renewable Energies precisely because I wanted to be part of the solution to our devastating climate change problem and to help reduce our dependence on foreign oil.

I am certainly not against producing biofuels in a sustainable manner. But the science of measuring environmental impacts for non-corn biofuels is brand new and the

subject of great debate and controversy. Our legislators knew about sustainability and iLUC when they drafted and passed AB 118 and they purposely chose to exclude those requirements from AB 118-funded projects. We have to build a non-corn biofuels industry from scratch here in California NOW to help us with our existing and severe GHG problem in the state. It's hard enough to do that without burdening the process with unproven, discriminatory procedures not authorized anywhere in AB 118 and related legislation and state plans.

A reading of AB 118 (the "Act") [as well as AB 1007 and the State Alternative Fuels Plan, the Draft Goals prepared for the September 9 Workshop and the CEC Commission Staff Working Draft Discussion Paper setting forth the Staff's proposed "Integrated Framework … for Assessing the Sustainability of AB 118 Project Applications issued on September 4, 2008 (the "Framework")] makes it clear that the Draft Language is at odds with the express language of the Act.

Furthermore, the Draft Language is in conflict with what the California Legislature intended in passing the Act, as well as AB 1007, the Governor's initiatives like AB 32 and the Low Carbon Fuel Standard, and the Energy Commission's and CARB's State Alternative Fuels Plan adopted in December 2007.

I base these statements on the following:

The Draft Language elevates "sustainability" to the position of being the driver in AB 118 implementation. All projects seeking funding under AB 118 would have to first go through a sustainability "screening" process.

However, nowhere in AB 118 is there authority for the Commission to institute such a sustainability screening threshold.

On the contrary, when one reads the statute in its entirety, it is clear that sustainability is only one small piece of AB 118, and that the actual drivers for the statute are set forth in Section 1 (a) – (k) thereof, <u>where sustainability is not even mentioned</u>.

In fact, the word "sustainability" occurs only twice in the AB 118.

The first mention, in Section 44271 (a) (2) of the California Health and Safety Code (created by Section 5), is very specific about how the issue of "sustainability" is to be applied in connection with alternative and renewable energy fuel projects.

Per Section 44271 (a) (2), the Commission is required to "[e]stablish sustainability <u>goals</u> to ensure that alternative and renewable fuel … projects, on a <u>full</u>

fuel-cycle assessment basis, will not adversely impact the state natural resources, especially state and federal lands". [Emphasis added].

"Goal" is defined by the Compact Oxford English Dictionary to be "an aim or desired result". This means that "sustainability goals" are aspirations, something to be achieved over time, not something that is attainable at this point in time. And the express language of the statute makes it clear that the legislators understood that a goal is not a standard to be followed or a screen to be used for funding programs under AB 118 when they distinguished "goals" from "requirements" in Section 1(k) of the Act.

Furthermore the legislators expressly limited the establishment of those goals to ensuring that alternative or renewable fuels funded under the Act would not adversely impact CALIFORNIA'S natural resources in Section 44271 (a) (2), and not natural resources outside the State's borders.

Therefore, Section 3101 (a) of the Draft Language is in direct violation of section 44271 (a) (2) of the Act when it deletes "state" before the words "natural resources" in defining sustainability goals. Section 3101 (e), the proposed second sustainability goal, continues the violation when it refers to protecting the environment, including "all natural resources". Similarly, that Section has added the word "sustainable" before "alternative fuels and vehicles". The word "sustainable" is nowhere to be found before the words "alternative fuels" anywhere in the statute.

Those language variations from the statute appear to be a way to bring indirect land use change ("iLUC") into the Draft Language without specifically calling it that. Please see my discussion of iLUC later in this letter.

Additionally, Section 44271 (a) (2) requires that the goals be measured by adverse impacts as determined on a FULL FUEL-CYCLE ASSESSMENT basis. A fuel fuel-cycle assessment was done for a panoply of fuel pathways under the State Alternative Fuels Plan, which was referred to by the legislators in AB 118, and yet none of these are referred to in the Draft Language. Additional full fuel-cycle assessments remain to be done, as discussed the September Staff Workshop. (I would ask that we utilize existing full fuel cycle analyses done for fuel pathways that don't yet but could exist in California and adapt them to California conditions where we can do so. This will help the Commission to not delay the funding of worthy biofuels projects whose LCA's are well-established in other jurisdictions using vetted and accepted models.)

Furthermore, sustainability under AB 118 is subordinate to the State Alternative Fuels Plan (the "Plan") which is specifically mentioned in the aforementioned Section 1 of the Act. The Plan synthesizes and aggregates into one document the state's major policies with respect to "the increased penetration of alternative and non-petroleum fuels". The policies, repeated often in the Plan, are: petroleum reduction, GHG reduction, in-state biofuel production and use goals for biofuel.

Again, sustainability is not one of the state's major policies as set forth in the State Alternative Fuels Plan. In fact, notwithstanding the expressed desire of some stakeholders to preclude purpose grown energy crops from consideration for funding under AB 118 in evidence during the AB 118 implementation proceeding, the Plan requires that the state employ purpose grown crops for renewable transportation fuels, as it recognizes the need for biofuels in the short to medium run in order to accomplish the state's major policies.

The Plan also has something to say about sustainability. According to it, "[s]ustainability requires the state to meet its future transportation energy needs with a viable supply of alternative fuels. Sustainability also requires the state to insure that in accessing biofuels, food access and energy crops needs are balanced …" Thus the CEC and CARB have already determined that purpose grown energy crops can be grown on a sustainable basis in California. [Emphasis added].

The second and only other time sustainability is mentioned in the Act is in Section 44272 (b).

Besides the sustainability goals to be established by the Commission under Section 44271 (a) (2), Section 44272 (b) sets forth 11 specific criteria to be used "as appropriate" in determining which projects are to be accorded preference in receiving funding.

Therefore, no project is required to meet sustainability criteria to get funded under AB 118, but if a given project "does not adversely affect the sustainability of the state's natural resources, especially state and federal lands", Section 44272 (b) (5), that will count positively toward giving the project preference in funding under AB 118. Again it's worth noting that the adverse impact is limited to one affecting state natural resources.

Yet contrary to the foregoing, Section 3101 (b) of the Draft Language requires the Commission to establish, *inter alia*, "[e]nvironmental performance measures that will serve as screening thresholds for project eligibility" "through a public process, and prior to issuing project solicitations".

In the first place, this language has the effect of elevating sustainability goals, which by definition, are to be developed over time, to be the driver of AB 118 funding before such goals can be established. If the Commission followed the Draft Language in implementing the statute, the tail would be wagging the dog.

Besides, it would contradict the express emphasis of the AB 118 program.

See Section 44272 (a) which states: "The emphasis of this program shall be to develop and deploy …. alternative and renewable fuels in the marketplace, without adopting any one preferred fuel or technology." [Emphasis added.]

There is nothing in the statute that permits holding up the awarding of funding under AB 118 to hold a public process to achieve goals that by definition can't be met until some indeterminate time in the future. We have seen through this proceeding that a public process takes a very long time. If the Commission were to require a public process before starting the solicitation process, it would no doubt take another year or two before solicitations could start, not even taking into account the possibility of litigation seeking to enjoin the enforcement of regulatory language that conflicts with the express language of the statute and intent of the legislature.

Unlike "goals" which are aims or desired results that don't exist yet, criteria are standards that already exist. According to the Oxford Dictionary, criterion, the singular of criteria, means "a principle or standard by which something may be judged or decided". "Criteria" are principles or standards by which something may be judged or decided.

Besides the concrete criteria that are to be used by the Commission in providing preference in funding, the Act sets forth in Section 44272 (c) the kind of projects that are eligible for funding.

Included in the list of projects that "shall be eligible for funding" are:

"(1) Alternative and renewable fuel projects to develop … alternative and renewable low-carbon fuels, including …ethanol, among others, and their feedstocks that have high potential for long-term or short-term commercialization …". [Emphasis added]. …

(3) Projects to produce alternative and renewable low-carbon fuels in California…."

Again, the conflict between the express direction of the statute and the desire of some stakeholders to exclude agriculturally based biofuels from funding consideration is manifested by comparing the above provisions with the Draft Language.

Thus, notwithstanding that the Act requires the Commission to establish limited sustainability goals (i.e., those impact the state's resources and that are determined by reference to a full fuel-cycle assessment), but provides specific criteria for giving projects preference for funding and sets forth types of projects that are required to be eligible for

funding, the Draft Language ignores the express language of the statute, and make "sustainability" the overarching concern of the law.

As previously noted in this letter, the Draft Language attempts to bring iLUC into AB 118 funding decisions through section 3101 (a) when it deletes the word "state" before "natural resources" in referring to natural resources that may be adversely impacted by a project.

ILUC has become a front burner issue this year after the publication of Tim Searchinger et al's paper on the iLUC they posited were caused by using certain crops to make biofuels. However, Mr. Searchinger's work has been the subject of criticism from many quarters, including renowned academicians, scientists, agronomists, renewable transportation fuels investors and executives from the biofuels industry.

Much of the criticism has been directed at the nascent state of the science and modeling of indirect land use change as well as the discrimination that biofuels would suffer by having iLUC charges assessed only against them when no other fuel or technology is so penalized. Everyone knows that there are direct and indirect impacts associated with the production of petroleum, hydrogen fuel cells and hybrid vehicles, yet no one is proposing that an iLUC charge be imposed against them. (See the letter from the New Fuels Alliance of October 23, 2008 addressed to Mary Nichols, Chairman of CARB, on which Commissioner Boyd was copied. If that letter is not included in the Docket for this proceeding, I hereby request that it be. I will be happy to furnish a copy if requested to do so.)

As a result of the visibility of the iLUC issue, some stakeholders apparently want it to be the most important driver of AB 118 implementation. However, that position is not supported by the statute. AB was signed into law by the Governor Schwarzenegger on October 14, 2007. Although iLUC and sustainability issues were being discussed by CARB and the CEC during 2007 - see the State Alternative Fuels Plan - indirect land use change ("iLUC") is never mentioned once in AB 118. If the Legislators wanted iLUC and sustainability standards to be part of the Act, they could have certainly chosen to do so.

The law-making role is the exclusive province of the legislature. Since iLUC is not in AB 118, stakeholders who believe it should be included must petition their representatives to amend the statute. At this time, however, the statute must be implemented in accordance with the actual language of the law, not in accordance with what some stakeholders think or hope the law should be.

Thus, it is not the role of the Energy Commission to write law, only to implement it, but the Draft Language reflects a usurpation of the legislature's role. The Draft Language needs to be changed to come into compliance with the law.

As I previously commented on the record, there has been a clearly expressed bias against purpose grown crops and row crops in the AB 118 proceeding, although there is nothing in the record to support it. In fact, the only evidence in the record based on facts and actual experience relating to such crops[1] would compel one who has an open mind to be quite enthusiastic about California's ability to grow purpose grown energy crops. While we can probably not produce enough biofuels from purpose grown crops in California to meet all of our alternative transportation fuels needs, it can be a significant piece of the puzzle. It uniquely offers the possibility of a short, medium and long term solution to our GHG problems and our vulnerability to foreign oil producers. An added benefit is the immediate economic and developmental benefit it would bring to the state[2].

The bias was expressed by members of the Advisory Board, documents issued by CEC Staff and comments made during Workshops, including as late as the September Staff Workshop on the Investment Plan. While I thought that the issue had been put to bed, it has surfaced again in a more subtle fashion in the Draft Language.

In Section 3101(f) (1), as part of the third sustainability goal, the Commission shall be required to "promote and collaborate in the development of the …international production of alternative and renewable fuels … for California markets". This is an obvious attempt to bring Brazilian sugar cane ethanol into California, apparently so we can meet the state's GHG reduction goals without growing biofuels feedstocks in-state.

Nowhere in the statute does it mention subsidizing foreign ethanol and in fact, the purpose of the statute is exactly the opposite. In addition, we California biofuels producers are already operating at a big disadvantage in establishing energy crops that could be feedstocks for alternative transportation fuels because we have a severe "chicken and egg" problem. No one has discussed this issue when it comes to biofuels, but members of the Advisory Board, staff and Commission experts have mentioned it numerous times in these proceedings when advocates are talking about fuel cell automobiles, infrastructure build-out, etc.

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[1] I refer to presentations made by Dr. Stephen Kaffka in these proceedings. Dr. Kaffka is the head of the California Biomass Collaborative and a professor of agriculture at UC Davis. He has vast practical experience with row crops in California and has demonstrated knowledge of and familiarity with the nuances relating to indirect land use changes as a result of growing purpose grown crops.

[2] Plus certain purpose grown crops (excluding corn) that can be reduced to sugars (or already sugars) and fermented are "advanced biofuels" under the Federal Energy Independence and Security Act.

Finally, the Draft Language deals with the Advisory Body in Section 3104. I hereby request that the Commission bring the constitution of the Advisory Body into compliance with the language of the Act at this time. Section 44271.5(b) expressly requires that representatives from academic institutions and private industry be members. Yet there are no academicians or biofuels industry representatives on the Advisory Board. The result has been a lack of understanding by most Board members about how agriculture works and how biofuels might be grown and produced in California.

The absence of people knowledgeable about biofuels other than corn ethanol and feedstocks other than corn grown in the mid-West has led many Advisory Board members and other stakeholders to display a verbal and written bias against all purpose grown energy crops and row crops.[3]

For example, we can grow purpose grown energy crops on a marginal existing cropland in California on cost-effective basis. These crops would serve as the feedstock for biofuels whose energy balance would be about 12:1 to start with, will use no fossil fuel to power the production of the fuel, will produce clean electricity complying with our state's Renewable Portfolio Standard as a second byproduct, can use existing oil distribution infrastructure and will not require agricultural subsidies to be sustainable on an economic basis.

Since these purpose grown crops and the biofuels resulting from them do not yet exist in the United States on a commercial basis, many Advisory Board members and other stakeholders making or submitting comments in this proceeding are unaware of them, and would deprive California of a means of reducing dependence on foreign oil, meeting the state's climate change mandates, stimulate the California economy and bring developmental benefits to the state.

Therefore, instead of a level playing field for all stakeholders from the outset, a substantial majority of the Board came into the proceeding with the preconceived notion that all crop-based biofuels are bad. These Board members are no doubt well-intentioned and deeply committed to protection of the environment. However, it is apparent from the

[3] My use of corn ethanol in this discussion is not intended to express in my own feelings about corn ethanol as a viable renewable transportation fuel. I will leave that discussion to others more knowledgeable than I about the issue. However it is a fact that corn ethanol has been the subject of much negative commentary in the media and in academic circles this year and Tim Searchinger made it the poster child for disastrous indirect land use changes.

Since we only produce ethanol from corn in the US at this time, I think it is fair to assume the antipathy displayed in these proceedings towards all biofuels whose feedstocks are purpose grown crops is a result of the commenters' feelings about corn ethanol. As stated above, this bias is not supported by the record, the evidence or the data, but it has been apparent in this proceeding from day 1.

Draft Language that some or all have been unable to get past their biases. They continue to maintain their antipathy notwithstanding data in the record that compels the conclusion that not all biofuels are bad, their respective carbon footprints can differ substantially and land use impacts are a function of the specific facts of the locale where the crops are being grown, rather than a "one-size fits all" approach based on corn ethanol..

The upshot is that we producers, who are actually getting our hands in the dirt and spending the money to develop these projects, have had to keep waging a continuing uphill battle throughout the implementation proceeding.

I have been told that the reason that no members from the agricultural or private industry sectors are on the Advisory Board is a result of the conclusion by someone at the Commission that members of the Board could not apply for funding under AB 118 to avoid the appearance of a conflict of interest. However, the legislators apparently already considered that issue and decided there was no conflict of interest because they did mandate that representatives of private industry and academicians who might want to receive funding be on the Board.

I would therefore request that agronomists and biofuels industry representatives be appointed to the Board so their input can be taken into account when finalizing the Draft Language and in making funding and other recommendations. Naturally, joining the Advisory Board should not subject their projects to penalties or conflicts of interest charges if they apply for funding under AB 118 and the regulations should expressly say so in order that there not be any misunderstanding in this connection.

I would also recommend that the California Secretary of Food and Agriculture be appointed to the Board since agriculture is the basis of biofuels, and that a member of the Governor's Economic Development Team also be appointed given that the purpose of the statute is, inter alia, to stimulate economic development. The Act specifically contemplates the appointment of others not expressly set forth in its language.

In closing, please note that I raised the issue of whether the Commission was running afoul of the statute when I went to Sacramento to attend the Sustainability Working Group meeting at the Energy Commission on August 15, 2008. However, the transcript of that meeting is not included in the Docket for AB 118 and no one ever answered the questions I raised. I therefore believe it important that these comments be included in the Docket.

Sincerely,

Nathalie Hoffman
CEO