November 1, 2013

VIA ELECTRONIC POSTING
Comment List: 2013-sp-update-ws

Mr. David Mallory
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Subject: HECA Comments on Discussion Draft of First Update to AB 32 Scoping Plan

Dear Mr. Mallory:

Hydrogen Energy California LLC (HECA) appreciates the opportunity to comment on the First Update to the AB 32 Scoping Plan. HECA is in the process of developing a clean and reliable alternative energy solution using Carbon Capture Utilization and Storage (CCUS) technology which will provide significant economic and environmental benefits to Kern County and the State of California, while simultaneously advancing California's long-term greenhouse gas (GHG) reduction strategy.

HECA expresses our support for the California Air Resources Board's (ARB or Board) draft updated scoping plan and in particular staff's recommendation for the extension of AB 32's policies beyond 2020. Continuing these policies sends the correct signal to the marketplace that technologies such as CCUS should be pursued.

Besides supporting these policy extensions, we would like to emphasize the huge potential benefits that can be achieved by the deployment of CCUS technology across both the power and manufacturing sectors. We also want to draw your attention to the very real near-term opportunity for California by enabling and embracing CCUS technology via the HECA Project.

Many scientists, academics, and policy makers acknowledge that carbon capture and storage MUST play a critical role in decarbonizing electricity and manufacturing. HECA will demonstrate, before 2020 and beyond, that capturing carbon is a safe and viable strategy for mitigating global climate change in these sectors.

The deployment of CCUS can materially help California to achieve its long-term GHG emissions reduction goals. The International Energy Agency's World Energy Outlook describes CCUS as a "key abatement option", and predicts that it will account for 18 percent of future emission savings. The IEA further states that CCUS investment must be made "now" if emission reductions are to be achieved economically and effectively. We are proud to say that the HECA project is entirely consistent with this timeframe and will help demonstrate that permanently capturing carbon is a safe and viable strategy for mitigating GHG emissions.

The Discussion Draft acknowledges that capture and long-term geologic storage of CO_2 may represent one way to "green up" fossil fuels and further mitigate climate change. But it also states that *"significant work must still be done to ensure that sequestered emissions are not eventually released into the atmosphere and to demonstrate the project on a large scale in California*." We believe that this language overlooks the near-term solution that HECA can provide, starting as early as next year. The lessons that will be learned from finalizing a Quantification Methodology (QM) that demonstrates real, permanent, quantifiable, verifiable and enforceable reductions can serve as a model for all future CCUS projects in the state, and beyond it boundaries. We strongly suggest that the language be changed to: *"Under the cap-and-trade program, ARB will develop a quantification methodology to ensure that sequestered emissions are not eventually released into the atmosphere, which will support existing and future efforts to demonstrate CCUS on a large scale in California."*

The HECA project will utilize full carbon capture – at least 90% of the CO_2 from the fossil fuel will be captured and utilized for enhanced oil recovery with simultaneous permanent CO_2 storage. In short, the Hydrogen Energy California Project will provide the answers and the framework necessary to enable further deployment of CCUS throughout various sectors and to optimize CCUS as a technology that can significantly reduce GHG emissions.

The successful completion of an industrial-scale CCUS project in California will be viewed by the public as a case study of AB 32's ability to promote advanced technology that can be duplicated in other jurisdictions in California and around the country.

We look forward to working with ARB to enable this near-term opportunity for California while simultaneously demonstrating national leadership. We hope this commitment will be reflected more directly in both the revised First Update and through staff engagement.

Specifically we recommend the following:

- The Updated Scoping Plan should recognize that CCUS advances California towards its 2020 AB 32 GHG emission reduction goals. The HECA project is progressing through the California Energy Commission's (CEC) application process and is scheduled to break ground next year (2014) and begin operations in 2018. This is truly a near-term timeline that will enable the project to start sequestering CO_2 prior to 2020. **The Updated Scoping Plan should recognize that CCUS is a near-term solution and not just a potential future reduction strategy.**

- ARB should remain fuel neutral when discussing CCUS projects. CCUS is inherently a fuel neutral technology. The language regarding CCUS should reflect this fact and that it is a realistic GHG reduction opportunity today. In fact, the HECA project is the only CCUS project moving forward in California that has reached an advanced stage of the permitting process. It is a project that will bridge the gap between what has been contemplated only in theory and what can be achieved in practice. **The Updated Scoping Plan should accurately reflect the fact that CCUS is a fuel neutral technology and should not give preferential treatment to any particular fuel.**

- The successful completion of an industrial-scale CCUS project in California will be viewed by the public as a case study of AB 32's ability to promote advanced technology that can be duplicated in other jurisdictions in California and around the country. Recognizing and supporting a project such as HECA can put California in the forefront of this technology as an industry leader and demonstrate California's leadership position. First, HECA will be a tangible example of the State's ability to develop exportable policies that other jurisdictions can follow. Second, the fertilizer component of the project will make California a net exporter of low-carbon fertilizer, instead of importing nearly all of its fertilizer. And third, California would be demonstrating that fossil fuels can continue to be used responsibly by eliminating 90% of their GHG emissions, and thus showing the rest of the world a responsible path forward. **CCUS can provide 2020 GHG reductions and be instrumental in helping California achieve its 2050 goals. The Updated Scoping Plan should promote policies that assist in making that a reality.**

- The existing Cap-and-Trade Regulation already recognizes the accounting mechanism needed for emission reductions associated with CCUS projects, the QM. **The Updated Scoping Plan should highlight the importance of enforcement mechanisms for CCUS, including the near-term adoption of a CCUS QM.** As noted above, we strongly suggest that ARB revises the document to include the following statement: "Under the cap-and-trade program, ARB will develop a quantification methodology to ensure that sequestered emissions are not eventually released into the atmosphere, which will support existing and future efforts to demonstrate CCUS on a large scale in California."

- ARB should revise the draft to be policy-consistent with the goals of the Governor and the California Legislature by providing more in-depth support for CCUS. HECA is siting this new facility in California because of the State's leadership role in requiring GHG reductions through policy initiatives such as AB 32. In order to account for and recognize the benefits of a bold project like the HECA project in California, and to send the exportable policy signals that will lead to further investments in CCUS, **CARB should provide more specific policy support for CCUS**.

Thank you for the opportunity to provide these comments on behalf of HECA. For additional information, please contact Tiffany Rau at 310-469-8683 (trau@heca.com) or Jon Costantino at 916-552-2365 or (jcostantino@manatt.com)

Sincerely,

/s/ James L. Croyle

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