

## DOCKETED

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# Memorandum

**Date:** November 19, 2013

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**To:** Commissioner Karen Douglas, Presiding Member  
Commissioner Andrew McAllister, Associate Member  
Hearing Officer Raoul Renaud

**From:** California Energy Commission - John Heiser, AICP,  
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**Subject:** HYDROGEN ENERGY CALIFORNIA, AMENDED (08-AFC-8A)  
STAFF STATUS REPORT NUMBER 11

Staff hereby files Status Report number 11 for the Hydrogen Energy California, Amended AFC (HECA) to brief the Committee on progress of the project review and data that remains outstanding. Energy Commission staff and the U.S. Department of Energy (DOE) are jointly conducting the review of the proposed HECA project and intend to continue to issue joint documents. Staff continues to evaluate the project subject to both the Warren Alquist Act and the California Environmental Quality Act (CEQA) as well as the National Environmental Policy Act (NEPA).

Due to the complexity of the project, refinements proposed and new information obtained since issuance of the PSA/DEIS, outstanding determinations still needed from other federal agencies, and the level of public interest. DOE is considering issuing a Revised Draft Environmental Impact Statement (RDEIS) with staff's Final Staff Assessment, instead of a Final Environmental Impact Statement, as originally anticipated. The FEIS and Record of Decision (ROD) would likely be published after the issuance of the Presiding Member's Proposed Decision or later.

While the applicant has submitted a lot of the information identified as outstanding in the PSA/DEIS and at the September PSA workshops, significant information remains outstanding. Staff has issued data requests regarding the Wasco Coal Terminal Supplemental Environmental Analysis (TN 200797) that was docketed on 10/09/2013. The Wasco Coal Terminal will be used by the project to transfer coal from trains to trucks for final shipment to the project site if the rail spur option is not used. Savage Coal received a Conditional Use Permit (CUP) from the city of Wasco in 1990 for the terminal. The applicant proposes transferring 1,500,000 tons of coal per year at the coal facility for the HECA project. Condition 81 of the CUP allowed transloading up to 900,000 tons of coal per year. The city of Wasco has received from Savage Coal a request and application to amend their original Conditional Use Permit (CUP). The city of Wasco Planning Department is currently reviewing the application request for completeness and Planning Commission action on the requested amendment is estimated to take place in March of 2014. The city of Wasco also intends to provide

comments on the HECA PSA/DEIS as well as the Savage Coal Supplemental Environmental Analysis (SEA) (TN 200797). The city of Wasco has not provided a date when these comments will be provided.

In addition to identifying data gaps, staff has been actively working with the parties to ensure receipt of the needed information, including engaging in workshops to identify and resolve, where possible, potential areas of disagreement. On November 13, 2013, staff participated in a workshop with the applicant, intervenors, interested parties, public, California Public Utilities Commission (CPUC), US Department of Energy (DOE), California Department of Conservation, Division of Oil, Gas and Geothermal Resources (DOGGR), and California Air Resources Board (ARB), to discuss outstanding greenhouse gas emissions, issues and the project's conformance with SB 1368 (Perata, Stat. 2006, Ch. 598, §2). This workshop was very productive and while the parties may not be in complete agreement with all of the emissions sources that should be included in the project's SB 1368 calculation, the areas of remaining disagreement were narrowed. Staff looks forward to similar discussions in other technical areas and anticipates having additional workshops in the following areas; enhanced oil recovery – carbon sequestration monitoring, reporting and verification plan (MRVP), water resources, biological resources, Wasco Transloading facility, and air quality.

Staff met with the Buena Vista Water Storage District on September 5, 2013 to discuss data submitted by the District on their adaptive management plan. Department of Water Resources staff and Regional Water Board staff participated in the discussions. (TN 200472)

### **Summary of Status of Individual Technical Areas:**

Below is a summary of the general outstanding informational needs by technical area that may have a bearing on project schedule. This is not intended to be an exhaustive list of all outstanding information. Also included is a discussion of areas where staff is conducting additional, in-depth analysis that may take more time and areas where additional agency input may be needed.

### **Carbon Sequestration and Greenhouse Gas Emissions:**

The analysis of the project's proposal to sequester its carbon dioxide emissions is a complicated one given that this is the first large-scale proposal of its kind in California, one that requires sufficient assurances. Further complicating the issue is the Energy Commission's lack of jurisdiction over the entity that will ultimately be in charge of sequestration. Therefore, as discussed in the PSA/DEIS, staff needs the applicant to provide, at the very least, the contractual terms it intends to enter into with Occidental of Elk Hills, Inc., (OEHI) to ensure that OEHI will abide by the Energy Commission's conditions of certification applicable to activities occurring on the OEHI site and under OEHI's control. Staff also needs the applicant to provide a copy of OEHI's final, accepted Class II injection well permit application submitted to DOGGR. This will be critical to a complete understanding of OEHI's proposed handling of the carbon dioxide (CO<sub>2</sub>), including what measures will be taken to locate and plug abandoned and idle wells so they do not become conduits for CO<sub>2</sub> leaks and any abatement procedures OEHI will undertake if CO<sub>2</sub> leaks to

the surface and escapes to the atmosphere. DOGGR is currently reviewing OEHI's latest submittal to determine if it is sufficient to complete the application. Lastly, as discussed at the PSA/DEIS workshop, staff needs OEHI to submit a more detailed monitoring, reporting and verification plan (MRVP), identifying exactly how the sequestration efforts will be monitored and overseen.

### **Biological Resources:**

Staff is in the process of reviewing information recently provided by the applicant, including the applicant's habitat mitigation plan for the HECA project site. It appears that additional detail concerning this plan will be needed. Staff still needs biological resources survey information for the Elk Hills oil field portion of the project as well as additional botanical surveys along the CO<sub>2</sub> pipeline route. The applicant also agreed to provide modeling of potential nitrogen deposition impacts from the project. Also outstanding is a habitat mitigation plan for the Elk Hills oil field portion of the project. It is unclear at this point whether OEHI, whose current permits covering impacts to biological resources in the Elk Hills oil field are out of date, will be obtaining a separate permit for impacts resulting from the proposed CO<sub>2</sub> sequestration and enhanced oil recovery (EOR) project, or will be rolling those impacts into the permit update needed for the entire oil field and all of its operations. Additionally, staff is waiting for the draft Biological Opinion from the U.S. Fish and Wildlife Service, which may be significantly delayed due to staffing difficulties at the agency.

### **Cultural Resources:**

Staff is currently waiting for the applicant to provide significance evaluations of identified cultural resources in the Elk Hills oil field and an historic built environment inventory along the proposed truck route from Wasco to the project site.

### **Noise and Vibration:**

Depending upon the additional alternative truck routes identified under Traffic and Transportation, additional noise analyses may be required.

### **Traffic and Transportation:**

Based on comments received on the PSA/DEIS and at the PSA/DEIS workshop, staff will be analyzing the project's impacts on school bus routes as a result of the proposed truck route from the Wasco transloading facility to the project site. Staff is also trying to obtain input from the CPUC on the project's rail spur proposal. Since the transportation division of the CPUC is not familiar with the Energy Commission's role in power plant siting, there is some confusion as to who has permitting authority for the two rail crossings that will occur over public roads should the rail spur option be employed.

### **Waste Management:**

A portion of the project site is contaminated and must be remediated prior to construction. The Department of Toxic Substances Control has indicated that further evaluation of the site is necessary prior to remediation, but access by the applicant to conduct such

characterization is currently restricted by authorization from the land owner. Some form of additional site information may be required prior to the FSA/RDEIS to ensure the potential for impacts can be fully evaluated.

### **Water Resources:**

Staff is currently evaluating the feasibility of dry cooling for project and air-separation unit cooling, along with syngas and polygen products processing needs.

### **Transmission System Engineering:**

The Phase I California Independent System Operator (CAISO) transmission system engineering study for Cluster 6, of which HECA is now a part, will not be available until December 2013.

### **November Workshops**

An Energy Commission PSA/DEIS public workshop and Committee Status Conference is scheduled for November 20, 2013 in Buttonwillow California. Discussion of technical areas will include: Air Quality, Socioeconomics, Traffic and Transportation, Noise, Reliability, Cultural Resources, Water Resources and if questions are raised, Public Health, Hazardous Materials Management, and Worker Safety and Fire Protection.

### **Additional Workshops**

Energy Commission staff anticipates having additional workshops addressing the following issues; enhanced oil recovery – carbon sequestration monitoring, reporting, and verification plan (MRVP), water resources, biological resources, Wasco Transloading facility, and air quality.

### **Conclusion**

As discussed above, significant information remains outstanding, including input needed from other agencies. Staff does not foresee this information being provided before the end of the first quarter in 2014. Staff will endeavor to complete work on the FSA/RDEIS within 45 days of receiving all outstanding information and subsequent approvals from DOE's FSA/RDEIS review process.