

DOCKETED

Docket Number:	08-AFC-08A
Project Title:	Hydrogen Energy Center Application for Certification Amendment
TN #:	200217
Document Title:	Kern County Addendum to Staff Report
Description:	re: HECA Williamson Act cancellation request. Continued Agenda item.
Filer:	Tiffani Winter
Organization:	County of Kern, Planning and Community Development Department
Submitter Role:	Public
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Docketed Date:	8/19/2013

ADDENDUM**KERN COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT****Planning Commission****STAFF REPORT****Date:** August 22, 2013**FILE:** Cancellation #13-01, Map #120
S.D.: #4 - Couch**TITLE:** Cancellation of Land Use Restrictions, Land Conservation Act, Agricultural Preserve No. 3 (Zoning Map No. 120) and Contract Amending Land Use Contract**PROPOSAL:** Cancellation of an approximate 72-acre portion of an existing Williamson Act Land Use Contract within Agricultural Preserve 3**APPLICANT:** Hydrogen Energy International, LLC by Manatt, Phelps, and Phillips, LLP (PP12328)**PROJECT SIZE:** Approximately 72 acres**LOCATION:** West of Tupman Road, south of Adohr Road, west of Interstate 5, northwest of Tupman area**GENERAL PLAN DESIGNATION:** 8.1 (Intensive Agriculture)**SURROUNDING LAND USE/ZONING:** North, East, and West - Irrigated crops/A (Exclusive Agriculture); South - Irrigated crops and Westside Canal/A**PROJECT ANALYSIS:** This project was originally scheduled for consideration by your Commission on June 13, 2013; however, was continued due to an advertising error. Subsequently, the project was considered by your Commission on June 27, 2013; and was continued to tonight's hearing to allow for further environmental review and release of the California Energy Commission's Preliminary Staff Assessment (PSA).

The project is a request to cancel an approximate 72-acre portion of a 168-acre Williamson Act Land Use Contract that was recorded on February 28, 1969, in Book 4250, Page 496 of Official Records. The project area is located approximately ten miles west of the City of Bakersfield and 1.5 miles northwest of Tupman in western Kern County. The site is designated 8.1 (Intensive Agriculture) by the Kern County General Plan and is zoned A (Exclusive Agriculture).

This petition for cancellation is being sought by Hydrogen Energy International, LLC, and is a component of the Hydrogen Energy California (HECA) Project being considered by the California Energy Commission (CEC). If approved by the CEC, the HECA Project (CEC Docket No. 08-AFC-8A) would authorize a 300 megawatt (MW) "integrated gasification combined cycle" power plant and fertilizer manufacturing facility. A complete overview of the components of the HECA Project, the project history, and other issues related to the overall HECA Project was previously provided to your Commission in the June 27, 2013, staff report. The text and maps associated with that staff report are attached for your reference.

Today, your Commission is considering the Williamson Act Land Use Contract cancellation component of the HECA Project only; as Kern County does not have jurisdiction over the project

as a whole. The CEC is processing the power plant component of the application because the California Government Code stipulates they act as the Lead Agency for all thermal electric power plants and related facilities that are 50 MW or larger. Once an application is submitted to the CEC, the Agency prepares a Preliminary Staff Assessment (PSA) and presents it to the applicant, interveners, organizations, agencies and other interested parties for comment. Next, a Final Staff Assessment (FSA) and corresponding environmental review documents are prepared by CEC staff and the project is presented to the CEC Commission for review and decision.

Although the CEC has jurisdiction over the project as a whole, State law requires that the project be consistent with all local rules and regulations. A portion of the HECA project site is located on land currently under the Williamson Act Land Use program; and the proposed facility is not consistent with the provisions of the program. Therefore, the project requires a cancellation of the existing Williamson Act Land Use Contract by Kern County.

Previous Kern County Comments on the overall HECA Project

Although the CEC is the permitting Agency for the HECA Project, Kern County has an ongoing opportunity to provide formal comments to the CEC to recommend mitigation measures for the HECA project, beyond the County's current consideration of the Williamson Act Land Use Contract cancellation. As such, the Kern County Planning and Community Development Department Staff has been coordinating meetings since 2010 between HECA staff, CEC staff, and County Departments to review the HECA Project and the project has been reviewed by the necessary County Departments and the County Administrative Office for impacts on public services, roads, and Kern County.

As detailed in the attached June 27, 2013, staff report, the comments received from County Departments and stakeholders have been presented to the Board of Supervisors and sent to the CEC for inclusion in the CEC's CEQA review and project consideration. Staff has been directed to bring the overall HECA Project back before the Board once the CEC issues the FSA.

Previous Planning Commission Hearings

June 13, 2013

On June 13, 2013, a public hearing was held by your Commission to consider the proposed project. However, due to an advertising error regarding the publication of the required hearing notice ten (10) days prior to this hearing; your Commission could not legally take any action regarding this project on June 13, 2013. Therefore, the Planning Commission took public comments and then continued the project to June 27, 2013. Staff presented a brief overview of the proposed cancellation and then your Commission accepted comments.

At the June 13th hearing, several representatives of the applicant; including Attorney, Kristina Lawson; CEO, Jim Cryole; and Tom Daniels provided an overview of the project. Several members of the public then spoke in opposition of the project, and expressed concerns related to environment, traffic, pollution, air quality, and protection of farmland. Several members of the public spoke in support of the project; and stated that HECA would boost oil production, bring jobs and help the United States stop relying on foreign energy. The hearing was then closed and continued to June 27, 2013.

June 27, 2013

On June 27, 2013, a second public hearing was held by your Commission to consider the proposed Williamson Act Land Use Contract. At the hearing, Commissioner Belluomini recused himself. Christina Lawson, the applicant's representative, addressed the findings needed for

recommendation of approval or cancellation for the Williamson Act Land Use Contract and stated: (1) The proposal would be in the public interest; (2) There was no proximate noncontracted land which was both available and suitable for the project. Ms. Lawson stated the project would address public concerns regarding energy supply and energy security, global climate change, water supply, hydrogen infrastructure, fertilizer supply, and the economy. Ms. Lawson also stated the proposed site had been selected based on available land, proximity to storage reservoir, and existing natural gas transportation, electric transmission, and brackish groundwater supply, and asked the Commission for approval. Staff, gave clarification regarding the required findings for approval of the cancellation.

Several members of the public spoke in opposition of the overall HECA Project and the proposed Williamson Act Land Use Contract cancellation component of the project. Speakers expressed concerns related to: environment; loss of brackish water and its effect on other farmers; the cost to Kern County to mitigate loss of Prime Farmland; traffic; pollution; air quality; placement of the rail spur and possible coal spillage; the projects effect on property values; potential safety hazards caused by plant explosions; health risks due to food contamination; loss to the County's long-term economy; and creation of a "hopscotch-type" effect on land use development and possible setting of a precedent for other such projects.

Commissioners Edwards and Babcock stated the project should be referred back to Staff to allow the CEC to complete the environmental document before a decision is recommended by the Commission. Commissioner Martin voiced support of the applicant meeting the necessary findings; however, hoped Staff would continue to work closely with the CEC. Commissioner Sprague voice support of the cancellation and suggested moving the item onto the Board of Supervisors. Commissioner Babcock stated there was a lack of information to justify the cancellation of 72 acres of Prime Agricultural land and had concerns regarding the proposed railroad spur. Commissioner Edwards voiced concern with the negative impact the cancellation would have on the public's interest and felt the proposal was premature.

In response to Commission comments, Ms. Lawson, noted the railroad spur was only an option, but without the cancellation there would be no project and asked the Commission to take action. A motion was made by Commissioner Martin and a second by Commissioner Sprague to approve as requested. The motion failed due to lack of a majority vote. A motion was made by Commissioner Martin and a second by Commissioner Babcock to continue this case to August 22, 2013, to allow Staff to review the CEC's upcoming environmental document; which was scheduled for release on June 28, 2013. The motion carried.

Events Subsequent to the June 27, 2013, Planning Commission

June 28, 2013 (CEC release of Environmental Document for overall HECA Project)

On June 30, 2013, the CEC released a Preliminary Staff Assessment/Draft Environmental Impact Statement (PSA/DEIS) as part of the environmental compliance process. This PSA/DEIS contains the CEC and DOE's independent evaluation of the HECA Project application.

July 23, 2013 (Board of Supervisors Hearing – Full Staff review of CEC's PSA)

On July 23, 2013, a response to a February 26, 2013, Board referral request was sent to the Board of Supervisors, which included a full review of the "Preliminary Staff Assessment/Draft Environmental Impact Statement (PSA/DEIS)" prepared by the California Energy Commission (CEC). That Board letter is attached, in full, to this report for your Commission's review. Additionally, the full Board hearing can be reviewed online at: <http://www.co.kern.ca.us/bos/AgendaMinutesVideo.aspx>.

As detailed above and in the attached report to the Board, the CEC has found the project will have a significant and unavoidable impact to "Visual Resources" (Aesthetics). However, the CEC has not yet made any determination on many of the key subject-matter areas that are of particular interest to Kern County.

Several members of the public were heard by the Board in opposition to the Hydrogen Energy Project as a whole; and the Board directed Staff to review the Final Staff Assessment (FSA) when it is issued by the CEC and report back to the Board with additional comments and recommendations. The Board also authorized the Director of the Kern County Planning and Community Development Department to prepare and mail formal written comments, including all comments provided by the Board during the current meeting to the CEC and specific requests for mitigation measures requested by the Kern County Departments and the Board of Supervisors, to address potential impacts of the HECA Project in Kern County. The Board also authorized the Chairman to sign a letter to the CEC with opposition to use of eminent domain.

August 8, 2013 (Kern County letter to the CEC regarding PSA)

The two letters discussed at the July 23, 2013, Board hearing were sent to the CEC and the applicant on August 8, 2013. The first letter was signed by the Director of the Kern County Planning and Community Development Department and included three parts: (1) a listing of mitigation measures previously requested by Kern County that were not included in the PSA and the County's subsequent recommended revisions to the Conditions of Certification; (2) a listing of other additional requests specified by the Board; and, (3) closing comments and a reiteration that Kern County does not support the use of eminent domain for any action related to the HECA Project. The second letter was signed by the Chairman of the Board and included a reiteration that Kern County does not support the use of eminent domain for any action related to the HECA Project. The letter from the Planning Department is attached for your reference.

Kern County Planning Department's Review of the CEC's PSA Document

As requested by your Commission and the Kern County Board of Supervisors, the Planning Department has completed a review of the CEC's PSA/DEIS; which was released on June 30, 2013. County Staff has completed a review of the information provided and provided a complete analysis of the PSA to the Kern County Board of Supervisors on July 23, 2013.

As noted above, the July 23, 2013, Board staff report which contains the Planning Department's analysis of the PSA is attached to this staff report for your reference.

Environmental Impact Findings of HECA Project

As is shown below in Table 1, the CEC has found that the project will have a Significant and Unavoidable Impact to "Visual Resources" (Aesthetics). However, the CEC has not yet made any determination on many of the key subject-matter areas that are of particular interest to Kern County.

Specifically, the CEC has not yet made a final conclusion regarding the impacts of the overall HECA Project on the following:

- › Biological Resources Impacts
- › GHG Emissions Impacts
- › Cultural Resources Impacts
- › Land Use compatibility Impacts
- › Traffic and Transportation Impacts
- › Waste Management Impacts
- › Water Supply (Hydrology) Impacts

The PSA indicates the CEC is awaiting additional information before it can make final environmental impact conclusions on these categories, as noted above. It is Staff's understanding the CEC will make final determinations on these subject matter areas when they issue their "Final Staff Assessment (FSA) for the project.

Table 1. Summary of the CEC's Preliminary Impact Conclusions (from PSA)

Technical Area	Complies with LORS ¹	Impacts Mitigated	Additional Information Requested ²
Air Quality	Yes	Yes	Yes
Biological Resources	Undetermined	Undetermined	Yes
Carbon Sequestration and GHG Emission	Undetermined	Undetermined	Yes
Cultural Resources	Undetermined	Undetermined	Yes
Hazardous Materials	Yes	Yes	No
Land Use	Undetermined	Undetermined	Yes
Noise and Vibration	Yes	Yes	Yes
Public Health	Yes	Yes	No
Socioeconomics	Yes	Yes	No
Soil and Surface Water Resources	Yes	Yes	Yes
Traffic & Transportation	Undetermined	Undetermined	Yes
Transmission Line Safety/Nuisance	Yes	Yes	No
Visual Resources	No	No	No
Waste Management	Undetermined	Undetermined	Yes
Water Supply	Undetermined	Undetermined	No
Worker Safety and Fire Protection	Yes	Yes	No
Facility Design	Yes	N/A	No
Geology & Paleontology	Yes	Yes	Yes
Power Plant Efficiency	N/A	N/A	Yes
Power Plant Reliability	N/A	N/A	Yes
Transmission System Engineering	Yes	Yes	Yes
Alternatives	N/A	N/A	No

¹ LORS = Laws, Ordinances, Regulations and Standards (of the State)

² Information requested from the applicant (HECA) by the CEC.

The next step will be to release of a Final Staff Assessment (FSA) and is anticipated in late 2013. After preparation by CEC staff, the FSA will be provided to the CEC Commissioners assigned to this project that will then use the information to reach a decision on the project. Then the full CEC considers the project.

Cancellation of Williamson Act Land Use Contract

In 2010, the Kern County Board of Supervisors approved cancellation of a 491-acre portion of a Williamson Act Land Use Contract that covered a portion of the HECA project site (Cancellation 10-1, Map 120; approved June 29, 2010; Resolution 2010-168). However, after the approval of that project, the project was sold to another entity causing a change in applicant and the project boundaries were revised during project redesign in 2012. Therefore, the applicant is now requesting cancellation of an additional 72 acres of land under contract in order to facilitate the revised project as currently presented to the CEC for processing.

It should be noted, according to the current project design, the additional 72-acre cancellation request is necessary for transportation facilities related to the project; including truck loading areas, truck parking, warehousing, etc.

The project site is bound by Adohr Road to the north, Tupman Road to the east, an irrigation canal to the south, and the Dairy Road right-of-way to the west.

The 72-acre site is currently being farmed with row crops and is under an active Williamson Act Land Use Contract. Construction of the project would require cancellation of the contract; and this matter is subject to the jurisdiction of your Commission and the Board. The previous 491-acre cancellation approval was contingent upon the applicant's payment of the cancellation fee and was not to become effective until the CEC issued a permit based on its review of CEC project, Docket No. 08-AFC-8. Since that 2010 decision, the project proponent has not yet paid the cancellation fees and, therefore, the 491-acre portion of the contract is still active.

As noted above, the applicant has requested a cancellation of the remaining portion of the Williamson Act Land Use Contract that currently encumbers the project site and totals approximately 72 acres. The contract was recorded in 1969 by previous property owners, Lawrence and Margaret Scarrone.

Required Findings for Williamson Act Contract Cancellation

Section 51282 of the California Government Code states your Commission may recommend approval a tentative approval for cancellation of a contract only if one of the following findings can be made:

- (1) That the cancellation is consistent with the purposes of Chapter 7 (i.e., the Williamson Act); or,
- (2) That cancellation is in the public interest.

The options for cancellation can be explained as follows:

Option 1: In order for your Commission to make the findings associated with Option 1, the applicant would have to demonstrate the following:

1. The cancellation is for land on which a notice of nonrenewal has been served.
2. The cancellation is not likely to result in the removal of adjacent lands from agricultural use.
3. The cancellation is for an alternative use which is consistent with the applicable provisions of the City or County General Plan.
4. The cancellation will not result in discontinuous patterns of urban development.
5. There is no proximate, noncontracted land which is both available and suitable for the proposed use or the development of the contracted land would provide more contiguous patterns of urban development (Government Code Section 41282(b)).

Option 2: In order for your Commission to make the findings associated with Option 2, the applicant would have to demonstrate the following:

1. The other public concerns substantially outweigh the objectives of Chapter 7; and

2. There is no proximate noncontracted land which is both available and suitable for the contracted land would provide more continuous patterns of urban development of the proximate noncontracted land.

The applicant states that approval of this project would be in the public interest and would, therefore, be consistent with the second finding (Option 2) as listed in Section 51282 of the Government Code. Therefore, the applicant must offer adequate justification for your Commission to make the findings for public interest, as listed above under Option 2.

Applicant's Justification for Contract Cancellation per Option 2

The applicant filed a petition for cancellation of the contract (attached) noting the cancellation would be in the public interest. The cancellation is an option under the limited circumstances and conditions set forth in Government Code Section 51280 et seq. In such cases, landowners may petition for Williamson Act Land Use Contract cancellation. Your Commission may recommend to the Board, the granting of a tentative cancellation only if it makes the required statutory findings as outlined above.

The applicant has provided the following information summarized to support the conclusion that public concerns substantially outweigh the objectives of the Williamson Act (Government Code Section 51282(c)(1)) and those justifications are listed in the June 27, 2013, staff report; which is attached for your reference.

Comments from the State Department of Conservation

The State Department of Conservation (DOC) received the cancellation petition on February 8, 2013, and responded on April 26, 2013, with an analysis of the ability for the project to meet the required findings for cancellation, as detailed below.

With regard to public concerns, the DOC believes the term "public" and "interest" refer to the interest of the public as a whole in the value of the land for open space and agricultural use. Though the interests of local and regional communities involved are also important, no decision regarding the public interest can be based exclusively on the local benefit of the proposed project. The DOC notes the 71.56-acre site under contract is designated Prime Farmland per the 2010 Kern County Important Farmland Map and data from County Staff indicates the site has had an active agriculturally productive history including cotton, wheat, and onions. Current 2012 Farmland Mapping and Monitoring Program (FMMP) imagery data indicates irrigated vegetation. Together with the supplied cropping history, the data would indicate the land is still agriculturally productive.

With regard to suitability and proximate available parcels, the DOC concludes that there are no alternative sites that meet the highly specific site selection requirements of the project discussed above. The DOC notes that as a part of HECA's application process with the CEC, the applicant was required to conduct an alternative site analysis to identify an alternative site for the project, which ultimately identified the general area of the currently proposed site. In the process, several possible alternative sites in the vicinity of the unincorporated communities of Buttonwillow and Tupman were considered. However, the alternative sites were rejected for various reasons, including topography, distance from the proposed carbon dioxide custody transfer point, lengths of linear facilities, sensitive environmental receptors, and/or land availability. In addition, each of these sites (with one exception), like the project site, were contracted under the Williamson Act.

The DOC noted in the County's deliberations, it must be shown that agricultural and open space objectives, which are protected by the Williamson Act, are substantially outweighed by other public concerns before the cancellation can be deemed "in the public interest."

Staff Analysis of Request for Williamson Act Land Use Contract Cancellation

Farmland valuation is estimated using a number of variables, such as the applicable water purveyor and the types of crops cultivated. With the proposed cancellation of the Williamson Act Land Use Contract, the Kern County Tax Assessor's Office reassessed the land value for this portion of the HECA Project property (approximately 72 acres of prime farmland) at \$644,040. Staff notes that property is assessed at 1.2 percent of the land value for tax purposes. The land revaluation greatly increases the amount of property taxes paid to the County annually when compared to the taxes paid on property under a land use contract. Taxes on the site would amount to about \$7,728 per year. Over an estimated 25 to 30 year lifetime for a facility, the County would realize combined property tax revenue of between \$0.19 million and \$0.23 million. Your Commission should note that there is no property tax discount or reduction in valuation given to land that is under a conservation easement or deed restriction.

It should also be noted that since 2009, the State no longer provides subvention reimbursements to the County to administer land under the Williamson Act. In previous years, the County on average received approximately \$4.6 million in subvention funds, which to date equates to a loss of about \$18.4 million.

As noted above, the DOC has presented analysis and recommendations for the cancellation petition based on whether both sets of findings could be made by the Board of Supervisors. Staff has reviewed the proximate, noncontracted parcels analysis, and the request with regard to conformance with State and local requirements of the Agricultural Preserve Program for cancellation in the public interest, and confirms the project complies with all noted provisions. The analysis of proximate parcels supports justification for supporting the cancellation request based on the required public benefit findings.

The Kern County Assessor's Office has reviewed this request and has calculated the required cancellation fees based upon the site's fair market value. If ultimately approved by the Board of Supervisors, this cancellation will not become effective until the applicant has submitted the required fee of \$80,505.00 to the Clerk of the Board.

With regard to taxes, the Kern County Tax Assessor's Office has found that the land value for this portion of the HECA Project property would be \$644,040 if the cancellation were approved; which results in a tax revenue of \$7,728 per year; and approximately \$0.19 million over the life of the project. This is an increase over the current reduced tax rate on the property (currently assess at \$198,400).

The proposed project does not include a zone change to a nonagricultural zoned district, and would remain zoned A (Exclusive Agriculture). In the future, the land could revert back into agricultural production if determined by the property owner. Activities proposed on the site is not anticipated to result in the conversion of other farmland on adjacent or nearby properties to non-farmland uses.

Additionally, the proposed project would improve water quality and free up water for other farming by lowering the brackish water table and allowing better water from east of the project site to penetrate the area. For operations, the proposed project is estimated to use 7,500 acre feet of brackish water per year.

The project will demonstrate a first of a kind combination of proven technologies at commercial scale that can provide base load low-carbon power that will make an essential contribution to addressing each of these concerns. The applicant states the project will advance public interest on a variety of levels, including: increasing energy supplies, energy security, increase in water supply for agricultural use; creation of hydrogen infrastructure; combat global climate change by reducing use of fossil fuels; and creation of jobs; thereby increasing economic stability in the region.

The project has been awarded federal funds by the U.S. Department of Energy and the study of the project has the financial support of Southern California Edison Company.

After review of the application package, comments from the DOC, and the other components of the application request, Staff has found the findings can be made for cancellation pursuant to the Public Interest option as listed in Section 51282 of the California Government Code.

In order for your Commission to make the findings associated with the Public Interest option, your Commission would have to find the following:

1. The other public concerns substantially outweigh the objectives of Chapter 7; and,
2. There is no proximate noncontracted land which is both available and suitable for the contracted land would provide more continuous patterns of urban development of the proximate noncontracted land.

With regard to the first finding, Staff concludes that the project would provide energy for public consumption, which would address a public concerns (energy needs) that outweighs the objectives of the Williamson Act. Additionally, the project would generate more than 2,000 temporary construction jobs (over a period of 49 months) and more than 100 permanent operational jobs.

With regard to the second finding, a review of the application materials demonstrates there is no proximate noncontracted land that is available and which provides the specific components needed for the project. Also, the project does not include a zone change to a nonagricultural zoned district, and the site would remain zoned A. Therefore, the land could revert back to agricultural production in the future if determined by the property owner or if the HECA Project is never built; and the proposed activities are not anticipated to result in the conversion of other farmland on nearby properties.

The proposed project would increase fresh water supplies for other farming near the site by using brackish water for operations on the site, thereby lowering the brackish water table and allowing better quality water from east of the project site to penetrate the area. For operations, the proposed project is estimated to use 7,500 acre feet of brackish water per year.

Staff concludes the project will assist in providing economic stability for the region by providing increased property tax revenues and a stable source of high paying jobs. Additionally, given that the public concerns that will be addressed by the project, Staff concludes there is substantial evidence to support the findings set forth in Government Code Section 51282(c)(1) that "other public concerns substantially outweigh the objects of the Williamson Act Land Use Contract."

CEQA Determination for Williamson Act Cancellation Application

Staff notes the CEC is the Lead Agency (for licensing thermal power plants 50 MW and larger) under the California Environmental Quality Act (CEQA) and has a certified regulatory program under CEQA. Under its certified program, the CEC is exempt from having to prepare an

Environmental Impact Report (EIR). Its certified program, however, does require environmental analysis of the project, including an analysis of alternatives and mitigation measures to minimize any significant adverse effect the project may have on the environment.

For the purposes of complying with CEQA, Staff is utilizing Section 15271 in your Commission's consideration of the cancellation request. Section 15271 is an exemption for certified State regulatory programs which states in part:

"CEQA does not apply to actions undertaken by a public agency relating to any thermal power plant site or facility, including the expenditure, obligation, or encumbrance of funds by a public agency for planning, engineering, or design purposes, or for the conditional sale or purchase of equipment, fuel, water (except groundwater), steam, or power for such a thermal power plant, if the thermal power plant site and related facility will be the subject of an Environmental Impact Report or Negative Declaration or other document or documents prepared pursuant to a regulatory program certified pursuant to Public Resource Code Section 21080.5, which will be prepared by:

- (1) The State Energy Resources Conservation and Development Commission.*
- (2) The Public Utilities Commission.*
- (3) The City or County in which the power plant and related facility would be located."*

This exemption is appropriate since the CEC is conducting the environmental analysis on this project; and that analysis will include agricultural impact analysis.

Staff notes the project will result in the loss of approximately 72 acres of Prime Agricultural land. Therefore, Staff recommends the project, if approved by the CEC, include appropriate mitigation for loss of Prime Agricultural land at a 1:1 ratio as required by CEQA, and with mitigation occurring in Kern County.

Planning Department Conclusion and Recommendation

Regarding the conversion of agricultural farmland for the proposed hydrogen energy facility development, the project does not include a zone change to a nonagricultural zoned district, and would remain zoned A. Therefore, if the project is not approved, the cancellation is invalid and the land could continue agricultural production as determined by the property owner.

As proposed, the HECA Project would use brackish water for operations on the site, thereby lowering the brackish water table and potentially allowing better quality water from east of the project site to penetrate the area. For operations, the proposed project is estimated to use 7,500 acre feet of brackish water per year.

Additionally, the project would generate approximately 2,461 temporary construction jobs (over a period of 49 months) and approximately 200 permanent operational jobs.

It is Staff's opinion there is adequate justification for your Commission to find the public interests will be furthered by the implementation of the project outweigh the objectives of preserving the site for agricultural use under the Williamson Act Land Use Contract. The siting of facilities to provide an alternative low-carbon source of power will protect the health and safety of the State's expanding population. The project site will not be converted to urban use; therefore, approval of this request should not affect urban development patterns. Staff has reviewed the request with regard to conformance with State and local requirements of the Agricultural Preserve Program and confirms that the project complies with all noted provisions.

The Kern County Assessor's Office has calculated the required cancellation fees based upon the site's fair market value; and if ultimately approved by the Board, this cancellation will not become effective until the applicant has submitted the required fee in the amount of \$80,505.00 to the Clerk of the Board; and also not until the CEC approves the overall HECA Project.

Staff continues to conclude that the project meets the necessary findings for cancellation of the Williamson Act Land Use Contract. Therefore, Staff recommends your Commission recommend the Board of Supervisors approve cancellation of the Williamson Act Land Use Contract subject to payment of penalty fees; not to become effective until the California Energy Commission issues a permit following its environmental review of Docket No. 08-AFC-8A; direct Clerk of the Board to issue a Tentative Certificate of Cancellation subject to payment of penalty fees and compliance with all other conditions contained in the Tentative Certificate of Cancellation.

PUBLIC INQUIRY OR CORRESPONDENCE: Kern County Assessor's Office, Kern County Roads Department; Kern County Engineering, Surveying, and Permit Services Department/Floodplain Management; Kern County Public Health Services Department/Environmental Health Division; Kern County Farm Bureau, Inc.; Greater Bakersfield Chamber of Commerce; State Department of Conservation; Department of Conservation/Division of Oil, Gas, and Geothermal Resources; John and Chris Romanini (2); Setton Pistachio of Terra Bella, LLC; Maria Polite; Marjorie Bell; Trudy Douglass (2)

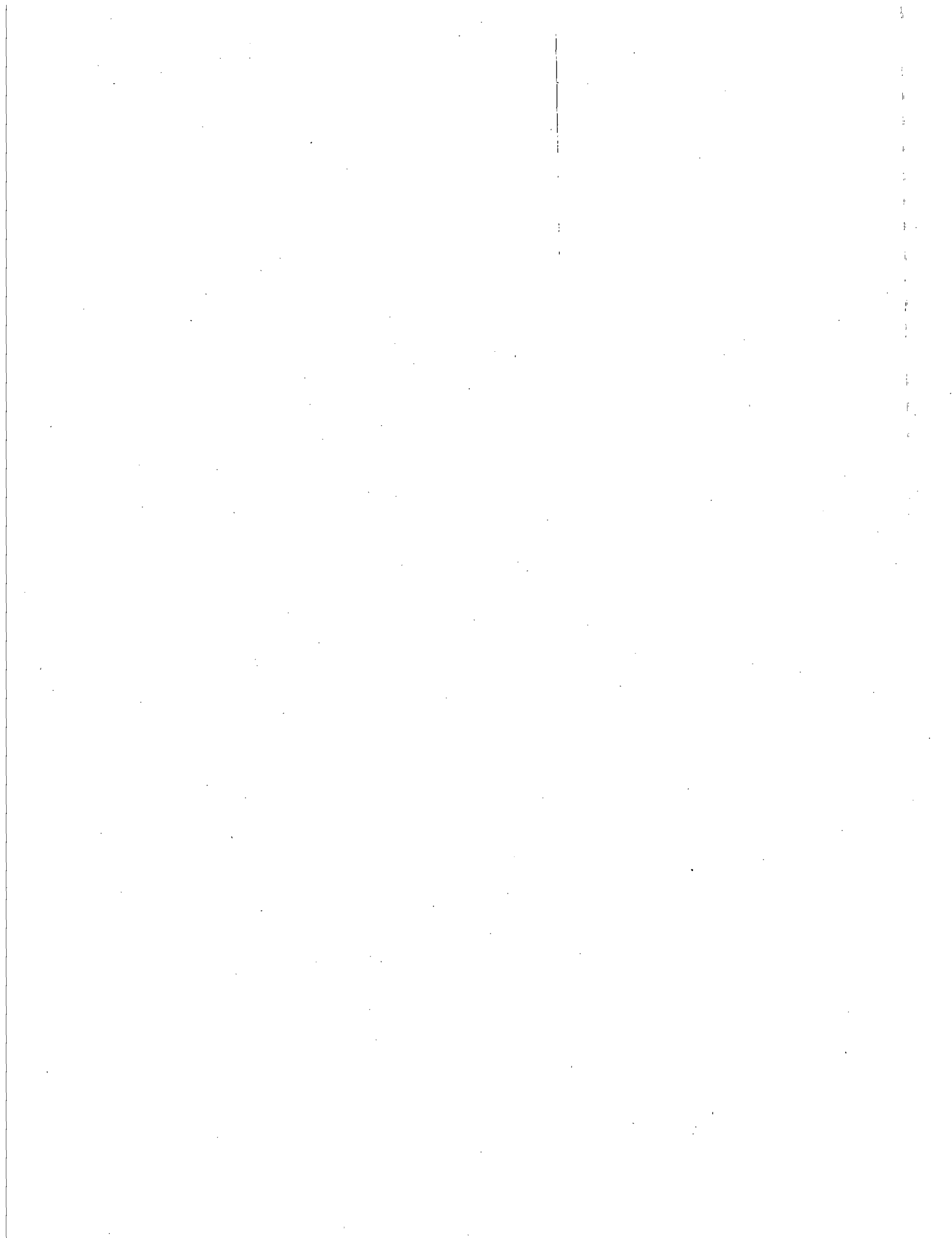
CEQA ACTION: Special Situation, Section 15271

DEPARTMENT RECOMMENDATION: Advise the Planning Commission to recommend the Board of Supervisors approve cancellation of the Williamson Act Land Use Contract subject to payment of penalty fees; not to become effective until the California Energy Commission issues a permit following its environmental review of Docket No. 08-AFC-8A; direct Clerk of the Board to issue a Tentative Certificate of Cancellation subject to payment of penalty fees and issue a Certificate of Cancellation upon receipt of written verification from the Kern County Planning and Community Development Department that confirms the applicants are in compliance with all other conditions contained in the Tentative Certificate of Cancellation; adopt the suggested findings as set forth in the attached Draft Resolution

CMM:JKM:sc

Attachments

Maps










Williamson Act Contract Cancellation No. 13-01

Hydrogen Energy
International LLC.
by
Manatt, Phelps, &
Phillips LP

In association with the
Hydrogen Energy California (HECA)
Project by SCS Energy
(CEC Docket No. 08-AFC-8A)

- Figure 1 -
Vicinity Map

Legend

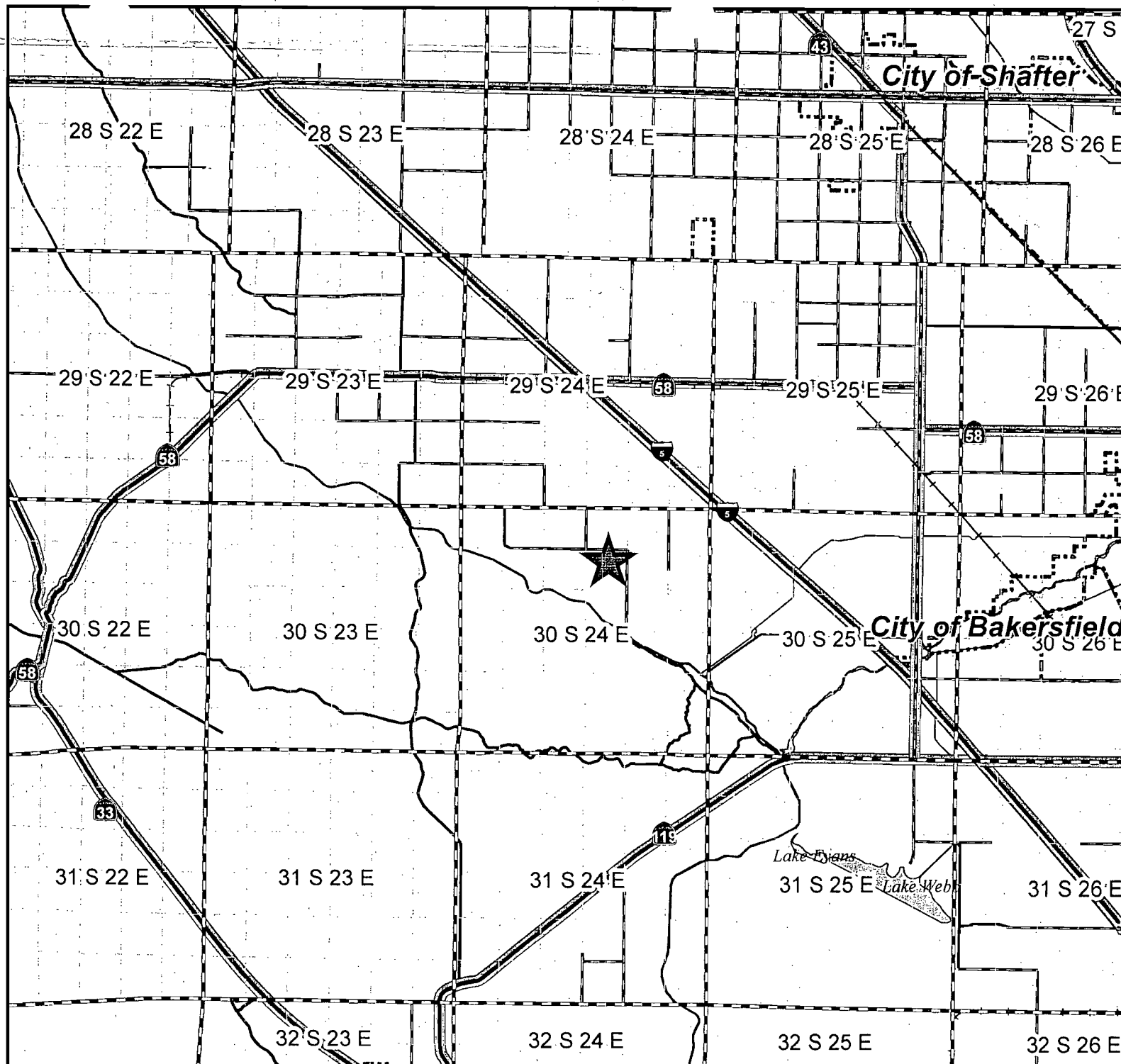
-  Township/Range
-  Sections
-  railroad
-  Kern Hwys
-  water bodies
-  City Limits
-  Project Site



0 1 2 3 Miles



Kern County
Planning & Community
Development Department



**Kern County
Planning & Community
Development Department**


Williamson Act Contract Cancellation No. 13-01


Hydrogen Energy
International LLC.
by
Manatt, Phelps, &
Phillips LP

In association with the
Hydrogen Energy California (HECA)
Project by SCS Energy
(CEC Docket No. 08-AFC-8A)

- Figure 3 - Existing Zoning

Legend

 WA Cancellation Area

 Sections

 Canal

 City Limits

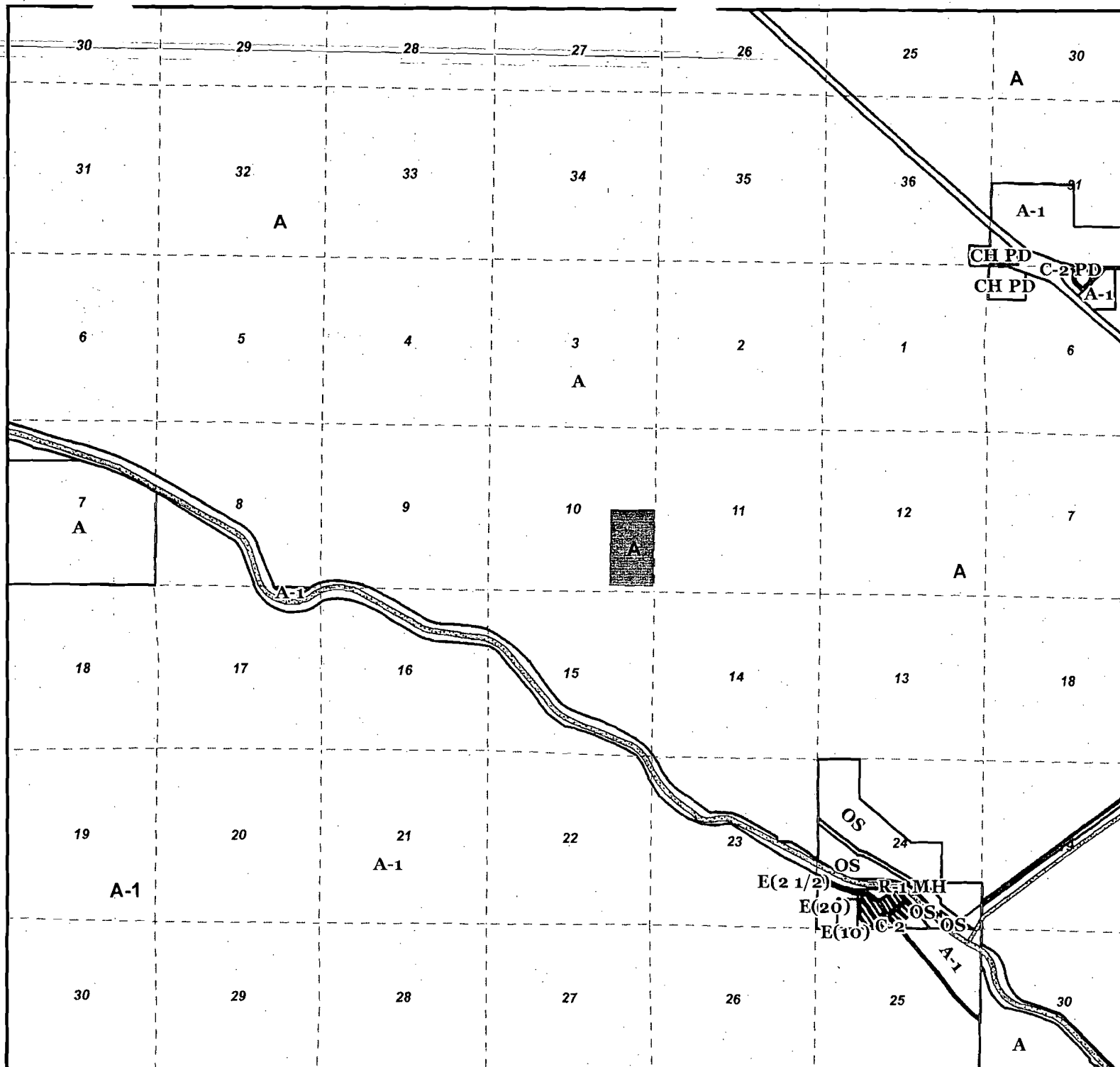


A - Exclusive Agriculture
A-1 - Limited Agriculture
OS - Open Space
E(x) - Estate (x acres)
R-1 - Single Family Residential
CH - Highway Commercial
C-2 - General Commercial
MH - Mobilehome Comb
PD - Precise Development Comb

0 0.4 0.8 1.2 Miles



Kern County
Planning & Community
Development Department













Williamson Act Contract Cancellation No. 13-01

Hydrogen Energy
International LLC.
by
Manatt, Phelps, &
Phillips LP

In association with the
Hydrogen Energy California (HECA)
Project by SCS Energy
(CEC Docket No. 08-AFC-8A)

- Figure 4 - Williamson Act Cancellation

Legend

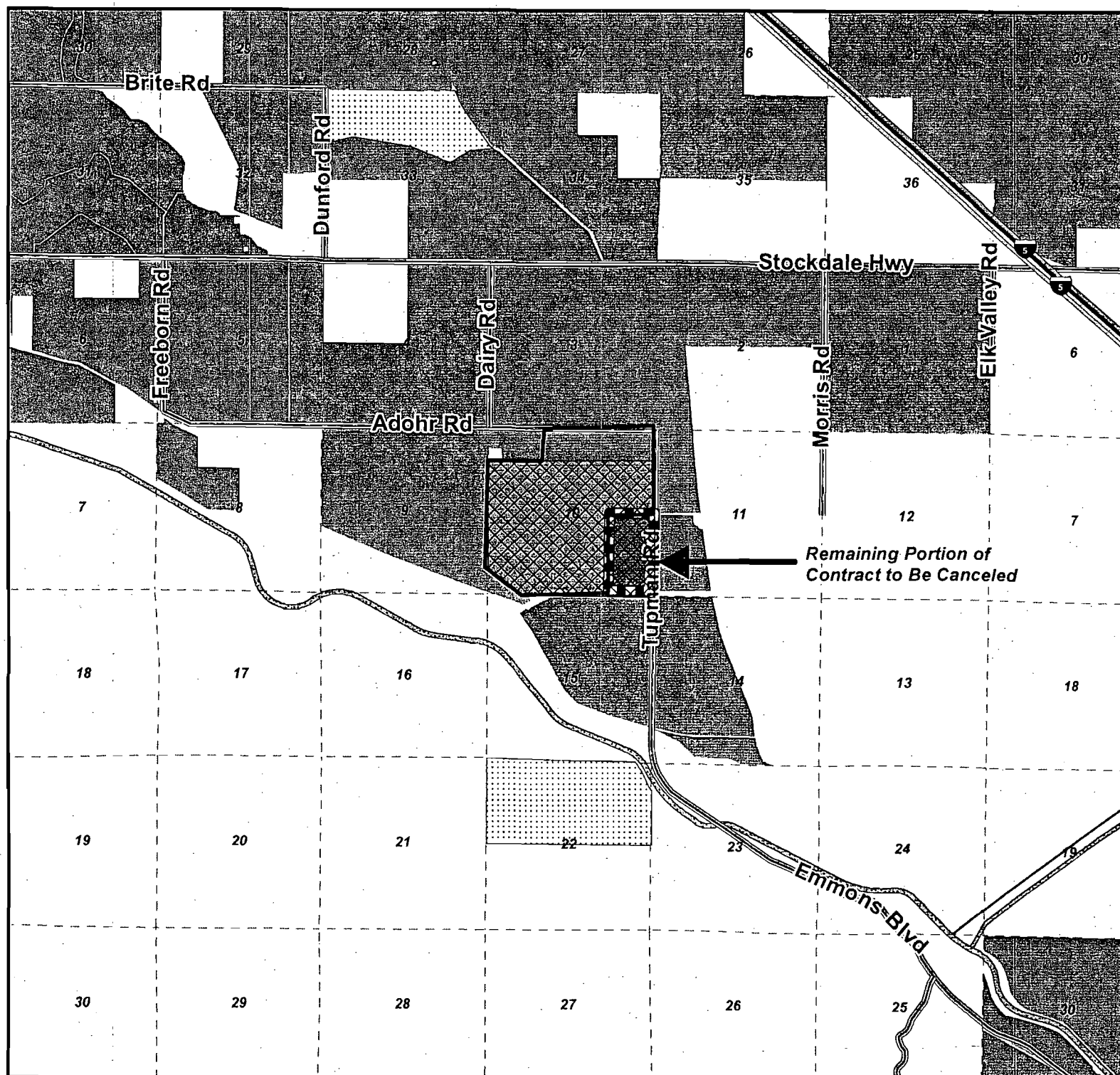
-  WA Cancellation Area
-  Sections
-  railroad
-  KernHwys
-  Canal
-  City Limits
-  Active Williamson Act
-  NonRenewal Williamson Act
-  HECA Project Site
-  Portion of WA Contract Previously Canceled per Resolution 2010-168

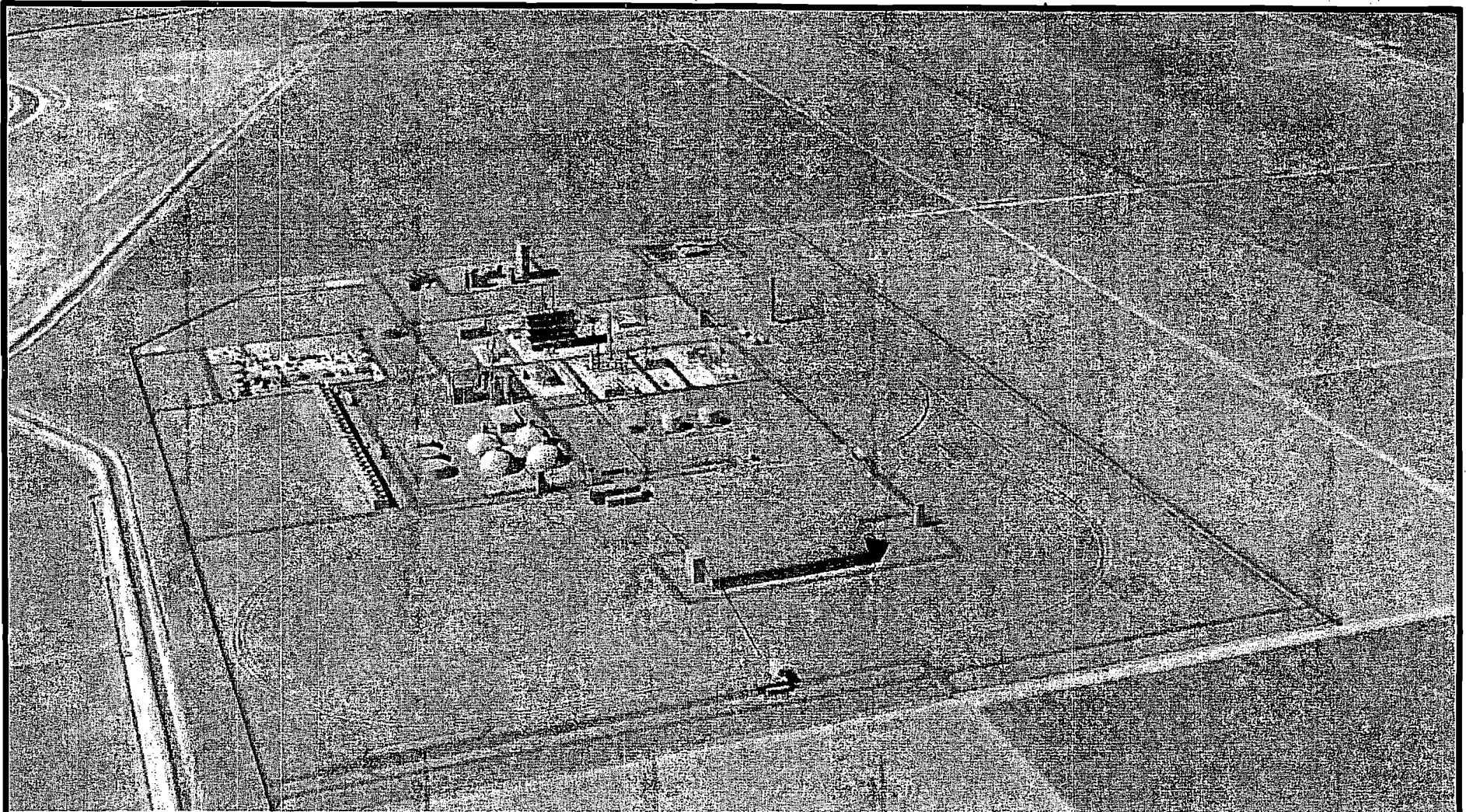


0 0.4 0.8 1.2 Miles



Kern County
Planning & Community
Development Department





California Energy
Commission
(CEC)
Application
CEC Docket
No. 08-AFC-8A

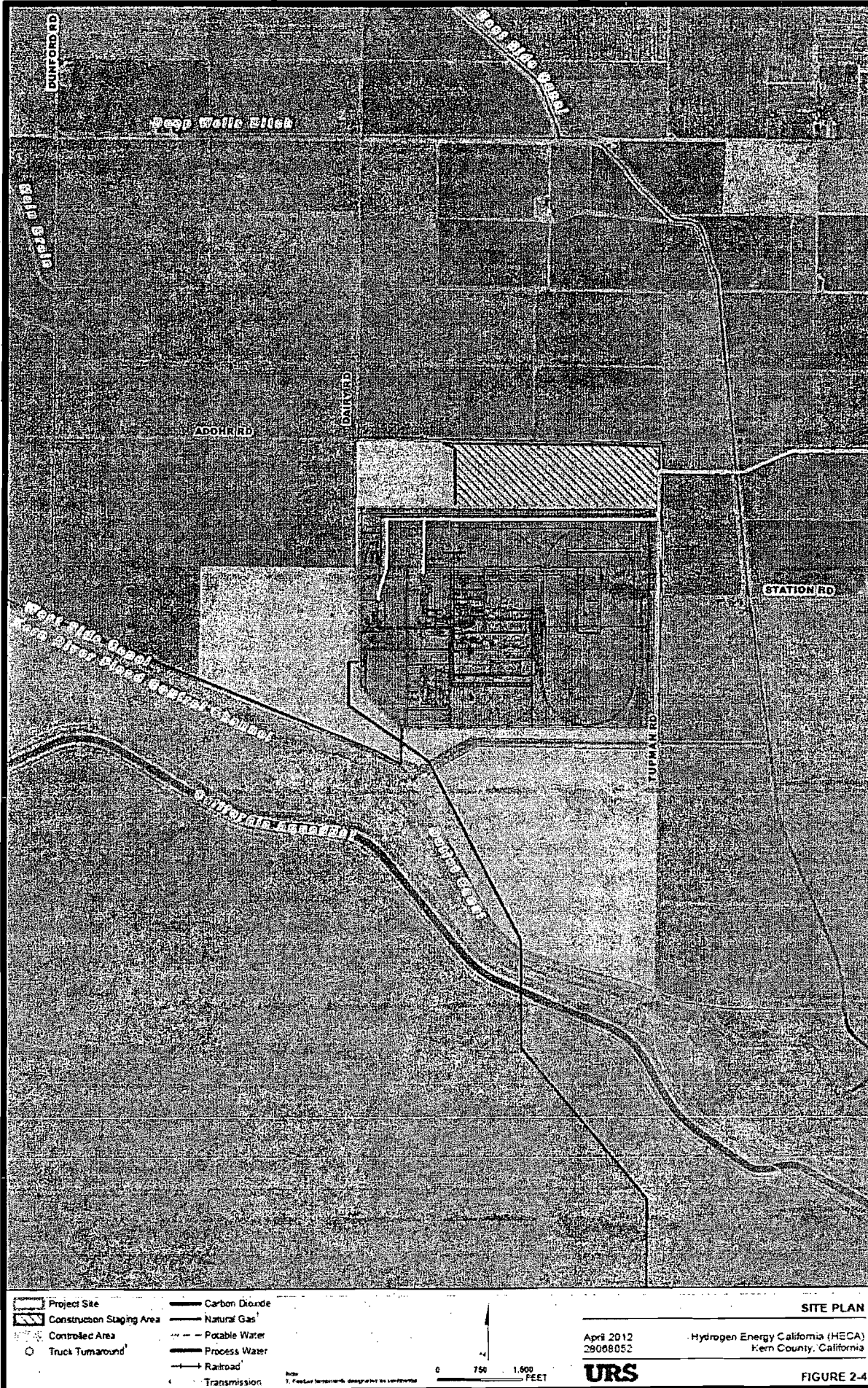
Hydrogen Energy
California Project
(HECA)
by
Hydrogen Energy
International LLC

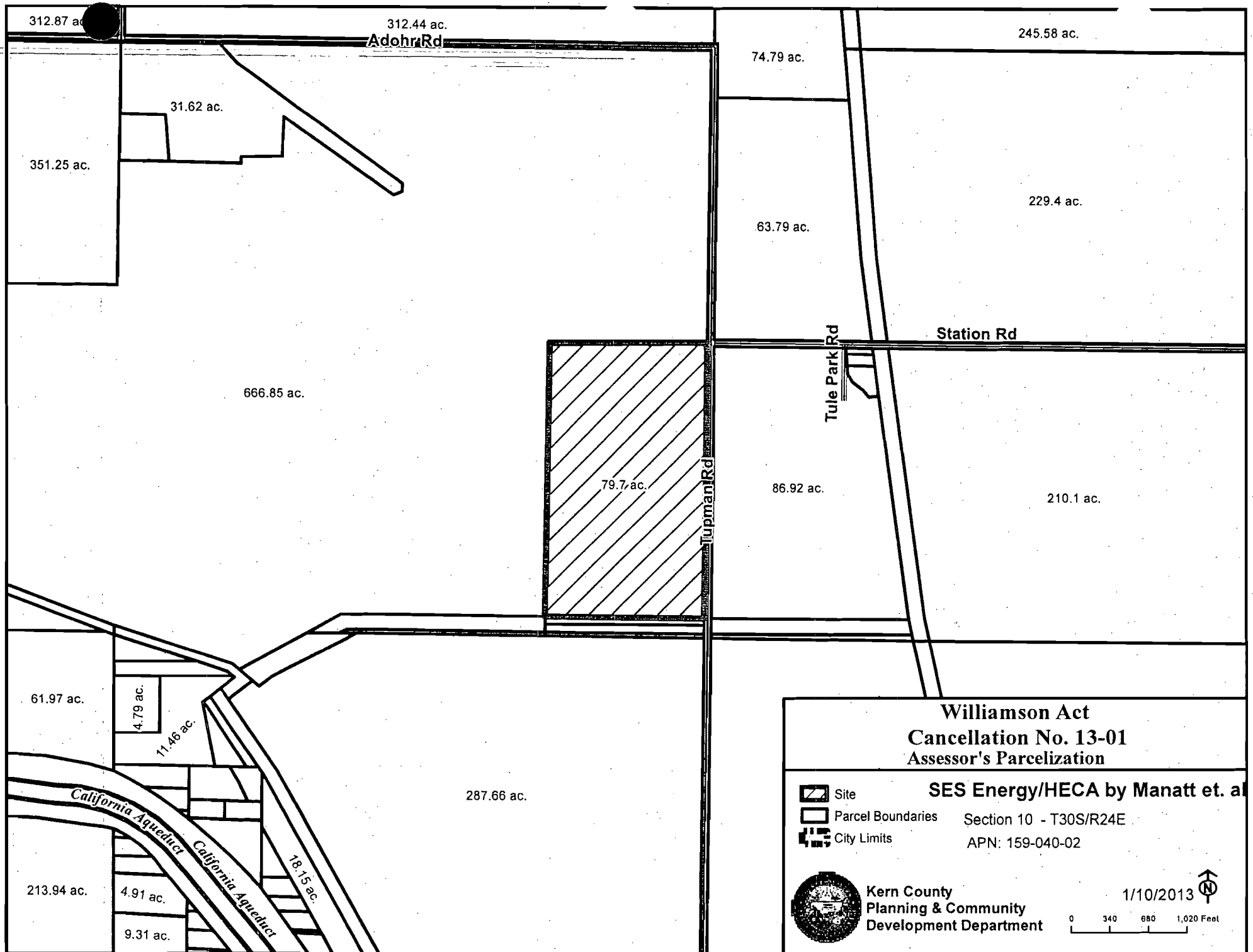
- Figure 5a -
Site Plan
(Rendering by Applicant)

California
Energy
Commission
(CEC)
Application
CEC Docket
No. 08-AFC-
8A

Hydrogen
Energy
California
Project
(HECA)
by
Hydrogen
Energy
International
LLC

- Figure 5b -
Site Plan
(Rendering by
Applicant)



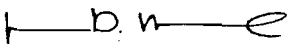


Public Comments

COUNTY OF KERN
DEVELOPMENT SERVICES AGENCY
ROADS DEPARTMENT
Office Memorandum

To: Lorelei Oviatt, Director
Planning and Community Development Department
Attn: Janice Mayes, Planner 2

May 17, 2013

From: Warren D. Maxwell, Transportation Development Engineer
Roads Department 

Subject: 7-2.1 Cancellation #13-01; Map 120 (West side of Tupman Road, south of Adohr Road)

This Department has reviewed the subject project and has no comment.

Thank you for the opportunity to comment on this project. If you have any questions or comment, please contact Brian Blacklock of this Department.

Kern County Roads Department Comments

August 13, 2013

HECA PROJECT MITIGATION

This department has reviewed the traffic impact study (by URS, Revision 2 dated July 2013) for the Hydrogen Energy California project, and determined the following to mitigate the impacts upon County Roads, () denote references to the traffic impact study.

Prior to construction, the HECA project and/or their representatives shall comply with following:

1. Under encroachment permit, issued by the Kern County Roads Department, reconstruct the following roads to Kern County standards as noted, this will include additional pavement at intersecting road returns to accommodate large truck turn movements, as necessary **(TRA-1)**:
 - a. Morris Road - Stockdale Highway to Station Road (Segment – 1.5 miles, 0.64' AC over 1.57' Aggregate Base).
 - b. Station Road - Morris Road to Tupman Road (Segment – 1 mile, 0.63' AC over 1.55' Aggregate Base).
 - c. Dairy Road - Stockdale Highway to Adohr Road (Segment – 1 mile, 0.33' AC over 0.81' Aggregate Base).
 - d. Adohr Road - Tupman Road to Dairy Road (Segment – 1 mile, 0.35' AC over 0.86' Aggregate Base).

2. Under encroachment permit, issued by the Kern County Roads Department, provide an asphaltic concrete overlay of the following roads to Kern County standards, this will include additional pavement at intersecting road returns to accommodate large truck turn movements **(TRA-1)**:
 - a. Stockdale Highway - State Route 43/Enos Lane to Interstate 5 (Segment – 4.7 miles, 0.12' AC).
 - b. Stockdale Highway - Interstate 5 to Dairy Road (Segment – 2.3 miles, 0.24' AC).
 - c. Stockdale Highway - Dairy Road to Wasco Way (Segment – 3 miles, 0.32' AC).
 - d. Wasco Way - Stockdale Highway to State Route 58 (Segment – 3 miles, 0.31' AC).

3. Under encroachment permit, issued by the Kern County Roads Department or Caltrans, where applicable, construct the following improvements to Kern County/Caltrans standards **(TRA-2)**:
 - a. State Route 43/Enos Lane and Stockdale Highway – Install Traffic Signal and associated improvements.
 - b. Interstate 5 Southbound Ramps and Stockdale Highway - Install Traffic Signal and associated improvements.
 - c. Dairy Road and Stockdale Highway – Construct a westbound left-turn lane and a northbound right-turn lane.
 - d. Dairy Road and Adohr Road - Reconstruct the intersection to accommodate the turning radius needed by large trucks to facilitate the necessary turning movements.
 - e. Morris Road and Stockdale Highway - Construct a westbound left-turn lane and a northbound right-turn lane.
 - f. Tupman Road and Adohr Road - Reconstruct the intersection to accommodate the turning radius needed by large trucks to facilitate the necessary turning movements.
 - g. Tupman Road and Station Road - Reconstruct the intersection to accommodate the turning radius needed by large trucks to facilitate the necessary turning movements.

- h. Morris Road and Station Road - Reconstruct the intersection to accommodate the turning radius needed by large trucks to facilitate the necessary turning movements.
- 4. Submit for review and approval to the Kern County Roads Department and Caltrans, a traffic control plan. The traffic control plan shall provide signs and traffic control measures as needed, such as lane closures and road, closures during the construction of the HECA project **(TRA-3)**.
- 5. Schedule lane or road closures during off-peak hours **(TRA-4)**.
- 6. Limit construction vehicular traffic to designated access roads, construction laydown, and worker parking areas, and the Project construction site only **(TRA-5)**.
- 7. Encourage carpooling as part of Transportation Demand Management **(TRA-6)**.
- 8. Record, through the Roads Department, an irrevocable offer of dedication to the County of Kern of additional right of way, where truck turn movements will require additional pavement and larger radius returns at intersecting roadways.
- 9. All easements shall be kept open, clear, and free from buildings and structures of any kind pursuant to Chapters 18.50 and 18.55 of the Kern County Land Division Ordinance. All obstructions, including utility poles and lines, trees, pole signs, fences, or similar obstructions, shall be removed from the ultimate road rights-of-way. Compliance with this requirement is the responsibility of the applicant and may result in significant financial expenditures.

During project operations, the HECA project and/or their representatives shall comply with following:

- 10. Enter into a secured agreement with the Kern County Roads Department to provide reimbursement for the annual cost of maintaining the improvements required by Items #1 and #2, **(TRA-1)** and **(TRA-2)**, respectively. In addition, further reimbursement will be required to ensure that these improvements, if demonstrably damaged by project-related activities, are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed. The extent of the repair will be determined in consultation with the applicant and the Kern County Roads Department.
- 11. Limit operations vehicular traffic to designated access roads. Encourage carpooling as part of Transportation Demand Management **(TRA-7)**.

Thank you for the opportunity to comment on this project. If you have any questions or comments, please contact Brian Blacklock of this Department.

Office Memorandum

KERN COUNTY

To: Planning Department
Janice Mayes

Date: June 6, 2013

From: Engineering, Surveying and Permit Services
Floodplain Management Section
Aaron Leicht, by Jason Scheer

Phone: (661) 862-5083
Email: ScheerJ@co.kern.ca.us

Subject: Notice of Public Hearing – Planning Commission
Cancellation #13-01, Map #120

From the information supplied with the Notice of Public Hearing, we have no comments or recommendations regarding the above project.



KERN COUNTY FARM BUREAU, Inc.

801 South Mt. Vernon Avenue
Bakersfield, CA 93307
Phone: (661) 397-9635 - Fax: (661) 397-3403
Web: kerncfb.com - Email: kcfb@kerncfb.com

Steve Maniaci
President

Greg Wegis
1st Vice President

Jeff Rasmussen
2nd Vice President

Benjamin McFarland
Executive Director

June 12, 2013

Kern County Planning and Community Development Department
2700 "M" Street, Suite 100
Bakersfield, CA 93301

RE: Cancellation #13-01, Map #120

Dear Kern County Planning Commission and Staff:

As way of background, the Kern County Farm Bureau (KCFB) is a formal intervenor in the California Energy Commission's siting process for the Hydrogen Energy California (HECA) Power Plant.

As you consider the cancellation of an existing Williamson Act contract for the HECA Power Plant, I am writing on behalf of KCFB to share with you our concerns as it relates to the impacts to Kern County agriculture. Specifically, the following five issues that were brought to the attention of the California Energy Commission at the July 2012 Scoping Meeting in Tupman;

- Potential bifurcation of farming operations as a result of new rail lines,
- Loss of state-designated important farmland,
- Disruption of neighboring farming activities, and
- Contribution of emissions negatively impacting local air quality, in which farming operations in the area are already significantly regulated.

In addition, we support a plan in place for a financial commitment as mitigation to protect neighboring agricultural production in the event unforeseen negative events impact surrounding crop production.

Thank you for your consideration and continued support of agriculture in Kern County.

Sincerely,

Steve Maniaci
President
Kern County Farm Bureau, Inc.

CHAMBER

June 11, 2013

Honorable Chairman Ronald Sprague
Kern County Planning Commission
1115 Truxtun Ave.
Bakersfield, CA 93301

Receive and File
PLANNING COMMISSION
Date: 6/13/13
Item No.: 3
From: _____
MTN: _____ 2nd _____
Clerk: AL

Dear Chairman Sprague:

The Greater Bakersfield Chamber of Commerce, representing local businesses, taxpayers and consumers, is writing to express our support for the Hydrogen Energy California (HECA) project for its potential to create new jobs and make significant contribution to the local tax base.

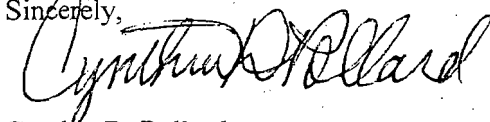
This project will create 200 permanent jobs once it is operational. In addition to the 200 permanent and skilled jobs created for the operation of the power and manufacturing facilities and the Enhanced Oil Recovery (EOR) and rail operations, the Project will create hundreds of other jobs in Kern County creating a positive impact on the supply chain and other ancillary industries.

The HECA project is also expected to generate approximately \$77.4 million in taxable sales revenue of which an estimated \$10.1 million will be retained in Kern County, providing needed revenue for municipal services that the County is struggling to provide at this time. After construction is complete, additional sales tax revenues will continue as materials are purchased during operation.

The project carries additional positive benefits, specifically in the efforts to reduce greenhouse gas emissions--primarily carbon dioxide--by removing thousands of tons of the gas and injecting it deep underground. The project anticipates a remaining 300 MW of power to be exported to California's energy grid which will allow us to stop relying on imported power. This will help California remain on the forefront of clean energy technology, while providing essential, reliable, low-carbon electricity and fertilizer to local markets

Because of its positive economic impact the Greater Bakersfield Chamber of Commerce representing 1,300 member businesses supports the HECA project. In times of economic challenge this project will help business development and economic growth not just in Kern County but throughout California. We encourage the county of Kern to foster this opportunity for economic growth.

Sincerely,



Cynthia D. Pollard
President/CEO

cc: Planning Commission--

Peter Belluomini, Chris Babcock, Brandon Martin, William Edwards

Greater Bakersfield Chamber of Commerce
Your Partner in Business



DEPARTMENT OF CONSERVATION

MANAGING CALIFORNIA'S WORKING LANDS

DIVISION OF LAND RESOURCE PROTECTION

801 K STREET • MS 18-01 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 324-0850 • FAX 916 / 327-3430 • TDD 916 / 324-2555 • WEBSITE CONSERVATION.CA.GOV

April 26, 2013

Ms. Patricia Thomsen, Planner 2
Kern County Planning & Community Development Department
2700 M Street, Suite 100
Bakersfield, CA 93301-2323

SUBJECT: HECA BY MANATT ET. AL – CANCELLATION OF LAND CONSERVATION ACT No. 13-01; APN 159-040-02

Dear Ms. Thomsen:

The Department of Conservation (Department) monitors farmland conversion on a statewide basis and administers the California Land Conservation (Williamson) Act. The Department has reviewed the cancellation petition submitted by the Kern County Community Development Department (County) and offers the following recommendations.

PROJECT DESCRIPTION

The project, as proposed, would gasify blends of petroleum coke (25 %) and coal (75%) to produce hydrogen to fuel a combustion turbine operating in combined cycle mode. The gasification component would produce 180 million standard cubic feet per day (MMSCFD) of hydrogen to feed a 400 megawatt gross, 288 MW net combined cycle plant providing California with dispatchable baseload power to the grid. The gasification component would also capture approximately 130 MMSCFD of carbon dioxide (or approximately 90 percent) which would be transported and used for enhanced oil recovery and sequestration (storage) in the Elk Hills Oil Field Unit. The HECA project would also produce approximately 1 million tons of fertilizer for domestic use.

The original project design included the cancellation of approximately 491 acres of adjacent Williamson Act contract land, which was tentatively approved by the Kern County Board of Supervisors on June 29, 2010 (Resolution 2010-168). Because of problems with habitat for endangered species in the original location for the project, the company retracted the original design. In September 2011, the applicant modified the design which included a change to the project boundaries. A portion of the new proposed project site is encumbered by the remaining Williamson Act contract. To accommodate the project the applicant is submitting a petition to cancel the Williamson Act contract on the residual 71.56 acres of land.

REQUIRED CANCELLATION FINDINGS

The requirements necessary for cancellation of Williamson Act contracts are outlined in Government Code Section 51282, which the County must document to justify the cancellation through a set of findings. Based on the County's request, the project is being processed under the public interest findings outlined below in the Department's comments.

DEPARTMENT COMMENTS ON PUBLIC INTEREST CANCELLATION FINDINGS

a. Other Public Concerns Substantially Outweigh The Objectives Of The Williamson Act:

The Department believes that the terms "public" and "interest" refer to the interest of the public as a whole in the value of the land for open space and agricultural use. Though the interests of the local and regional communities involved are also important, no decision regarding the public interest can be based exclusively on the local benefit of the proposed project.

The 71.56 acre site under contract is designated Prime Farmland per the 2010 Kern County Important Farmland Map. Data from county staff indicates that the site has had an active agriculturally productive history including cotton, wheat, and onions. Current 2012 Farmland Mapping and Monitoring Program (FMMP) imagery data indicates irrigated vegetation. Together with the supplied cropping history, the data would indicate that the land is still agriculturally productive.

After a review of the agricultural data, and a search for Farmland Mapping and Monitoring Program (FMMP) data denoting circumstances that might limit the use of the parcel for agricultural activities, the Department did not find substantial evidence that would support the opinion that the land is unsuitable for agricultural production.

Given the agricultural productivity of the site in question, a decision regarding the quality of this land and cancellation of this contract should be viewed relative to the need for this type of project. In the County's deliberations, it must be shown that agricultural and open space objectives, which are protected by the Act, are substantially outweighed by other public concerns before the cancellation can be deemed "in the public interest."¹

b. There Is No Available And Suitable Proximate Non-Contracted Land For The Use Proposed On The Contracted Land:

With regard to suitability, as concluded in the 2012 and 2009 Revised Applications for Certification (AFC) for the project filed with the California Energy Commission (CEC), there are no alternative sites that meet the highly specific site selection requirements of the project discussed above. Prior to selecting the project site, HECA LLC submitted its initial AFC (08-AFC-8) to the CEC on July 30, 2008, which proposed the Project on an adjacent site. HECA LLC subsequently decided to move the project when it discovered the existence of previously undisclosed sensitive biological resources at the prior site. As a result, HECA LLC was required to conduct an alternative site analysis to identify an alternative site for the project, which ultimately identified the general area of the currently

¹ *Sierra Club v. Hayward* (1981) 28 Cal 3d 840, 171 Cal Rptr 619, 623 P2d 180, 1981 Cal LEXIS 117, superseded by statute as stated in *Friends of East Willits Valley v. County of Mendocino* (2002, Cal App 1st Dist) 101 Cal App 4th 191, 123 Cal Rptr 2d 708, 2002 Cal App LEXIS 4509.

proposed site. In the process, several possible alternative sites in the vicinity of the unincorporated communities of Buttonwillow and Tupman were considered. However, the alternative sites were rejected for various reasons, including topography, distance from the proposed carbon dioxide custody transfer point, lengths of linear facilities, sensitive environmental receptors and/or land availability. In addition, each of these sites (with one exception), like the project site, were contracted under the Williamson Act.

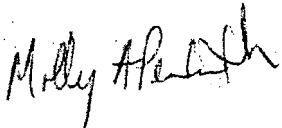
CANCELLATION FINDINGS CONCLUSIONS

Because the previous site considered for tentative cancellation was Prime, irrigated, and agriculturally productive farmland, the landowner may want to consider, that if a portion of the adjacent land under contract is no longer needed for the project, and it still meets the requirements of the Williamson Act, that the tentative cancellation is officially removed from that portion per §51283.4(c) with a Certificate of Withdrawal of Tentative Approval of a Cancellation of Contract.

Thank you for the opportunity to provide comments on the proposed cancellation. Please provide our office with a copy of the Notice of the Public Hearing and any staff reports on this matter ten (10) working days before the hearing and a copy of the published notice of the Board's decision within 30 days of any tentative cancellation pursuant to GC section 51284.

Within 30 days of the landowner, satisfying the conditions and contingencies required in a Certificate of Tentative Cancellation, and payment of the required fee, the Board will record a Certificate of Cancellation for the contract. The county treasurer is required to send the cancellation fee to State Controller within 30 days of recordation of Certificate of Cancellation and a copy of the Certificate of Cancellation to the DOC. If you have any questions concerning our comments, please contact Meri Meraz, Associate Environmental Planner at (916) 445-9411 or at mmeraz@conservation.ca.gov.

Sincerely,



Molly A Penberth, Manager
Division of Land Resource Protection
Conservation Support Unit

Janice Mayes - Cancellation 13-01, Map 120

From: "Frery, Dayne@DOC" <Dayne.Frery@conservation.ca.gov>
To: "mayesj@co.kern.ca.us" <mayesj@co.kern.ca.us>
Date: 6/6/2013 2:40 PM
Subject: Cancellation 13-01, Map 120

Janice, the Division has no comment on the 72-acre portion of the Hydrogen Energy International, LLC project that is being cancelled as part of an existing Williamson Act contract. There are no oil & gas wells located in that parcel.

There is one abandoned dry hole to the west of that Williamson parcel, located in the NW/4 of the SE/4 of Section 10. I'll address that well as I normally would when the main project *Notice of Public Hearing* is received.

Dayne L. Frery, P. G.
Associate Oil and Gas Engineer, CEQA Program
California DOGGR, Bakersfield Office
(661) 334-4601 Direct Line

We are opposed to the cancellation from the Williamson Act of an additional 72 acres of prime farmland for HECA. They already have close to 500 acres taken out. It is time to say "STOP" to additional growth.

Our prime farm land is along the proposed rail line and along the roads leading to the HECA site. This area is known to have some of the richest farmland in the United States. There are thousands of acres of food crops very near the proposed site. And it is all at risk. The food safety issues from HECA's demonstration project contaminating our crops is a real threat. Their never-before-tried on this scale in the whole world plant is an experiment. If something goes wrong with their chemical production, their coal gasifier, their refinery waste, a toxic spill, or anything else, it could devastate our established farming industry. Processors can refuse to accept our food crops if there is even a suggestion of contamination. What is the benefit to Kern County to allow this experiment? Does it outweigh the benefit of our county's great name as a food producer?

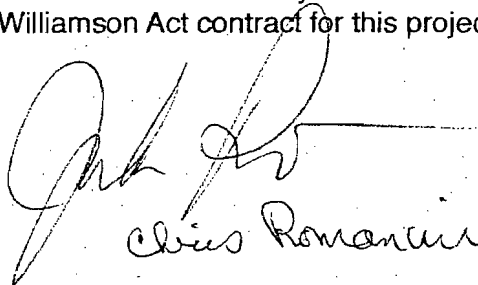
Wasco has a railroad coal depot. Coal has been dropping from rail cars onto the tracks and is up to 6 inches deep in Wasco. This mess on the ground extends as far as the eye can see. Nobody is taking responsibility for cleaning up this coal in Wasco. We can assume coal will fall onto the tracks near HECA, also, and blow into our fields. Coal has toxics in it...heavy metals, mercury, and other contaminants. With the huge amount of coal delivered daily to HECA the risk of HECA's operation contaminating our soil and our food crops is real. The food crops in this area include pistachios, cherries, almonds, grapes, and alfalfa. The federal government has issued warnings in the past when there was a contamination scare in a nut crop, and nobody wanted to buy our produce. Even worse, what if there is more than a scare? What if someone is hurt from our food crops contaminated by HECA? What if someone in the neighborhood is hurt by an accidental release of a toxic in the air? Or an explosion from all their ammonia chemicals like in West Texas? They are putting the public health and our farming industry at risk as they test their ideas. Please do not allow them to expand the threat beyond what has already been allowed.

This project is in the wrong location. It jeopardizes our rich farming industry. Don't allow this idea to grow larger by another 72 acres. The preservation of prime farmland substantially outweighs the benefits of creating and testing a carbon sequester project in the interest of global warming. They should work with the land already cancelled. Please say NO to more land being canceled from the Williamson Act contract for this project.

Sincerely

John and Chris Romanini

John Romanini and Sons
PO Box 786
Buttonwillow, CA 93206

The block contains two handwritten signatures. The first signature is a stylized, cursive 'JR' for John Romanini. The second signature is a more legible cursive 'Chris Romanini'.

Cancellation #13-01 Map 120 Williamson Act Cancellation for HECA

Date: 6/13/13
Item No.: 3
From: _____
MTN: _____ 2nd _____
Clerk: [Signature]

**RETURN
TO CLERK**

We are opposed to the cancellation from the Williamson Act of an additional 72 acres of prime farmland for HECA. They already have close to 500 acres taken out. It is time to say "STOP" to additional growth. Staff did not explore the public concern of food safety issues. You cannot justify that sequestering carbon dioxide in the interest of using COAL as an energy source substantially outweighs preservation of prime farmland when neighboring farmland is jeopardized by the new plant.

Our farm land is along the proposed rail line and along the roads leading to the HECA site. This area is known to have some of the richest farmland in the United States. There are thousands of acres of food crops very near the proposed site. And it is all at risk. The food safety issues from HECA's demonstration project contaminating our crops is a real threat. Their never-before-tried on this scale in the whole world plant is an experiment. If something goes wrong with their chemical production, their coal gasifier, their refinery waste, a toxic spill, or anything else, it could devastate our established farming industry. Processors can refuse to accept our food crops if there is even a suggestion of contamination. What is the benefit to Kern County to allow this experiment? Does it outweigh the benefit of our county's great name as a food producer?

Wasco has a railroad coal terminal. Coal has been dropping from rail cars onto the tracks and is up to 6 inches deep in Wasco. This mess on the ground extends as far as the eye can see. Nobody is taking responsibility for cleaning up this coal in Wasco. We can assume coal will fall onto the tracks near HECA, also, and blow into our fields. Coal has toxics in it...heavy metals, mercury, and other contaminants. With the huge amount of coal delivered daily to HECA the risk of HECA's operation contaminating our soil and our food crops is real. The food crops in this area include pistachios, cherries, almonds, grapes, and alfalfa. The federal government has issued warnings in the past when there was a contamination scare in a nut crop, and nobody wanted to buy our produce. Even worse, what if there is more than a scare? What if someone is hurt from our food crops contaminated by HECA? What if someone in the neighborhood is hurt by an accidental release of a toxic in the air? Or an explosion from all their ammonia chemicals like in West Texas? They are putting the public health and our farming industry at risk as they test their ideas. Please do not allow them to expand the threat beyond what has already been allowed.

This project is in the wrong location. Its jeopardizes our rich farming industry. Don't allow this idea to grow larger by another 72 acres. The preservation of prime farmland substantially outweighs the benefits of creating and testing a carbon sequester project in the interest of global warming. They should work with the land already cancelled. Please say NO to more land being canceled from of the Williamson Act contract for this project.

Sincerely

John and Chris Romanini

John Romanini and Sons

[Handwritten Signature]

PO Box 786
Buttonwillow, CA 93206



Setton Pistachio of Terra Bella, Inc.

9370 Road 234 • Terra Bella, California 93270
Tel: (559) 535-6050 • Fax: (559) 535-6089 • Email: Info@settonfarms.com

Receive and File
PLANNING COMMISSION

Date: 6/13/13
Item No.: 2
From: _____
MTN: _____ 2nd _____
Clerk: [Signature]

June 3, 2013

Kern County
Planning Department
2700 M Street
Bakersfield, CA 93301

Re: Cancellation # 13-01 Map 120 for HECA plant

RETURN
TO CLERK

Setton Pistachio of Terra Bella is a processor and farmer of pistachios. We have been processing pistachios from several growers in the Buttonwillow area for several years and rely on their production. We are against allowing additional acreage to be cancelled from the Williamson Act as we have been developing markets for pistachios from the Buttonwillow area.

We feel it is in the public's best interest to preserve these acres for production agriculture in Kern County. Kern County and specifically the Buttonwillow area is developing the reputation of producing very nice pistachio crops.

On another note, we are concerned that this coal plant will adversely affect the ability of this area to produce and harvest pistachios with the large amount of incoming truckloads of coal and outgoing truckloads of waste on a daily basis. Even though mobile equipment like trucks are not regulated by the air quality control district, this heavy volume will produce significant amounts of pollution in our valley that already has the dirtiest air in the nation. And the addition of several hundred truck trips every day (upwards of 800 trips per day) during harvest with the large harvest equipment entering and exiting the pistachio fields is a very dangerous situation.

Jeffrey Gibbons
Grower Relations Manager

13 JUL -1 AM 11 '10

FILED IN CLERK OF
THE BOARD OF SUPERVISORS
TO: BOARD OF SUPERVISORS

FROM: Marjorie L. Bell, 3419 La Cresta Dr., Bakersfield, CA 93305

Referred To _____
Copies Furnished Each Supervisor And CAO
Planning, Co Counsel
Filed by BD Supv 7-1-13
KATHLEEN KRAUSE
Clerk of the Board of Supervisors
By K Krause

After studying what's at stake in building the hydrogen energy plant in Kern County, it's easy to say "no" to the HECA project. It's not "too big to fail."

Is it really in the "**public interest**" to locate a large coal-burning power plant in the middle of farming areas in Kern County? Is it really in the public interest to lug 300 diesel trucks full of dirty coal across the valley to fuel this plant putting at risk our farming industry, which currently is very productive? Why we would use up finite water resources to cool this plant when the same water (that you conveniently label "brackish") is now already being used by farmers? It is a certainty that HECA's water use will hasten the downfall of farming in this area of the Valley--and mainly because of the use of the finite resource of water.

As you may know, oil companies in the Midwest can readily afford to outbid farmers for the water that companies need to frack. The oil industry is driving farmers out of business. The same thing is most likely to happen here with the HECA project, which would use large quantities of water and compete with farmers for our limited supply.

There is a concept in economics called "**negative externality**"—that is, the cost of a project to be passed onto people who live in the area. One negative externality is health costs caused by increases in air pollution. Credits that the county already bought over the past years don't help decrease air pollution now. We also pay more money in taxes and higher health insurance premiums because we live in an area which has incredibly dirty air.

We still haven't heard the figures. It costs millions and millions of dollars to build, upgrade and maintain roads to the plant in order to accommodate 300 diesel truckloads of coal. Also that would be the expense of building landfills for the millions of tons coal leftovers, the slag? Who is going to pay for landfills for the slag? Where will we put landfills? (Maybe in Los Angeles in exchange for the sludge they bring here?) Is HECA going to pay the tab for roads, road maintenance and landfill? Is the railroad going to allow a spur to the site? Do we have that all in writing?

In summary, HECA may well be a **boondoggle**, kind of like the Alaska's "bridge to nowhere," which became a symbol for federal spending gone awry. So many millions of dollars have been spent already to develop, design and redesign HECA that it's hard to stop spending federal money till it's gone. One more thing: the price of solar energy is going down (currently at 15 cents per kilowatt hour, and the price will continue to decrease. It is quite possible that a large facility such as HECA will not be able to compete with solar energy in the next 10 years, and we will be left with a large failed industrial plant eyesore out near Tupman.

The Board can help stop HECA now by voting not to support this venture.

Marjorie Bell (6-29-2013)

June 27, 2013

Planning Commissioners
County of Kern Public Services Building
2700 M Street, Suite 100
Bakersfield CA 93301

Dear Commissioners,

It has come to my attention that you have been requested to consider canceling of the Williamson Act for an additional 70 plus acres for the proposed HECA plant. Please just say no! If it was necessary for HECA to go back to the "drawing board" to fulfill their plant's need, how many other items have they neglected to address? How many changes will they continue to make? Do you trust their "facts and figures"? As a citizen of Kern County for almost fifty years, I do not favor the building of this coal plant in our valley. At all costs we must protect our ag community. To add land for coal storage and railroad spurs, are we really willing to cancel the Williamson Act? Please look past the promise of tax revenue (which we all know comes at a cost to government for services needed) and not approve this request. Don't we want to preserve our way of life? Do we want to lose more acres to asphalt and pavement? I for one do not. Just say no!

Thank you for your consideration.

Sincerely,



Maria M. Polite
3131 La Cresta Drive
Bakersfield, CA 93305



KERN COUNTY
Public Health Services
DEPARTMENT

MATTHEW CONSTANTINE
DIRECTOR

2700 M STREET, SUITE 300 BAKERSFIELD, CALIFORNIA, 93301-2370 VOICE: 661-862-8740 FAX: 661-862-8701 WWW.CO.KERN.CA.US/EH

INTEROFFICE MEMORANDUM

To: Janice K. Mayes, Planner 2
From: Jeremy Nathan, EHS in Training
Subject: Cancellation #13-01, Map #120

Date: May 31, 2013

The Kern County Environmental Health Division has reviewed the cancellation above. This division has the local regulatory authority to enforce state regulations and local codes as they relate to waste discharge, water supply requirements, and other items that may affect the health and safety of the public or that may be detrimental to the environment.

The design of the project or the type of improvement is not likely to cause serious public health problems; therefore, this Division has no comments or recommendations and does not wish to impose any conditions on the subject project.



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From: chris ROMANINI <romaninichris2@gmail.com>
To: "kitchenj@co.kern.ca.us" <kitchenj@co.kern.ca.us>
Date: 07/24/2013 10:32 AM
Subject: for the roads dept
Attachments: CEC-700-2013-001-PSA (dragged).pdf

Look how many TRUCKS they NOW say are coming..... over 910 round trips just with feed stock .
Not mentioning waste removal. Can you forward this to ROADS?

Thank you,,,
Chris Romanini

Thank you

separation unit, to the manufacture of urea pastilles and urea-ammonium nitrate; both products are agricultural fertilizers. Intermediate products produced to make fertilizer products, but not be sold as products, include anhydrous ammonia and nitric acid.

Additionally, approximately 90 percent of the carbon dioxide (CO₂) produced by HECA, estimated to be about 3 million tons per year, would be captured. Approximately 2.6 million tons would be compressed and sent through a three-mile long, 12" diameter pipeline to the Occidental Elk Hills Oil Field CO₂ enhanced oil recovery (EOR) Processing Facility where it will be conditioned, and distributed to satellite locations and then to injection wells as part of an on-going enhanced oil recovery project. The CO₂ would be a key component of a water-alternating-gas process that displaces and moves oil and gas from the pore-spaces to the production wells and would result in the eventual sequestration (permanent geologic encapsulation) of the injected CO₂ within the reservoir's vacated pore-spaces. Approximately 0.4 million tons of CO₂ per year would be used in fertilizer production and not considered to be sequestered. HECA would be expected to have a 25 year life span, and Occidental Elk Hills, Incorporated (OEHI) EOR project would use the CO₂ from HECA for the life of the HECA project (see the **Sequestration and Greenhouse Gas** section of this document).

HECA has proposed two coal transportation alternatives: Alternative 1 is a proposed 5-mile private railroad spur that would connect with the existing San Joaquin Valley Railroad at Buttonwillow to HECA. Alternative 1 would allow for the delivery of coal and the possible transportation of the proposed manufactured products to commercial markets. Alternative 2 would involve transportation of the coal to HECA from the coal transloading facilities in Wasco using trucks, an approximately 27-mile route. Manufactured product would also require truck transport from the project site under Alternative 2. (**Project Description Figures 6, 7, and 9**).

During construction traffic would range as high as 1230 vehicle round trips per day, with an additional 50 truck deliveries, and 60 soil deliveries to the site. During operations (post-construction) expected traffic levels were estimated for each of the two alternatives. Alternative 1, would likely have 154 vehicle round trips per day for operations staff, 213 truck round trips for process material (fertilizers) and 175 truck round trips for feed stock deliveries (predominantly petcoke and fluxant). Alternative 2 would have 154 vehicle round trips, 399 truck round trips for process materials, and 910 truck round trips delivering feed stock (coal, petcoke and fluxant). The **Traffic and Transportation** and the **Land Use** sections of this document discuss these elements in more detail. Staff also analyzes the associated impacts from each transportation alternative further in the **Air Quality, Public Health, and Noise** sections of this document.

HECA proposes to use Mitsubishi Heavy Industries equipment to gasify petroleum coke (petcoke) from southern California refineries, bituminous coal from mines in New Mexico and limestone fluxant from California sources, producing a hydrogen-rich synthesis gas (syngas) to be used in a combustion turbine and a steam turbine to drive a single-shaft generator producing between 405 and 431 megawatts (MW) of gross base-load electricity, with up to 300 MW net electrical output, and would connect to the Pacific Gas and Electric (PG&E) 230kV transmission network at a new switchyard to be constructed approximately 2 miles east of the project site. The proposed transmission

There are significant negative impacts in the HECA project that you need to consider. There are so many health and safety issues involved .. their air pollution, their dangerous chemicals and fertilizer, and food contamination issues. With so much at risk, you can not conclude that the public interests will be benefited by HECA.

The air. San Joaquin Air Pollution District's notice in the Californian said HECA will result in significant emission increases of tons of pollutants per year into our air. Can those tons of pollutants really be beneficial to us?? HECA concludes that their project will be a net air quality benefit because they will buy air credits. Are we to believe that the air we breath really is going to be safer than it is now because they will buy air credits? Are the parents of a child with asthma supposed to believe the air will be better for that child because HECA is in town with 350 trucks of coal stewed up daily with 100 trucks of refinery waste? Will that child really be benefited by HECA?

And how about the danger of all that fertilizer? ... a mile and a half from the Tupman school ? What blew up in West Texas, killing 15, was only 30 tons. HECA will be producing almost 3000 tons a day. Not 30 tons. They say the Texas explosion was felt 50 miles away. Why are we not discussing the safety issues of an experimental project blowing up so close to those kids in Tupman? And I'm not even addressing the lethal elements in anhydrous ammonia that they will be producing.

And the health risk of contaminating food crops is real. Coal has toxics in it. Refinery waste has toxics in it. HECA is surrounded by farms producing food crops. It is realistic to assume that our food crops and our land is at risk of contamination from HECA's toxics. The threat of hurting people who consume our crops is real.

It is with great disappointment that the Planning Dept's conclusion is approval. They said that the public's interest to provide power will protect the health and safety of the State's expanding population. It is sad that WE with the most polluted air in the nation should suffer even more for the good of the state. How can you vote that OUR health and safety is "substantially outweighed" by the state's interest in this plant? To allow additional acres to be cancelled from the Williamson Act is wrong given it's threat to our health and safety. Please say NO.

Chris Romanini

From: Chris Romanini <roman93311@aol.com>
To: "kitchenj@co.kern.ca.us" <kitchenj@co.kern.ca.us>
CC: <district4@co.Kern.CA.us>, <CouchD@Co.Kern.CA.us>
Date: 07/24/2013 10:17 AM
Subject: HECA corrections CEC needs to make
Attachments: CEC-700-2013-001-PSA (dragged) 1.pdf; Part.002; CEC-700-2013-001-PSA (dragged) 6.pdf; Part.004

Supervisor Couch and Jacque Kitchen

It is important to correct both of these errors in the CEC's preliminary staff assessment, so the voting commissioners

and possible investors won't believe Kern is promoting , or not taking action on an important motion.

This first statement is not correct. Please ask the CEC to correct this statement or show documents where this information came from.

75-58. However local farmers argue the groundwater has greater beneficial uses for irrigation of pistachio crops. Buena Vista Water Storage District (BVWSD) developed a Brackish Groundwater Remediation Plan, which indicates the HECA project could play a large role in its implementation. Staff has been unable to confirm that the plan for HECA to use this groundwater has any beneficial effect on water quality in the aquifer. In fact staff believes, given current data, that there could be a significant impact on water quality that could affect other users. In addition, staff has concluded that the planned well field extraction rate (7,500 AF/yr) may exceed the annual storage increase characterized by historical water level trends. This would be a significant impact for which no mitigation has been identified. The applicant and BVWSD have indicated there is additional information staff has not considered in the analysis. Staff has repeatedly requested this information and to date has not received it.

Staff is in the process of investigating the feasibility of dry cooling the facility, which would reduce project water demand by approximately 90 percent of the proposed amount and could reduce water costs by approximately \$76,000,000 over the 25-year life of the project. Such an analysis could mitigate potential impacts from overdraft and to water quality.

Waste Management

A major byproduct of the HECA project will be gasification solids (coal/petcoke/limestone ash and slag). The applicant is researching possible ash and slag markets, including for use in asphalt, sandblasting, or other industrial uses. If no market can be found, however, then it will have to be landfilled, which could cause Kern County to exceed CalRecycle's acceptable waste/recycle ratio. Kern County has requested a modification from CalRecycle that would exempt these wastes from the requirement, but so far CalRecycle has not responded. It would be helpful to get CalRecycle to weigh in on whether it would grant the modification prior to the Final Staff Assessment. The applicant is assessing the economics and logistics of train transportation of ash and slag to out-of-state landfills. It is unclear how this would affect Kern County's CalRecycle compliance. Additionally, as a result of previous site activities, recent soil sampling and analytical testing indicated elevated concentrations of petroleum hydrocarbons and other contaminants. Prior to publication of the FSA/FEIS staff recommends that the project owner develop a Soils Management Plan (SMP) to describe procedures to be followed during soil disturbance so workers can be protected from soil contamination that may be encountered. Staff proposes Condition of Certification **WASTE-1** to ensure the applicant has procedures in place to properly handle and dispose of contaminated soil.

PREPARATION AND USE OF A JOINT-ENVIRONMENTAL DOCUMENT

The Energy Commission has exclusive permitting jurisdiction for the siting of thermal power plants of 50 megawatts (MW) or more and their related facilities in California. The Energy Commission also has responsibility for ensuring compliance with the California Environmental Quality Act (CEQA) through the administration of its certified regulatory program and as the lead agency under CEQA. Through the Energy Commission's certified regulatory program, this document is functionally equivalent to an

KERN COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT

Lorelei Oviatt, Director of the Kern County Planning and Community Development Department submitted two letters dated June 11, 2012 and July 12, 2012 outlining the county's questions and concerns regarding the project's land use incompatibilities. In Kern County's March 6, 2013 letter, county staff determined that the applicant's revised project description, if conditioned to restrict the chemical manufacturing and storage of fertilizers for agricultural use only, would comply with the County General Plan and Zoning Ordinance (Kern 2013a). Kern County also stated that the revised project would be a conditionally permitted use in the A District. Kern County recommends that mitigation for conversion of agricultural lands be at a 1:1 ratio. Staff is recommending Conditions of Certification **LAND-1** and **LAND-2** requiring the project owner to mitigate the loss of affected farmland at a 1:1 ratio. Staff is also recommending Condition of Certification **LAND-6** requiring the project owner to restrict the chemical manufacturing of fertilizer for agricultural use only.

Kern County staff and residents in the area have expressed concerns regarding the use of eminent domain by the Energy Commission to obtain right-of-way for infrastructure including the rail spur for the project. The Kern County Board of Supervisors made a motion at their February 26, 2013 hearing to oppose the use of eminent domain associated with the HECA project (Kern 2013a). The Energy Commission does not have the power of eminent domain. In the event the applicant is unable to obtain from the adjacent landowners the required right-of-way for the rail spur as proposed, the applicant would have to use the proposed truck delivery route instead or propose an alternative rail spur route for Commission consideration.

KERN COUNTY FARM BUREAU

The Executive Director of the Kern County Farm Bureau, Inc. cited issues with the HECA project regarding agricultural impacts from the proposed rail spur, loss of farmland, disruption of farming activities and impacts to air quality. Staff has addressed the project's impacts to agricultural lands in this section and is recommending Conditions of Certification **LAND-1** and **LAND-2** to mitigate for the conversion of agricultural lands associated with the project site, linears and rail spur. Please refer to the **Traffic and Transportation** section for a detailed discussion of the proposed rail spur design and the **Air Quality** section for a discussion of air quality issues.

SIERRA CLUB

The Sierra Club submitted a letter dated July 27, 2012 identifying land use issues related to the HECA project (Sierra Club 2012b). The Sierra Club provided comments requesting the HECA project be required to mitigate at a 2:1 ratio for the loss of prime agricultural land. As discussed above, Energy Commission staff is recommending Conditions of Certification **LAND-1** and **LAND-2** which require the applicant to mitigate at a 1:1 ratio for impacts to prime agricultural land associated with the project. The requirement to mitigate impacted farmlands at a 1:1 ratio is consistent with Kern County's recommendation for agricultural impact mitigation and past Energy Commission projects for impacts to agricultural lands.

ENVIRONMENTAL PROTECTION AGENCY (EPA)

The EPA Environmental Review Office provided scoping comments regarding agricultural land use issues related to the HECA project. The EPA letter identified the

Jacquelyn Kitchen - Fw: HECA and Kern County health

From: "Trudy Douglass" <trudydouglass@att.net>
To: <krausek@co.kern.ca.us>
Date: 06/27/2013 9:46 PM
Subject: Fw: HECA and Kern County health

----- Original Message -----

From: Trudy Douglass
To: kitchenj@co.kern.ca.us ; clerkofboard@co.kern.ca.us
Sent: Thursday, June 27, 2013 1:48 PM
Subject: HECA and Kern County health

The Planning Department says that it cannot make decisions based only on local concerns. They must include the needs of all of California. This might make sense if we were talking about a few hundred people but we are talking about the lives of the almost 900,000 people residing in Kern County. Today the air in our valley is killing and sickening the most vulnerable of our population, the young and the aging. Adding HECA's emissions to our already deadly air will be a crime against every person living in the San Joaquin Valley.

California Environmental Protection Agency has released the 10 most polluted zip codes in our state. Even after many years of mitigation and legal actions by the Air District we are still at the top of state and national lists for worst air pollution. 7/10 of the zip codes mentioned in the report are in the San Joaquin Valley. Bakersfield 93307 is 2nd on the California EPA list and that is the area that will be the first part of the county to be impacted by HECA's emissions. How can you think that our air will be benefited by adding coal, coke, trains, and up to 500 idling trucks waiting to load and unload every day?

California Department of Public Health's 2012 report on statewide health issues puts Kern County's population at greater risk of having colon cancer, lung cancer, breast cancer, heart disease, and respiratory disease, because we are above the state's average for all these diseases. 123,000 children and adults in our county have asthma. Kern County is listed as having more heart disease and chronic lower respiratory disease than any of the other 58 counties in California. The pollution we have now in our valley is killing us, please don't agree to add more.

The National Disease Cluster Alliance has identified Kern County as having clusters of brain, kidney, and muscle cancer. In addition, a group of childhood cancers has also been recognized. An increase in thyroid cancer in Kern County is being studied. When the whole San Joaquin Valley is looked at, clusters of birth defects and another childhood cancer have been identified. Emissions and particulates of coal, coke, urea, sulfur, ammonia, ammonium nitrate, mercury, lead, and waste particles will not make our environment more healthy.

The Planning Department's report asserts that our state needs electricity. Our county exports more electricity than any other county. Instead of saying the state needs electricity the Board of Supervisors and the Planning Department should be saying to HECA and the state: "How can you put the people of our valley in danger of more chronic and even fatal diseases just so you can make your 30 pieces of silver?"

Please put a stop to this chemical/gasification factory. You can prevent the development of additional diseases and clusters by just saying "NO".

Jacquelyn Kitchen - HECA and the Williamson Act

From: "Trudy Douglass" <trudydouglass@att.net>
To: <kitchenj@co.kern.ca.us>, <krausek@co.kern.ca.us>
Date: 06/27/2013 10:06 PM
Subject: HECA and the Williamson Act

At the last hearing I talked about how the air pollution we are breathing now is killing and sickening the people of Kern County.

I am here to ask you to either postpone the vote on releasing this land from the Williamson Act or to vote no for a different reason. HECA wants this land for a rail spur. They speculated that the Buttonwillow farmers will change their objections to a train. The farmers will not change their minds. Having 200 rail cars a week bisecting their fields and shedding coal dust from their bottom dumpers and ventilation pipes is too hazardous for their crops and orchards. What I worry about is, heaven forbid, the CEC ok's this industrial monstrosity. HECA will then be able to say to the state or the federal government, "The project you have approved includes the rail spur to transport coal. The farmers are saying no but you can make them comply." Taking this land out of the Williamson Act at this time could give HECA a foot in the door toward forcing our farmers to give up their land for a rail line. Please postpone this vote or say no the land use change.

Association of Irrigated Residents (AIR)
Tom Frantz, President
29389 Fresno Ave
Shafter, CA 93263

Aug 7, 2013 **AIR Traffic Study Questions and Comments**

California Energy Commission

Docket number 08-AFC-08A

Re: Traffic Study Technical Memorandum (Revision 2) submitted by HECA on August 1, 2013 questions.

This traffic study is apparently incomplete. This "study" has left out one of the busiest and most complicated intersections along the route that would be impacted by the hundreds of daily coal trucks under the alternative 2 situation. AIR would like to know why this intersection was left out of the study.

The area in question is along Hwy 43 at the intersections of Los Angeles Ave, Beech, and Santa Fe Way. This is essentially a very busy 5 or 6-way intersection with 7 stop signs and really tight turns for any traffic traveling north on Hwy 43 which would be the case for the empty coal trucks returning to Wasco.

HECA needs to complete their study by analyzing the traffic flow, turns, safety, and road surface conditions at this intersection. It seems obvious that mitigation of this intersection will be needed. AIR suggests an overpass, traffic lights and more gradual turning radii would all be appropriate mitigations.

Below is a photo of the intersection from Google Maps. Please observe the length of the truck at the bottom of the photo in relation to this intersection. The seven stop signs are indicated with yellow and red dots inserted into the photo. We will also note that the building on the lower right is a medical center for patients. Many patients with breathing difficulties will be visiting this place on a daily basis and suffer from the added diesel exhaust and fine particulates coming from the coal trucks and the coal trains.

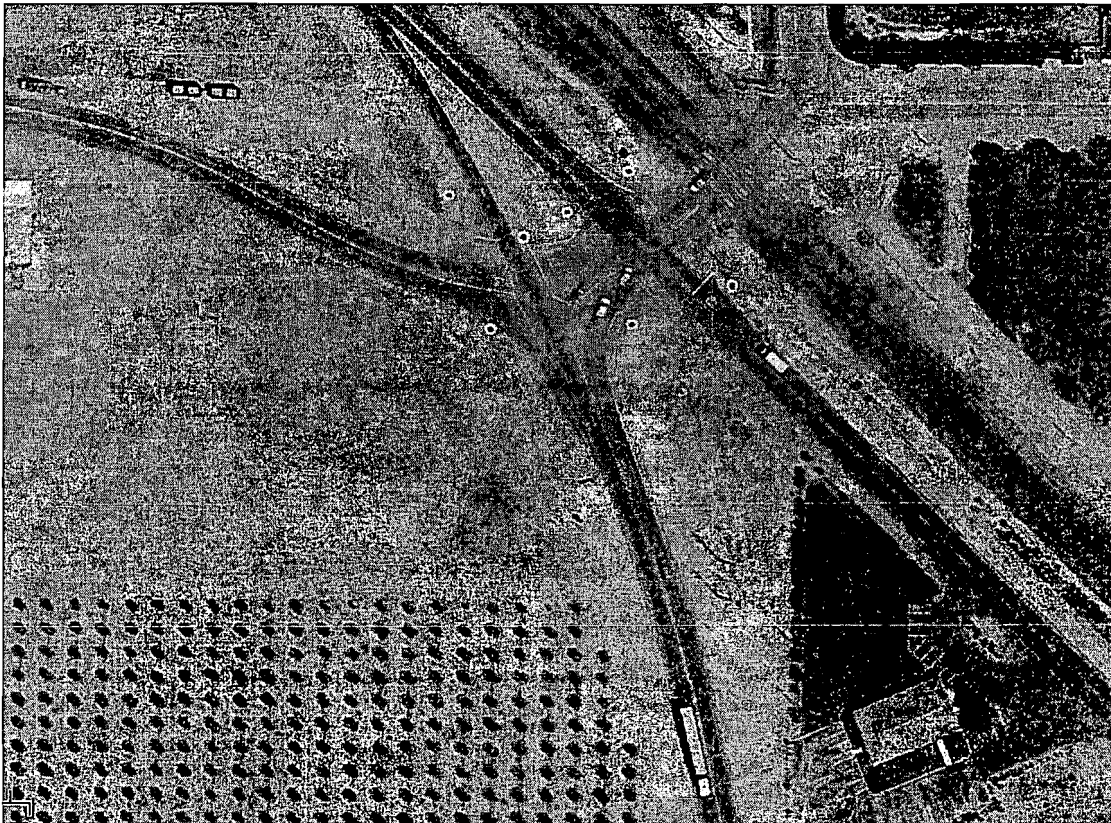
One dangerous aspect of this intersection is that northbound vehicles turning left from Hwy 43 onto Los Angeles Ave. do not have a stop sign. Another complicating factor is the railroad crossing immediately adjacent with yet another intersection and two roads approaching from just over the tracks to the east. Trains often slow in this area because there are long sidings in both directions which allow trains to pass each other. This backs up traffic at the stop signs surrounding this complicated intersection. The coal trains will definitely be responsible for backing up traffic in this area so that fact should be considered as well in this traffic study.

Ultimately, this intersection will be a great spot for local residents to watch coal trucks backed up at the stop signs along with local commuters while coal trains go rumbling by in either direction dropping off chunks of coal along the tracks next to our agricultural fields. Will this scene make Californian's proud about how we produce our energy? AIR requests that HECA do

a before and after visualization of this scene for the aesthetics impact study.

In conclusion, this apparent omission in the traffic study should cause DOE, CEC, Caltrans, and Kern County to wonder what other "mistakes" may also be in this study and possibly others prepared by URS and HECA. In any case, this particular study cannot be considered complete or accurate at this time.

Tom Frantz
Association of Irrigated Residents



DECLARATION OF SERVICE

I, Tom Frantz, declare that on August 7, 2013, I served and filed copies of the AIR Traffic Study Questions and Comments dated Aug 7, 2013. The most recent Proof of Service List, which I copied from the web page for this project at: <http://www.energy.ca.gov>, is attached to this Declaration.

(Check one)

For service to all other parties and filing with the Docket Unit at the Energy Commission:

 I successfully uploaded the document to the Energy Commission's e-filing system and I personally delivered the document or deposited it in the US mail with first class postage to those persons for whom a physical

mailing address but no e-mail address is shown on the attached Proof of Service List. [The e-filing system will serve the other parties and Committee via e-mail when the document is approved for filing.]

 x I e-mailed the document to docket@energy.ca.gov and I personally delivered the document or deposited it in the US mail with first class postage to those persons for whom a physical mailing address but no e-mail address is shown on the attached Proof of Service List. [The e-filing system will serve the other parties and Committee via e-mail when the document is approved for filing.]

 Instead of e-filing or e-mailing the document, I personally delivered it or deposited it in the US mail with first class postage to all of the persons on the attached Proof of Service List for whom a mailing address is given and to the

California Energy Commission – Docket Unit
Attn: Docket No. _____
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512

[The e-filing system will serve the other parties and Committee via e-mail when the document is received, scanned, uploaded, and approved for filing. The electronic copy stored in the e-filing system is the official copy of the document.]

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I am over the age of 18 years.

Dated: Aug 7, 2013

Tom Frantz

Proof of Service List

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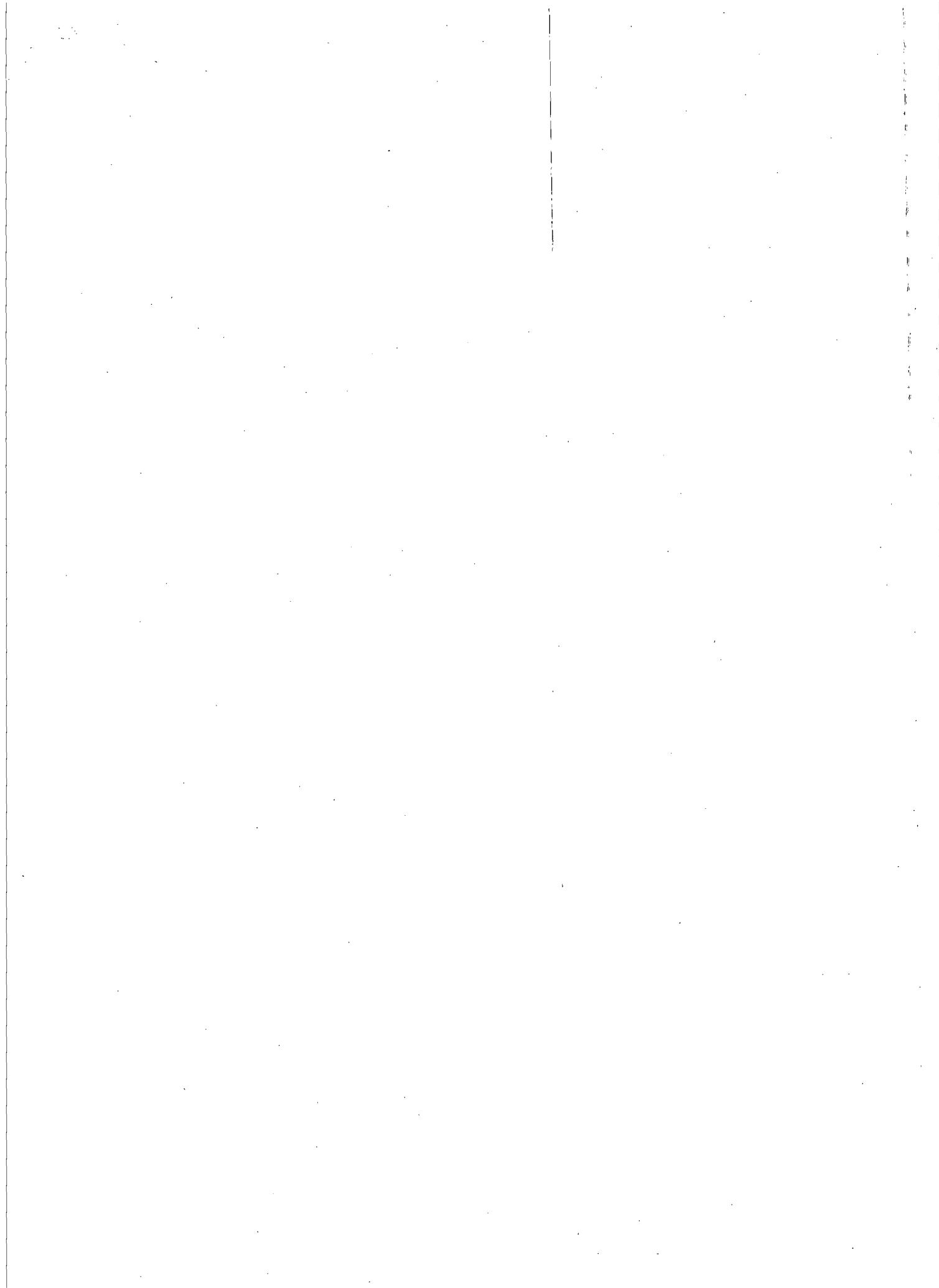
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Planning Commission Staff Report

June 27, 2013



ADDENDUM**KERN COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT****Planning Commission****STAFF REPORT****Date:** June 27, 2013**FILE:** Cancellation #13-01, Map #120
S.D.: #4 - Couch**TITLE:** Cancellation of Land Use Restrictions, Land Conservation Act, Agricultural Preserve No. 3 (Zoning Map No. 120) and Contract Amending Land Use Contract**PROPOSAL:** Cancellation of an approximate 72-acre portion of an existing Williamson Act Land Use Contract within Agricultural Preserve 3**APPLICANT:** Hydrogen Energy International, LLC by Manatt, Phelps, and Phillips, LLP (PP12328)**PROJECT SIZE:** Approximately 72 acres**LOCATION:** West of Tupman Road, south of Adohr Road, west of Interstate 5, northwest of Tupman area**GENERAL PLAN DESIGNATION:** 8.1 (Intensive Agriculture)**SURROUNDING LAND USE/ZONING:** North, East, and West - Irrigated crops/A (Exclusive Agriculture); South - Irrigated crops and Westside Canal/A**PROJECT ANALYSIS:** This case was previously discussed before your Commission on June 13, 2013; however, due to an advertising error regarding the publication of the required hearing notice ten (10) days prior to the hearing; your Commission could not legally take any action. In the interest of public involvement and input, your Commission received public testimony and continued the project to tonight's hearing.

The project before your Commission tonight is a request to the cancel an approximate 72-acre portion of a 168-acre Williamson Act Land Use Contract that was recorded on February 28, 1969, in Book 4250, Page 496 of Official Records. This petition for cancellation is being sought by Hydrogen Energy International, LLC. This cancellation before your Commission is a component of the Hydrogen Energy California (HECA) project being considered by the California Energy Commission (CEC). The HECA project, Docket No. 08-AFC-8A, being processed by the CEC would authorize a 300 megawatts (MW) "integrated gasification combined cycle" power plant that is known as the "Hydrogen Energy California (HECA) project."

Today, your Commission is considering the Williamson Act Land Use Contract cancellation component of the HECA project only; as Kern County does not have jurisdiction over the project as a whole. The CEC is acting as the Lead Agency in processing the power plant component of the application because the California Government Code stipulates that they act as the Lead Agency for all thermal electric power plants and related facilities that are 50 MW or larger. The application process used by the CEC has been certified by California Resources Agency as meeting all requirements of a certified regulatory program. Once an application is submitted to the CEC, the Agency prepares a Preliminary Staff Assessment and presents it to the applicant, interveners, organizations, agencies and other interested parties for comment. The Final Staff Assessment and corresponding environmental review documents are then prepared by CEC staff and the project is presented to the CEC Commission for review and decision. Although CEC has

jurisdiction over the project as a whole, State law requires that the project be consistent with all local rules and regulations. A portion of the project site is located on land currently under the Williamson Act Land Use program. The proposed facility if approved and implemented by the project applicant is not consistent with the provision of the program and, therefore, requires a cancellation of the existing Williamson Act Land Use Contract by Kern County.

The 72-acre cancellation area is located on Assessor's Parcel Number 159-040-02; approximately ten miles west of the City of Bakersfield and 1.5 miles northwest of Tupman in western Kern County. The site is designated 8.1 (Intensive Agriculture) by the Kern County General Plan and is zoned A (Exclusive Agriculture).

Overview of Full HECA Project (Background)

The proposed HECA project, which is subject to CEC jurisdiction as noted above, would produce 300 MW of energy by gasifying a fuel blend consisting of 75 percent coal, 25 percent petroleum coke (petcoke), and brackish water to produce synthesis gas (syngas). The syngas produced via an on-site gasification process would then be purified into hydrogen fuel and carbon dioxide (CO₂). The fuel would be used to generate the 300 MW of low-carbon base load electricity in a combined cycle power block; and would also be used for the on-site production of agricultural fertilizers in an on-site integrated "manufacturing complex." The extracted CO₂ would be sent via pipeline for use in an enhanced oil recovery process in the adjacent Elk Hills Oil Field. Leftover solids from the gasification process would require disposal at offsite landfills. As proposed, the facility will produce low-carbon base load electricity by capturing carbon dioxide (CO₂) and transporting it for enhanced oil recovery and CO₂ sequestration.

The applicant, Hydrogen Energy International, LLC, owned by SCS Energy, LLC, currently has an amended application (application for Certification 08-AFC-8A) pending before the State of California Energy Commission to seek approval of the project.

HECA Project Statistics

APNs	Project Acreage ¹	General Plan Designation	Zone District	Williamson Act	WALUC Cancellation
HECA Project Area: 159-040-16 (678 acres) 159-040-18 (33 acres) 159-040-02 (73 acres)	HECA Project Area: 453 acres	8.1 (Intensive Agriculture)	A (Exclusive Agriculture)	Active WA Contract	491 acres approved 6/29/10
Addl. Control Area: 159-040-17 (4 acres) 159-190-09 (315 acres)	Control Area: 653 acres			Prime Farmland Agricultural Preserve 3	71.5 acres still needed

¹ Total acreage of project area is all or a portion of the project APNs.

HECA Project History

The HECA project application has undergone several revisions since it was initially submitted to the CEC in 2008. For reference by your Commission, the major project revisions were as follows:

- **July 2008:** Original application submitted to the CEC by Hydrogen Energy International, LLC, which was jointly owned by BP Alternative Energy North America and Rio Tinto Hydrogen Energy, LLC. The application was for a 250 MW "integrated gasification combine cycle power generating facility" with 100 MW from natural gas generated peaking power, to be located on a 473-acre site.

- May 2009: Revised application submitted to the CEC to eliminate auxiliary combustion turbine generator. Applicant-stated purpose of revision was to reduce project's PM₁₀, PM_{2.5}, and greenhouse gas emissions.
- 2010: Application submitted to Kern County for cancellation of a 491-acre portion of a Williamson Act Land Use Contract that was recorded on February 26, 1971 (separate from current request).
- June 29, 2010: Kern County Board of Supervisors approved cancellation of 491-acre portion of Williamson Act Land Use Contract (Resolution 2010-168).
- May 2012: Revised application submitted to CEC which included the following key changes: (1) Added a *manufacturing complex* to produce "one million tons per year of low carbon nitrogen-based products (including urea, urea ammonium nitrate and anhydrous ammonia) to be used in agricultural, transportation, and industrial applications;" (2) Revised the project boundary and layout; (3) Identified two alternatives for transportation of coal feedstock to the project site, including: (a) A five-mile-long new industrial railroad spur that will connect to the existing San Joaquin Valley Railroad/Buttonwillow Railroad line, or (b) A 27-mile-long truck transport route via existing roads from an existing coal transloading facility northeast of the project site (Wasco).
- December 2012: In June 2012, the Kern County Planning and Community Development Department noted that certain components of the new "manufacturing complex" would require industrial zoning and General Plan designations. The Planning Department submitted written comments to the CEC and the applicant which stated the manufacture of any products, other than agricultural fertilizers, would necessitate the need for industrial designations. Therefore, in December, 2012 the applicant submitted a letter stating that HECA would revise the project to restrict the production of "nitrogen-based products" (including urea, urea ammonium nitrate, and anhydrous ammonia) to manufactured products for the purpose of "fertilizer manufacture and storage for agricultural use only."
- December 20, 2012: Current application submitted to Kern County for cancellation of approximately 72-acre portion of Williamson Act contract.

Current HECA Project Summary (2012/2013)

The HECA project is a 300 MW integrated gasification combined cycle electrical power plant that includes an integrated "manufacturing complex" that will produce fertilizer to be used for agricultural uses. HECA would gasify solid feedstocks consisting of coal and petcoke to produce hydrogen fuel for the power plant, CO₂ for export to the adjacent Elk Hills Oil Field, and fertilizer for agricultural purposes. Because it produces multiple products, HECA is sometimes referred to as a "polygeneration" project. HECA would produce:

- 300 MW of low-carbon base load electrical power;
- Low-carbon nitrogen-based products, including fertilizer for agricultural purposes;
- CO₂ for use in enhanced oil recovery processes at the adjacent Elk Hills Oilfield.

According to the application submitted to the CEC (full version available at www.energy.ca.gov/sitingcases/hydrogenenergy/index.html) the HECA project would be a first of its kind, a State of the Art facility that would produce electricity and other useful products for California, and that would have dramatically lower carbon emissions compared to traditional power plant facilities. The applicant states HECA would generate fewer emissions and have a lower carbon footprint than other traditional coal-burning power plants because HECA will capture 90 percent of the carbon dioxide (CO₂) from its processes and transport that CO₂ to the adjacent Elk Hills Oil Field where it will be used for enhanced oil recovery and simultaneously stored in secure geologic formations within the Earth (known as sequestration).

Electrical power generated by this project would be distributed to the grid through interconnection with the Pacific Gas and Electric Company's Midway Substation.

U.S. Department of Energy Funding

The U.S. Department of Energy is providing financial assistance to HECA under the Clean Coal Power Initiative (CCPI) Round 3, along with private capital cost sharing, to demonstrate an advanced coal-based generating plant that co-produces electricity and low-carbon nitrogen-based products. CCPI was established, in part, to demonstrate the commercial viability of next generation technologies that will capture CO₂ emissions and either sequester those emissions or beneficially reuse them. Once demonstrated, the technologies can be readily considered in the commercial marketplace by the electric power industry.

Kern County Comments on the HECA Project

Although the CEC is the permitting Agency for the HECA Project as a whole, Kern County has an ongoing opportunity to provide formal comments to the CEC to recommend mitigation measures for the HECA project, beyond the County's current consideration of just the Williamson Act Land Use Contract cancellation. As such, the Kern County Planning and Community Development Department Staff has been coordinating meetings since 2010 between HECA staff, CEC staff, and County Departments to review the HECA project and the project has been reviewed by the necessary County Departments and the County Administrative Office for impacts on public services, roads, and Kern County.

The comments received from County Departments and stakeholders were presented to the Kern County Board of Supervisors on February 26, 2013. At that hearing, the Board took action to authorize the Director of the Kern County Planning and Community Development Department to prepare and mail formal written comments to the CEC. Therefore, a letter dated March 6, 2013, (attached) was sent to the CEC which included requests for additional information on the HECA project, a list of the specific mitigation measures requested by County Departments to address potential impacts of the project in Kern County, and a statement that Kern County does not support the use of eminent domain for acquisition of any rail lines or other infrastructure related to the HECA project.

Staff notes that the Board also directed Staff to bring the project back before the Board once outstanding issues and concerns of the Kern County Roads Department had been addressed by the applicant/HECA. That issue is pending as a revised traffic study had been submitted by the project applicant to the Roads Department for review and comment.

Current Status of California Energy Commission (CEC) Review

Since Kern County's March 6, 2013, letter, the CEC has continued work on preparation of a "Staff Assessment," which is the CEC's equivalent CEQA review of the HECA project. The first step is to prepare and release a Preliminary Staff Assessment, which was tentatively scheduled for release on May 17, 2013, but has not yet been released as of the preparation of this report. The next step will be to release of a Final Staff Assessment and is anticipated in the late summer of 2013. After preparation by CEC staff, the Final Staff Assessment will be provided to the CEC Commissioners assigned to this project who will then use the information to reach a decision on the project. Then the full CEC considers the project.

A memorandum was recently released by CEC staff on April 30, 2013, titled "Staff Status Report Number 7" (attached). In that memo, CEC staff states that they are continuing to work to meet the revised HECA Committee schedule for the Preliminary Staff Assessment/Draft Environmental Impact Study joint document.

Cancellation of Williamson Act Land Use Contract

As noted above, in 2010, the Board of Supervisors approved cancellation of a 491-acre portion of a Williamson Act Land Use Contract that covered a portion of the HECA project site (Cancellation 10-1, Map 120; approved June 29, 2010; Resolution 2010-168). However, the applicant revised the project boundaries during project design in 2012. Therefore, the applicant is now requesting cancellation of an additional 72 acres of land under contract in order to facilitate the revised project as currently presented to the CEC for processing. The project site is bound by Adohr Road to the north, Tupman Road to the east, an irrigation canal to the south, and the Dairy Road right-of-way to the west.

The 72-acre site is currently being farmed with row crops and is under an active Williamson Act Land Use Contract. Construction of the project would require cancellation of the contract; and this matter is subject to the jurisdiction of your Commission and the Board of Supervisors. The previous 491-acre cancellation approval was contingent upon the applicant's payment of the cancellation fee and was not to become effective until the CEC issued a permit based on its review of CEC project, Docket No. 08-AFC-8. Since that 2010 decision, the applicant has not yet paid the cancellation fees and, therefore, the 491-acre portion of the contract is still active.

As noted above, the applicant has requested a cancellation of the remaining portion of the Williamson Act Land Use Contract that currently encumbers the project site and totals approximately 72 acres. The contract was recorded in 1969 by previous property owners, Lawrence and Margaret Scarrone.

Required Findings for Cancellation

Section 51282 of the California Government Code states your Commission may recommend a tentative approval for cancellation of a contract only if one of the following findings can be made:

- (1) That the cancellation is consistent with the purposes of Chapter 7 (i.e., the Williamson Act); or,
- (2) That cancellation is in the public interest.

The options for cancellation can be explained as follows:

Option 1: In order for your Commission to make the findings associated with Option 1, the applicant would have to demonstrate the following:

1. The cancellation is for land on which a notice of nonrenewal has been served.
2. The cancellation is not likely to result in the removal of adjacent lands from agricultural use.
3. The cancellation is for an alternative use which is consistent with the applicable provisions of the City or County General Plan.
4. The cancellation will not result in discontinuous patterns of urban development.
5. There is no proximate, noncontracted land which is both available and suitable for the proposed use or the development of the contracted land would provide more contiguous patterns of urban development (Government Code Section 41282(b)).

Option 2: In order for your Commission to make the findings associated with Option 2, the applicant would have to demonstrate the following:

1. The other public concerns substantially outweigh the objectives of Chapter 7; and
2. There is no proximate noncontracted land which is both available and suitable for the contracted land would provide more continuous patterns of urban development of the proximate noncontracted land.

The applicant states that approval of this project would be in the public interest and would, therefore, be consistent with the second finding (Option 2) as listed in Section 51282 of the Government Code. Therefore, the applicant must offer adequate justification for your Commission to make the findings for public interest, as listed above under Option 2.

Applicant's Justification for Contract Cancellation per Option 2

As noted above, the site includes approximately 72 acres of land remaining under a Williamson Act Land Use Contract. The applicant filed a petition for cancellation of the contract (attached) noting that the cancellation would be in the public interest. The cancellation is an option under the limited circumstances and conditions set forth in Government Code Section 51280 et seq. In such cases, landowners may petition for land use contract cancellation. The Board of Supervisors may grant tentative cancellation only if it makes the required statutory findings as outlined above.

The applicant has provided the following information summarized to support the conclusion that public concerns substantially outweigh the objectives of the Williamson Act (Government Code Section 51282c(1)):

Public Concerns. Regarding the first finding, the applicant states that public concerns of energy supply, energy security, global climate change, water supply, hydrogen infrastructure, fertilizer supply, and the economy substantially outweigh the objectives of the Williamson Act. The HECA project would demonstrate a first of its kind combination of proven technologies at commercial scale that can provide base load low-carbon power that will make an essential contribution to addressing each of these public concerns and provide numerous public benefits at the local State, regional, national, and global levels. As such, the findings set forth in Government Code Section 51282(c)(1) is satisfied, as detailed below.

- **Supplying Low-Carbon electricity** – The project would provide approximately 300 MW of base load low-carbon generating capacity to power more than 160,000 homes. The CEC estimates that the State will need to add more than 9,000 MW of capacity between 2008 and 2018 to meet demand.
- **Capturing Greenhouse Gas Emissions** – The project would prevent the release of more than three million tons per year of greenhouse gases to the atmosphere by sequestering them underground. Existing conventional power plants release carbon dioxide into the atmosphere, rather than capturing and sequestering it. The project will employ a State of the Art emission control technology to achieve near zero sulfur emissions and avoid flaring during steady-state operations. This will help the State to meet its important greenhouse gas reduction targets as established by Assembly Bill (AB) 32, AB 1925, and Senate Bill (SB) 1368.
- **Water Supply and Agricultural Production** – The project would conserve fresh water sources by using brackish groundwater for its water needs; supplied by Buena Vista Water Storage District. Project consumption of the sources is expected to benefit local agriculture by removing salts from the groundwater sourcing the Buena Vista Water Storage District which will result in an improved groundwater quality.
- **Protecting Energy Security and Domestic Energy Supplies** – The project would conserve domestic energy supplies by using petcoke, a local energy source that is currently exported overseas for fuel. Conservation of this domestic energy supply will enhance energy security and will also reduce stress on the United States natural gas supplies by using petcoke to generate electricity. Petcoke is a by-product from the oil refining process and is abundantly available. In addition, the project will produce additional energy from existing California oilfields by injecting CO₂ for enhanced oil recovery which could increase field reserves by up to 25 percent.

- **Promoting Hydrogen Infrastructure** – The project would increase the supply of hydrogen available to support the State's goal of energy independence as expressed in California Executive Order S-7-04 which mandates the development of a hydrogen infrastructure and hydrogen transportation in California.
- **Stimulating the Local and California Economy** – The project would boost the local and California economy with an estimated 1,500 jobs associated with construction and approximately 100 permanent positions associated with project operations. In addition, estimated indirect and induced effects of construction that will occur within Kern County could result in more than 4,000 jobs, representing a long-term economic benefit to Kern County.

Proximate Noncontracted Land. Regarding the second finding, the applicant states there is no proximate noncontracted land which is both available and suitable for the proposed use and; therefore, the finding set forth in Government Code Section 51282(c)(2) is satisfied.

The applicant asserts that the project site was selected based upon the available land, proximity to a carbon dioxide storage reservoir and the existing natural gas transportation, electric transmission, and brackish groundwater supply infrastructure that could support the proposed 300 MW of base load low-carbon power generation. The site was also selected for its reasonable proximity to Interstate 5, State Route 58, State Route 119, and Stockdale Highway.

With regard to availability, the applicant maintains that virtually all land in the proximity of the project site is either under Williamson Act Land Use Contracts or in the Tule Elk Reserve State Park; therefore, making it unavailable for the proposed project.

With regard to suitability, the applicant states there are no alternative sites that meet the highly specific site selection requirements of the project discussed above. Prior to selecting the project site, HECA, LLC, submitted its initial Application for Certification (08-AFC-8) to the CEC on July 30, 2008, which proposed the project on an adjacent site. HECA, LLC, subsequently decided to move the project when it discovered the existence of previously undisclosed sensitive biological resources at the prior site. As a result, HECA, LLC, was required to conduct an alternative site analysis to identify an alternative site for the project, which ultimately identified the general area of the currently proposed site. In the process, several possible alternative sites in the vicinity of the unincorporated communities of Buttonwillow and Tupman were considered. However, the alternative sites were rejected for various reasons, including topography, distance from the proposed carbon dioxide custody transfer point, lengths of linear facilities, sensitive environmental receptors, and/or land availability. In addition, each of these sites (with one exception), like the project site, were contracted under the Williamson Act.

The applicant concludes that no alternative sites were identified on either contracted or noncontracted land were both available and suitable for the project. As such, the finding set forth in Government Code Section 51282(c)(2) that "there is no proximate noncontracted land which is both available and suitable for the use to which it is proposed the contracted land be put" is satisfied.

Comments from the State Department of Conservation

The State Department of Conservation (DOC) received the cancellation petition on February 8, 2013, and responded on April 26, 2013, with an analysis of the ability for the project to meet the required findings for cancellation, as detailed below.

With regard to public concerns, the DOC believes the term "public" and "interest" refer to the interest of the public as a whole in the value of the land for open space and agricultural use. Though the interests of local and regional communities involved are also important, no decision

regarding the public interest can be based exclusively on the local benefit of the proposed project. The DOC notes the 71.56-acre site under contract is designated Prime Farmland per the 2010 Kern County Important Farmland Map and that data from County Staff indicates that the site has had an active agriculturally productive history including cotton, wheat, and onions. Current 2012 Farmland Mapping and Monitoring Program (FMMP) imagery data indicates irrigated vegetation. Together with the supplied cropping history, the data would indicate that the land is still agriculturally productive.

With regard to suitability and proximate available parcels, the DOC concludes that there are no alternative sites that meet the highly specific site selection requirements of the project discussed above. The DOC notes that as a part of HECA's application process with the CEC, the applicant was required to conduct an alternative site analysis to identify an alternative site for the project, which ultimately identified the general area of the currently proposed site. In the process, several possible alternative sites in the vicinity of the unincorporated communities of Buttonwillow and Tupman were considered. However, the alternative sites were rejected for various reasons, including topography, distance from the proposed carbon dioxide custody transfer point, lengths of linear facilities, sensitive environmental receptors, and/or land availability. In addition, each of these sites (with one exception), like the project site, were contracted under the Williamson Act.

The DOC noted in the County's deliberations, it must be shown that agricultural and open space objectives, which are protected by the Williamson Act, are substantially outweighed by other public concerns before the cancellation can be deemed "in the public interest."

Staff Analysis of Request for Williamson Act Land Use Contract Cancellation

Farmland valuation is estimated using a number of variables, such as the applicable water purveyor and the types of crops cultivated. With the proposed cancellation of the Williamson Act Land Use Contract, the Kern County Tax Assessor's Office reassessed the land value for this portion of the HECA project property (approximately 72 acres of prime farmland) at \$644,040. Staff notes that property is assessed at 1.2 percent of the land value for tax purposes. The land revaluation greatly increases the amount of property taxes paid to the County annually when compared to the taxes paid on property under a land use contract. Taxes on the site would amount to about \$7,728 per year. Over an estimated 25 to 30 year lifetime for a facility, the County would realize combined property tax revenue of between \$0.19 million and \$0.23 million. Your Commission should note that there is no property tax discount or reduction in valuation given to land that is under a conservation easement or deed restriction.

It should also be noted that since 2009, the State no longer provides subvention reimbursements to the County to administer land under Williamson Act. In previous years, the County on average received approximately \$4.6 million in subvention funds, which to date equates to a loss of about \$18.4 million.

As noted above, the DOC has presented analysis and recommendations for the cancellation petition based on whether both sets of findings could be made by the Board of Supervisors. Staff has reviewed the proximate, noncontracted parcels analysis, and the request with regard to conformance with State and local requirements of the Agricultural Preserve Program for cancellation in the public interest, and confirms the project complies with all noted provisions. The analysis of proximate parcels supports justification for supporting the cancellation request based on the required public benefit findings.

The Kern County Assessor's Office has reviewed this request and has calculated the required cancellation fees based upon the site's fair market value. If ultimately approved by the Board of Supervisors, this cancellation will not become effective until the applicant has submitted the required fee of \$80,505.00 to the Clerk of the Board.

The proposed project does not include a zone change to a nonagricultural zoned district, and would remain zoned A. In the future, the land could revert back into agricultural production if determined by the property owner. Activities proposed on the site is not anticipated to result in the conversion of other farmland on adjacent or nearby properties to non-farmland uses.

Additionally, the proposed project would improve water quality and free up water for other farming by lowering the brackish water table and allowing better water from east of the project site to penetrate the area. For operations, the proposed project is estimated to use 7,500 acre feet of brackish water per year.

The project will demonstrate a first of a kind combination of proven technologies at commercial scale that can provide base load low-carbon power that will make an essential contribution to addressing each of these concerns. The applicant states the project will advance public interest on a variety of levels, including: increasing energy supplies, energy security, increase in water supply for agricultural use; creation of hydrogen infrastructure; combat global climate change by reducing use of fossil fuels; and creation of jobs; thereby increasing economic stability in the region.

The project has been awarded federal funds by the U.S. Department of Energy and the study of the project has the financial support of Southern California Edison Company.

Staff concludes the project will assist in providing economic stability for the region by providing increased property tax revenues and a stable source of high paying jobs. Additionally, given that the public concerns that will be addressed by the project, Staff concludes there is substantial evidence to support the findings set forth in Government Code Section 51282(c)(1) that "other public concerns substantially outweigh the objects of the Williamson Act Land Use Contract."

Planning Department Conclusion and Recommendation

Regarding the conversion of agricultural farmland for the proposed hydrogen energy facility development, the project does not include a zone change to a nonagricultural zoned district, and would remain zoned A. Therefore, if the project is not approved, the cancellation is invalid and the land could continue agricultural production as determined by the property owner.

The proposed project would increase fresh water supplies for other farming near the site by using brackish water for operations on the site, thereby lowering the brackish water table and allowing better quality water from east of the project site to penetrate the area. For operations, the proposed project is estimated to use 7,500 acre feet of brackish water per year.

Additionally, the project would generate approximately 2,461 temporary construction jobs (over a period of 49 months) and 200 permanent operational jobs.

It is Staff's opinion there is adequate justification for your Commission to find the public interests will be furthered by the implementation of the project outweigh the objectives of preserving the site for agricultural use under the Williamson Act Land Use Contract. The siting of facilities to provide an alternative low-carbon source of power will protect the health and safety of the State's expanding population. The project site will not be converted to urban use; therefore, approval of this request should not affect urban development patterns.

Staff has reviewed the request with regard to conformance with State and local requirements of the Agricultural Preserve Program and confirms that the project complies with all noted provisions. Staff notes the CEC is the Lead Agency (for licensing thermal power plants 50 MW and larger) under the California Environmental Quality Act (CEQA) and has a certified regulatory program under CEQA. Under its certified program, the CEC is exempt from having to prepare an Environmental Impact Report (EIR). Its certified program, however, does require environmental analysis of the project, including an analysis of alternatives and mitigation measures to minimize any significant adverse effect the project may have on the environment.

Staff notes the project will result in the loss of approximately 72 acres of Prime Agricultural land. Therefore, Staff recommends that the project, if approved by the CEC, include appropriate mitigation for loss of Prime Agricultural land at a 1:1 ratio as required by CEQA, and with mitigation occurring in Kern County.

For the purposes of complying with CEQA, Staff is utilizing Section 15271, in your Commission's consideration of the cancellation request. Section 15271 is an exemption for certified State regulatory programs which states in part:

"CEQA does not apply to actions undertaken by a public agency relating to any thermal power plant site or facility, including the expenditure, obligation, or encumbrance of funds by a public agency for planning, engineering, or design purposes, or for the conditional sale or purchase of equipment, fuel, water (except groundwater), steam, or power for such a thermal power plant, if the thermal power plant site and related facility will be the subject of an EIR or Negative Declaration or other document or documents prepared pursuant to a regulatory program certified pursuant to Public Resource Code Section 21080.5, which will be prepared by:

- (1) The State Energy Resources Conservation and Development Commission.
- (2) The Public Utilities Commission.
- (3) The City or County in which the power plant and related facility would be located."

The Kern County Assessor's Office has reviewed this request and has calculated the required cancellation fee based upon the site's fair market value (attached). This cancellation will not become effective until the applicant has submitted the required cancellation fee of \$80,505 to the Clerk of the Board.

June 13, 2013 Planning Commission

As noted above, this case was previously scheduled before your Commission on June 13, 2013; however, due to an advertising error regarding the publication of the required hearing notice ten (10) days prior to this hearing; your Commission could not legally take any action regarding this project on June 13, 2013. In the interest of public involvement and input, Staff recommended that your Commission take public testimony and then continue this project until June 27, 2013, to ensure all advertising requirements were met.

Therefore, on June 13, 2013, a public hearing was held by the Planning Commission to consider the proposed project. Staff presented a brief overview of the proposed cancellation and then your Commission accepted comments.

Several representatives of the applicant; including Attorney Kristina Lawson, CEO Jim Kroil, and Tom Daniels provided an overview of the project.

Several members of the public then spoke in opposition of the project, including: Anna Martinez; Tom Franz; Trudy Douglas; Lorise Snow; Marjorie Bell; Chris Romannini; Marion Vargas; Don Vanloo; Rogelos Vargas; Beau Antongiovanni; Sara Goatcher; and Mark Romannini. Concerns expressed were related to environmental concerns, traffic concerns, pollution concerns, air concerns and protection of farmland.

Several members of the public spoke in support of the project; including Irene Clancey; Melinda Brown; Annette Salazar; Leticia Florez; and Bob Hampton. Those in support stated that HECA would boost oil production, bring jobs and help the U.S. stop relying on foreign energy.

Your Commission then closed public testimony and Commissioner Edwards commented that he had concerns about traffic and delivery trucks blocking the roads and requested that Staff guide the Commission through the public findings and address each one during the hearing on

June 27, 2013. Commissioner Martin requested that Staff discuss County participation in the project. In response to Mr. Martin's request, Staff noted that the County created an extensive amount of mitigation measures, which it recommended to the CEC for inclusion in the CEC's consideration of the HECA project. Commissioner Sprague requested a motion to continue the case and a motion was made by Commissioner Edwards, with a second by Commissioner Martin, to continue the case until June 27, 2013. The motion carried.

Therefore, Staff recommends your Commission recommend the Board of Supervisors approve cancellation of the Williamson Act Land Use Contract subject to payment of penalty fees; not to become effective until the California Energy Commission issues a permit following its environmental review of Docket No. 08-AFC-8A; direct Clerk of the Board to issue a Tentative Certificate of Cancellation subject to payment of penalty fees and compliance with all other conditions contained in the Tentative Certificate of Cancellation; and adopt the suggested findings as set forth in the attached Draft Resolution.

PUBLIC INQUIRY OR CORRESPONDENCE: Kern County Assessor's Office, Kern County Roads Department; Kern County Engineering, Surveying, and Permit Services Department/Floodplain Management; Kern County Farm Bureau, Inc.; Greater Bakersfield Chamber of Commerce; State Department of Conservation; Department of Conservation/Division of Oil, Gas, and Geothermal Resources; John and Chris Romanini (2); Setton Pistachio of Terra Bella, LLC

CEQA ACTION: Special Situation, Section 15271

DEPARTMENT RECOMMENDATION: Advise the Planning Commission to recommend the Board of Supervisors approve cancellation of the Williamson Act Land Use Contract subject to payment of penalty fees; not to become effective until the California Energy Commission issues a permit following its environmental review of Docket No. 08-AFC-8A; direct Clerk of the Board to issue a Tentative Certificate of Cancellation subject to payment of penalty fees and issue a Certificate of Cancellation upon receipt of written verification from the Kern County Planning and Community Development Department that confirms the applicant are in compliance with all other conditions contained in the Tentative Certificate of Cancellation; adopt the suggested findings as set forth in the attached Draft Resolution

CMM:JKM:sc

Attachments

Maps

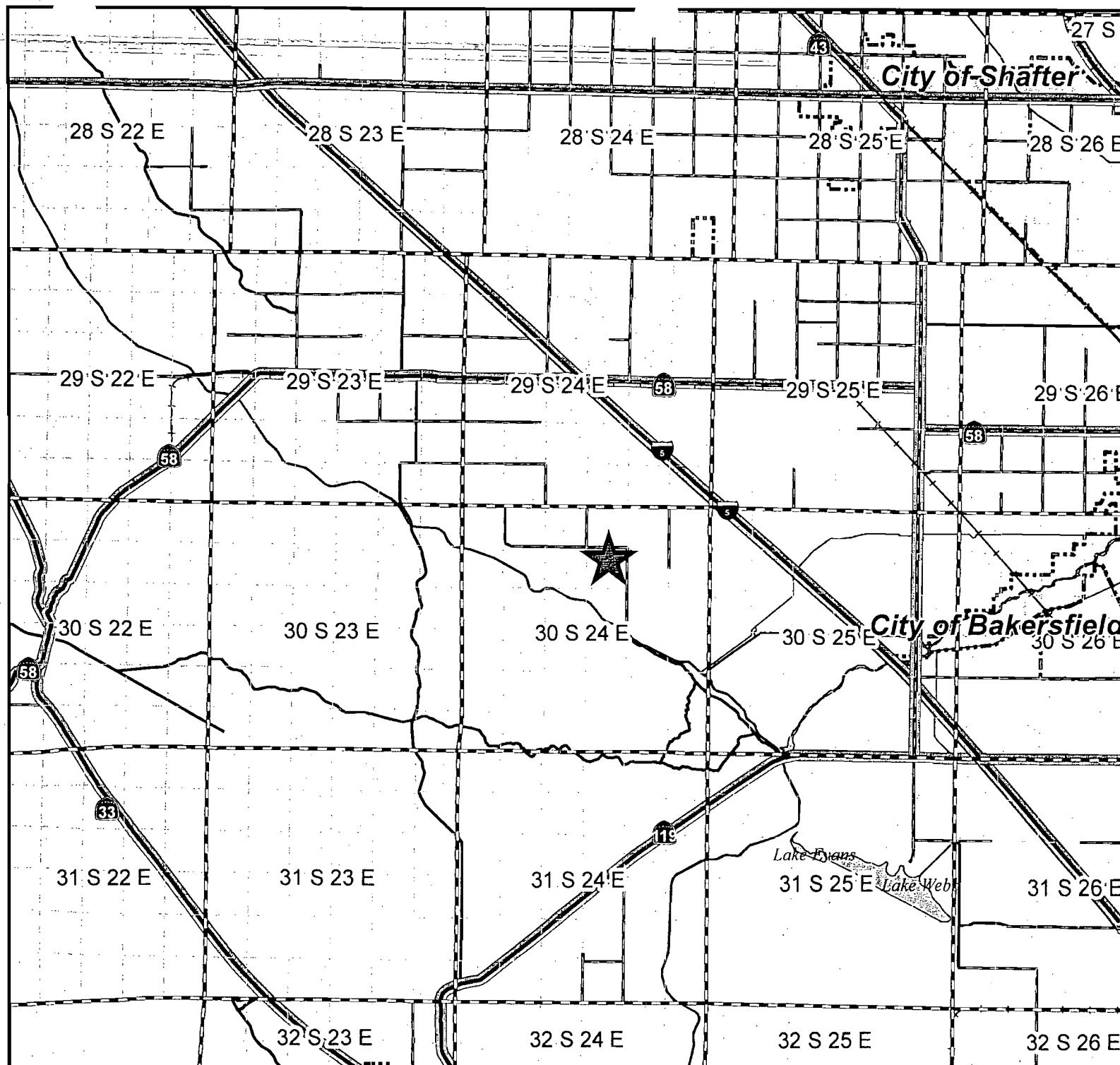
[The page contains extremely faint, illegible text, likely bleed-through from the reverse side. The text is organized into several paragraphs, but the characters are too light to transcribe accurately.]

**Williamson Act
Contract
Cancellation
No. 13-01**

**Hydrogen Energy
International LLC.
by
Manatt, Phelps, &
Phillips LP**

In association with the
Hydrogen Energy California (HECA)
Project by SCS Energy
(CEC Docket No. 08-AFC-8A)

**- Figure 1 -
Vicinity Map**



Legend

- Township/Range
- Sections
- railroad
- KernHwys
- water bodies
- City Limits
- Project Site



0 1 2 3 Miles



**Kern County
Planning & Community
Development Department**






Williamson Act Contract Cancellation No. 13-01

Hydrogen Energy
International LLC.
by
Manatt, Phelps, &
Phillips LP

In association with the
Hydrogen Energy California (HECA)
Project by SCS Energy
(CEC Docket No. 08-AFC-8A)

- Figure 2 - Existing General Plan

Legend

-  WA Cancellation Area
-  Sections
-  Canal
-  Tupman Specific Plan
-  General Plan Boundaries

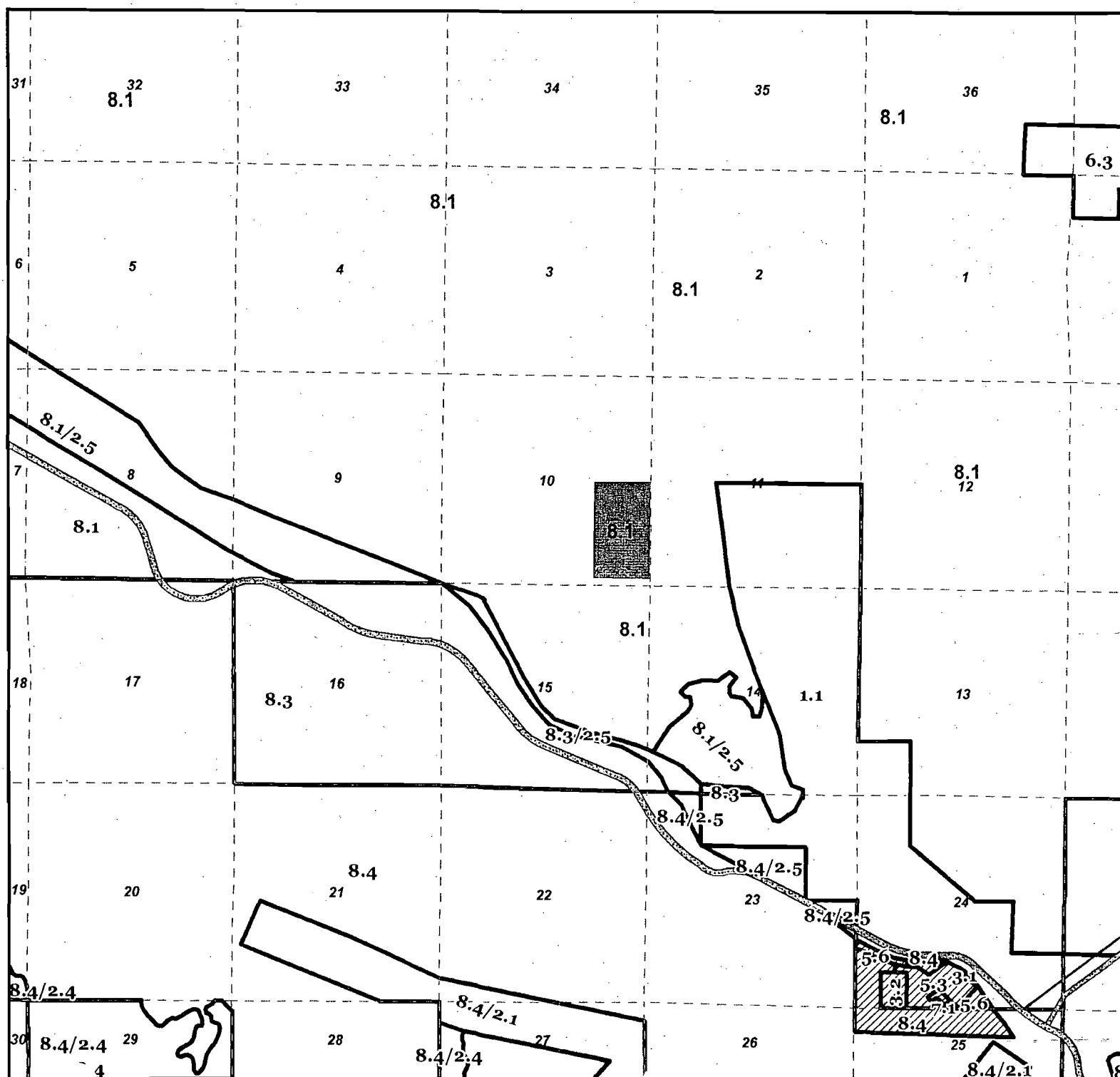


- 1.1 State And Federal Land
- 2.1 Seismic Hazard
- 2.4 Steep Slope
- 2.5 Flood Hazard
- 3.2 Educational Facilities
- 5.3 10 Units/Net Acre
- 5.6 2.5 Gross Acres/Unit
- 7.1 Light Industrial
- 8.1 Intensive Ag (Min. 20- Acre)
- 8.2 Resource Reserve (Min. 20- Or 80- Acre)
- 8.3 Extensive Ag (Min. 20- Or 80-Acre Parcel)
- 8.4 Mineral And Petroleum (Min. 5-Acre)
- 8.5 Resource Mgmt (Min. 20- Or 80-Acre)

0 0.3 0.6 0.9 Miles



Kern County
Planning & Community
Development Department








Williamson Act Contract Cancellation No. 13-01

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Hydrogen Energy California (HECA)
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(CEC Docket No. 08-AFC-8A)

- Figure 3 - Existing Zoning

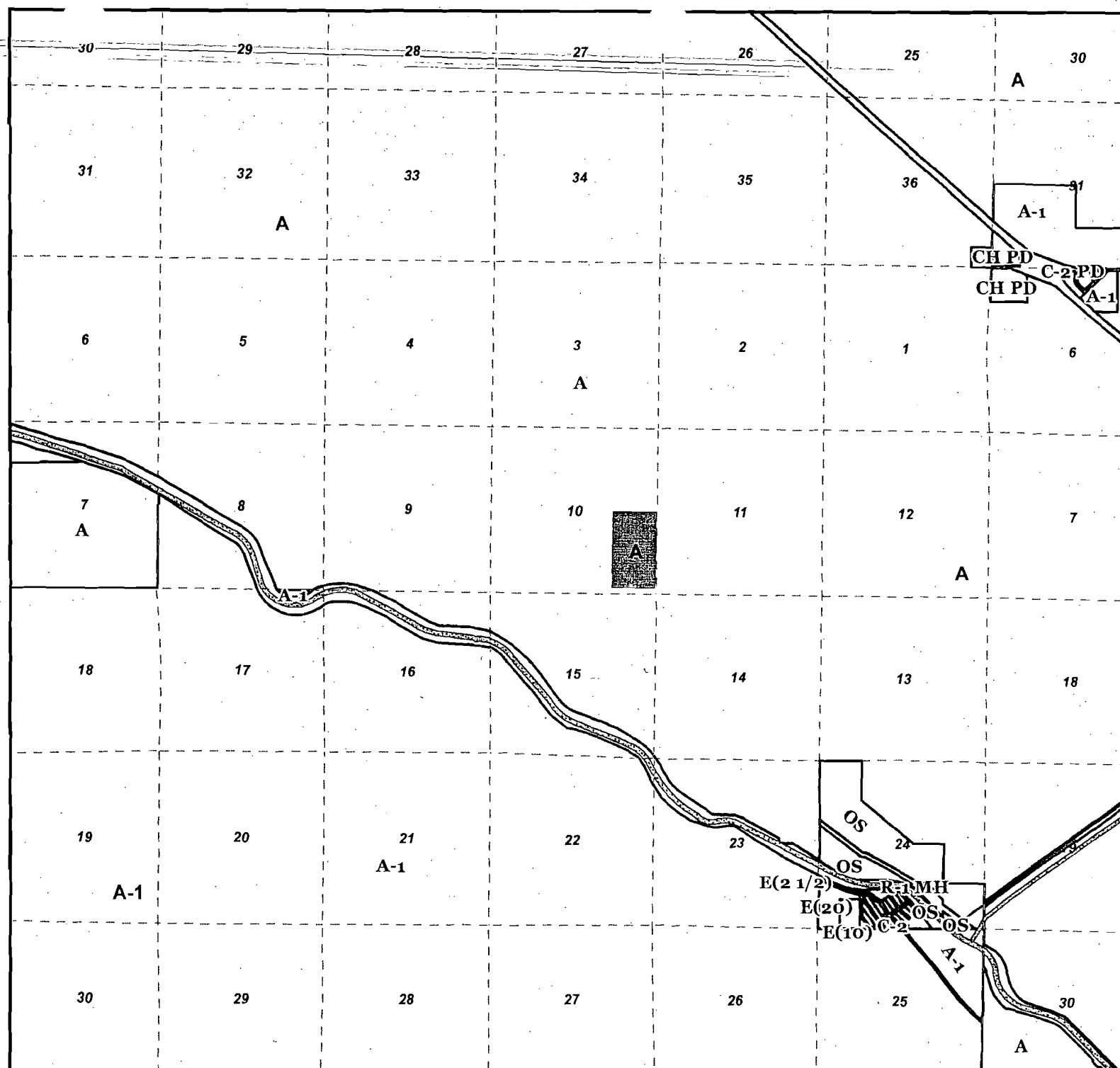
Legend

-  WA Cancellation Area
-  Sections
-  Canal
-  City Limits
- 
- A - Exclusive Agriculture
- A-1 - Limited Agriculture
- OS - Open Space
- E(x) - Estate (x acres)
- R-1 - Single Family Residential
- CH - Highway Commercial
- C-2 - General Commercial
- MH - Mobilehome Comb
- PD - Precise Development Comb

0 0.4 0.8 1.2 Miles



Kern County
Planning & Community
Development Department













Williamson Act Contract Cancellation No. 13-01

Hydrogen Energy
International LLC.
by
Manatt, Phelps, &
Phillips LP

In association with the
Hydrogen Energy California (HECA)
Project by SCS Energy
(CEC Docket No. 08-AFC-8A)

- Figure 4 - Williamson Act Cancellation

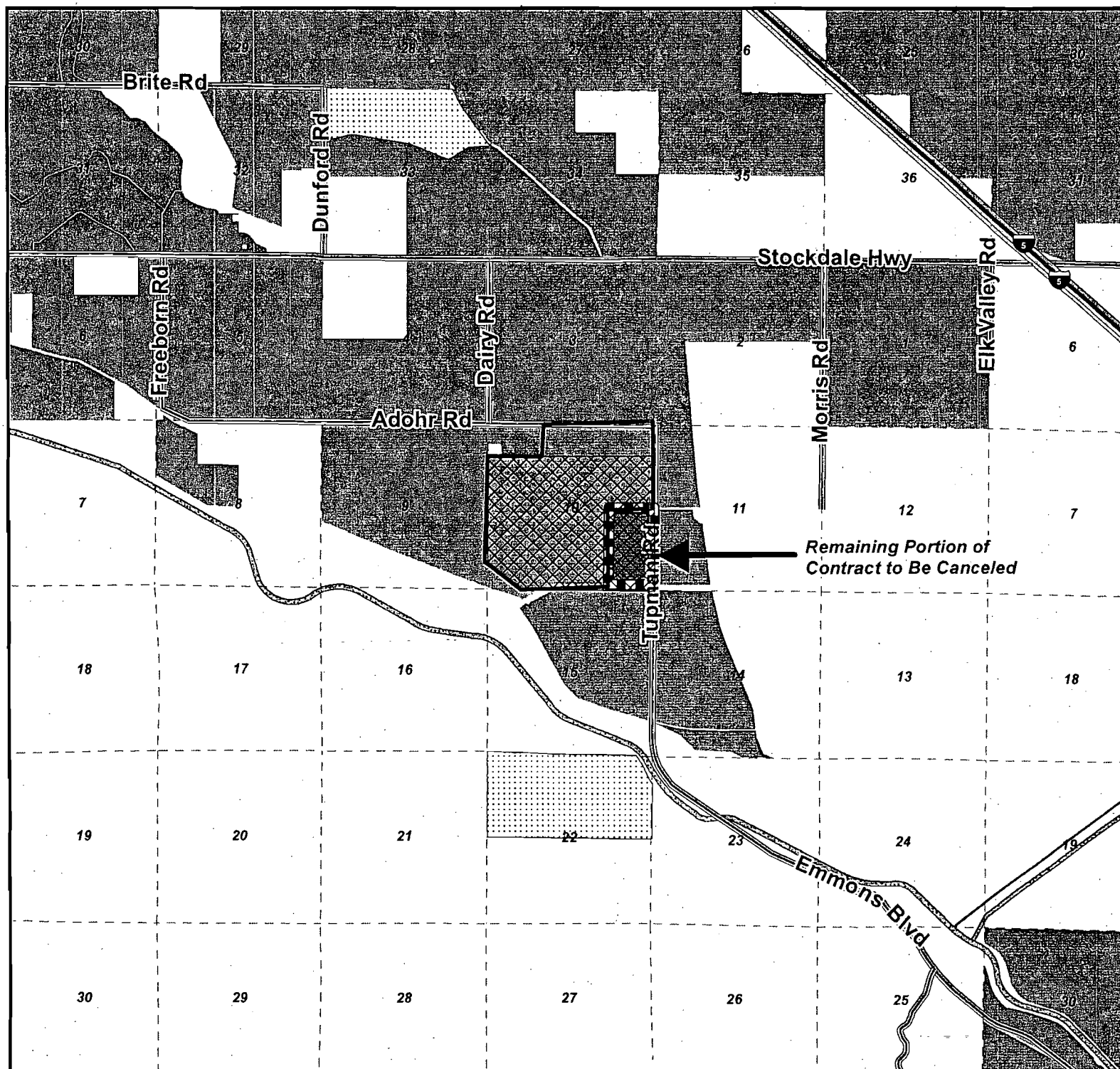
Legend

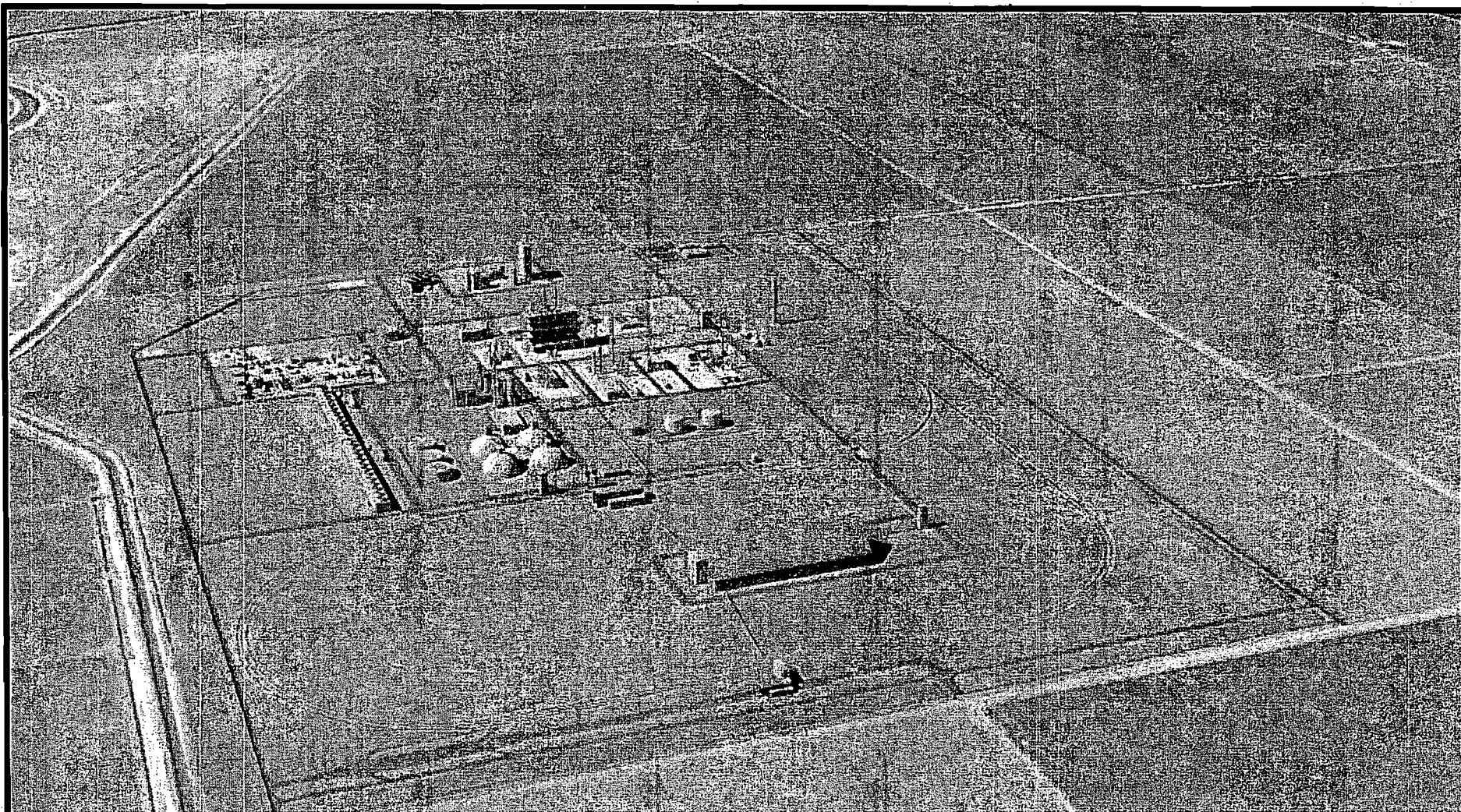
-  WA Cancellation Area
-  Sections
-  railroad
-  Kern Hwys
-  Canal
-  City Limits
-  Active Williamson Act
-  NonRenewal Williamson Act
-  HECA Project Site
-  Portion of WA Contract Previously Canceled per Resolution 2010-168

0 0.4 0.8 1.2 Miles



Kern County
Planning & Community
Development Department





California Energy
Commission
(CEC)
Application
CEC Docket
No. 08-AFC-8A

Hydrogen Energy
California Project
(HECA)
by
Hydrogen Energy
International LLC

- Figure 5a -
Site Plan
(Rendering by Applicant)

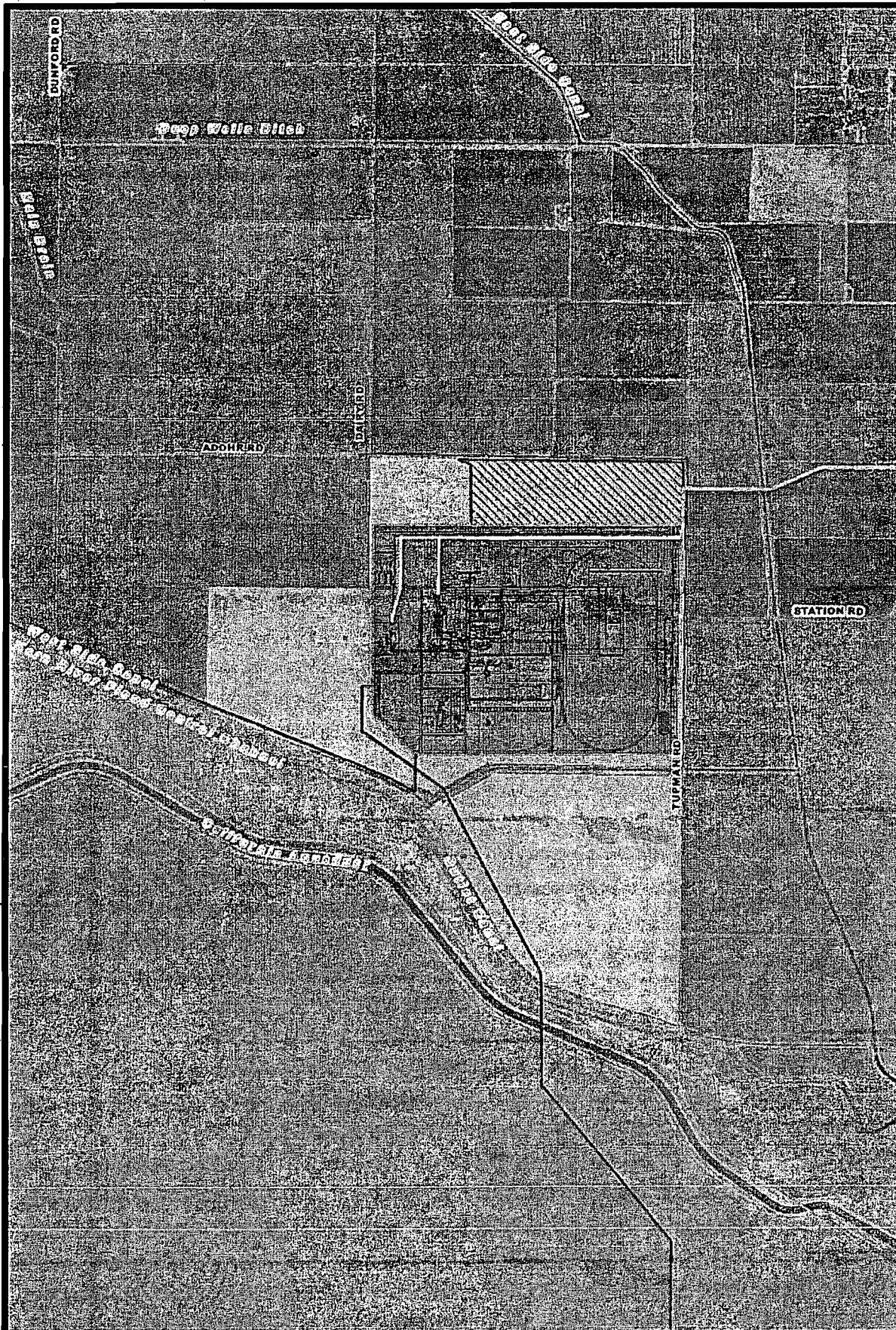
California
Energy
Commission
(CEC)
Application
CEC Docket
No. 08-AFC-
8A

Hydrogen
Energy
California
Project
(HECA)
by
Hydrogen
Energy
International
LLC

- Figure 5b -

Site Plan

(Rendering by
Applicant)



Project Site
 Construction Staging Area
 Controlled Area
 Truck Turnaround
 Carbon Dioxide
 Natural Gas
 Potable Water
 Process Water
 Railroad
 Transmission

Note:
 1. Feature temporarily designated as controlled

0 750 1,500 FEET

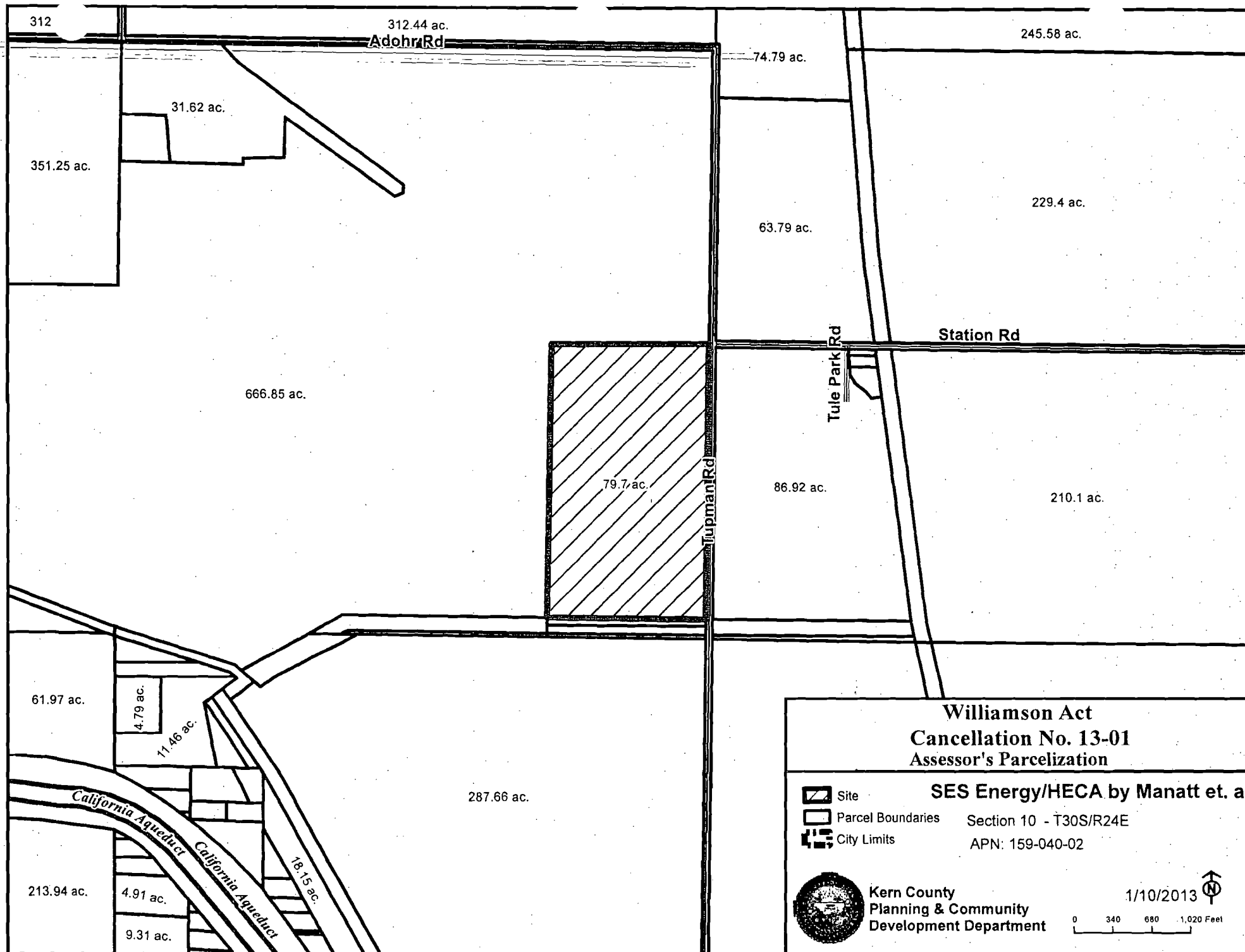
April 2012
 28068052

URS

Hydrogen Energy California (HECA)
 Kern County, California

SITE PLAN

FIGURE 2-4



July 23, 2013 Board Letter

- Summary of CEC's PSA Document -

Lorelei H. Oviatt, AICP, Director

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Administrative Operations
Engineering, Surveying and Permit Services
Planning and Community Development
Roads

July 23, 2013

Board of Supervisors
Kern County Administrative Office
1115 Truxtun Avenue
Bakersfield, CA 93301

Response to February 26, 2013 Board Referral related to the Hydrogen Energy California (HECA) Project by Hydrogen Energy International LLC. (Docket No. 08-AFC-8A): for review of the "Preliminary Staff Assessment Draft Environmental Impact Statement prepared by the California Energy Commission (CEC) (Fiscal Impact: None) SD # 4

This matter is a response to a February 26, 2013 referral made by your Board related to a comprehensive review of the proposed HECA Project and a recommendation on the amount and terms of impact mitigation measures, conditions, and payments for the Hydrogen Energy California (HECA) Project by Hydrogen Energy International LLC.

In summary, the HECA Project is an application for a 300 MW "Integrated Gasification Combined Cycle" power-plant that is being processed by the California Energy Commission (CEC) under Docket No. 08-AFC-8A. The CEC is acting as the CEQA Lead Agency in processing this application because the California Government Code stipulates that they act as the Lead Agency for all thermal electric power plants and related facilities that are 50 MW or larger. Once an application is submitted to the CEC, the Agency prepares a Preliminary Staff Assessment (PSA) and presents it to the applicant, interveners, organizations, agencies and other interested parties for comment. The Final Staff Assessment (FSA) and corresponding environmental-review documents are then prepared by CEC staff, along with a recommendation, and the project is presented to the CEC Commission for review and decision. These documents represent the CEC's environmental review of the project pursuant to CEQA. The CEC process does not allow for conversations with the applicant outside public workshops and neither the applicant or agencies are allowed to review the PSA or FSA before formal release to the public.

As a part of the CEC's application review process, the Planning and Community Development Department (PCDD) coordinated review of the HECA Project among various County Departments. The comments received from Kern County Departments and stakeholders were presented to your Board on February 26, 2013. At that hearing, your Board authorized the Director of the PCDD to prepare and mail formal written comments to the CEC which listed **specific mitigation measures for the CEC to include which address the potential impacts of the HECA Project on Kern County services and risks to residents.** Those comments were distributed on March 6, 2013 (attached).

Also at the February 26, 2013 hearing, your Board directed the PCDD to bring the matter back before you in June 2013 for review of the CEC's environmental document that they were preparing as a part of their review of the HECA Project. The CEC has not yet completed the "Final Staff Assessment and Final EIS" and only just released the "Preliminary Staff Assessment" on June 30, 2013. Therefore, this Board Letter will present Staff's review and preliminary determinations on impacts based on the recently released June 30, 2013 Preliminary Staff Assessment (PSA) from the CEC.

Staff also notes that your Board will also be scheduled to consider a separate application request from HECA to cancel a portion of an existing Williamson Act Contract on the project site. Your Board has the jurisdiction to take action on the Williamson Act Cancellation component of the project and, in 2010, previously approved the cancellation of a 491-acre portion of a Williamson Act Contract that covered a portion of the HECA project site (Cancellation 10-1, Map 120; Resolution 2010-168). However, the applicant revised the project boundaries during project design in 2012. Therefore, the applicant is now requesting cancellation of an additional 72 acres of land under contract in order to facilitate the revised project as currently presented to the CEC for processing. This matter was scheduled for consideration by the Planning Commission on August 27, 2013; however, the application was continued during the hearing at the request of the Commission so that Staff could provide an overview to Commissioners of the contents of the CEC's PSA document. Therefore, the current application will be scheduled for consideration by your Board after it is considered by the Planning Commission on August 22, 2013.

The CEC's Application Review Process

The CEC is acting as the Lead Agency in the review of the HECA Project for compliance with the California Environment Quality Act (CEQA). The application process used by the CEC has been certified by California Resources Agency as meeting all requirements of a certified regulatory program and includes the following steps:

Table 1. CEC Application and CEQA-Equivalent Review Process

Action Party	Action	Date
Applicant	Applicant submittal of "Application for Certification" to the CEC	5/2/12
CEC	CEC Application Processing (Includes Informational Hearings, Site Visit, Status Reports, etc.)	5/12/12 - Current
CEC	Preliminary Staff Assessment/ Draft Environmental Impact Statement (PSA/DEIS) filed	6/30/13
CEC	PSA/DEIS Workshop to be held in Buttonwillow	August 2013
CEC	Committee Conference on PSA/DEIS	TBD
Public	Public Comments Due on PSA/DEIS	TBD
CEC	Final Staff Assessment/Final Environmental Impact Statement filed	TBD
CEC	Prehearing Conference	TBD
CEC	Evidentiary Hearings	TBD
CEC	Committee files Presiding Member's Proposed Decision	TBD
CEC	Hearing on PMPD	TBD
CEC	Commission issues final Decision	TBD

**Items 12 through 16 will be scheduled by the Committee*

TBD – to be determined

Environmental Review Document Prepared by the CEC

The HECA Project involves a State action (permitting of the power plant by the CEC) and a federal action (allocation of financial assistance by the Department of Energy). Therefore, the project is subject to both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

On June 30, 2013, the CEC released a *Preliminary Staff Assessment/Draft Environmental Impact Statement (PSA/DEIS)* as part of the process of complying with the two environmental acts. This PSA/DEIS contains the CEC and DOE's independent evaluation of the HECA Project application.

The CEC has completed an independent assessment pursuant to CEQA and has detailed significant, and for the most part, unresolved issues regarding permitting of the HECA Project. The issues are summarized in Table 2, *CEC's Preliminary Conclusions*, of this report and are discussed further in the Executive Summary and in each related section of the PSA/DEIS.

The DOE has completed its assessment pursuant to NEPA and evaluated the potential environmental impacts of the Proposed Action (providing financial assistance for the construction and operation of the applicant's project) and the alternatives. The PSA/DEIS describes the affected environment and the environmental consequences of the alternatives among various resource areas.

Table 2. Summary of the CEC's Preliminary Impact Conclusions (from PSA)

Technical Area	Complies with LORS	Impacts Mitigated	Additional Information Requested
Air Quality	Yes	Yes	Yes
Biological Resources	Undetermined	Undetermined	Yes
Carbon Sequestration and GHG Emission	Undetermined	Undetermined	Yes
Cultural Resources	Undetermined	Undetermined	Yes
Hazardous Materials	Yes	Yes	No
Land Use	Undetermined	Undetermined	Yes
Noise and Vibration	Yes	Yes	Yes
Public Health	Yes	Yes	No
Socioeconomics	Yes	Yes	No
Soil and Surface Water Resources	Yes	Yes	Yes
Traffic & Transportation	Undetermined	Undetermined	Yes
Transmission Line Safety/Nuisance	Yes	Yes	No
Visual Resources	No	No	No
Waste Management	Undetermined	Undetermined	Yes
Water Supply	Undetermined	Undetermined	No
Worker Safety and Fire Protection	Yes	Yes	No
Facility Design	Yes	N/A	No
Geology & Paleontology	Yes	Yes	Yes
Power Plant Efficiency	N/A	N/A	Yes
Power Plant Reliability	N/A	N/A	Yes
Transmission System Engineering	Yes	Yes	Yes
Alternatives	N/A	N/A	No

¹ LORS = Laws, Ordinances, Regulations and Standards (of the State)

² Information requested from the applicant (HECA) by the CEC.

Kern County Review of the CEC's PSA Document

As noted above, the CEC released the PSA/DEIS on June 30, 2013 as part of the process of complying with CEQA. Per your Board's direction, County Staff has completed a review of the information provided and has provided an analysis of the following four components for your information: project description, impacts, alternatives, and mitigation measures.

Environmental Impact Findings of HECA Project

As is shown above in Table 2, the CEC has found that the project will have a Significant and Unavoidable Impact to "Visual Resources" (Aesthetics). However, the CEC has not yet made any determination on many of the key subject-matter areas that are of particular interest to Kern County.

Specifically, the CEC has not yet made a final conclusion regarding the impacts HECA on the following:

- › Biological Resources Impacts
- › GHG Emissions Impacts
- › Cultural Resources Impacts
- › Land Use compatibility Impacts
- › Traffic and Transportation Impacts
- › Waste Management Impacts
- › Water Supply (Hydrology) Impacts

The PSA indicates that the CEC is awaiting additional information before it can make final environmental impact conclusions on these categories as noted above. It is Staff's understanding that the CEC will make final determinations on these subject-matter areas when they issue their "Final Staff Assessment (FSA) for the project.

Therefore, Staff advises that your Board direct Staff to review and report on the FSA when it is issued.

Inclusion of County-Requested Mitigation Measures

With regard to the specific mitigation measures that your Board directed County Staff to request that the CEC include in the PSA, as binding project requirements to address the impacts of the HECA Project on Kern County; Staff offers comments as follows.

Throughout the PSA, several mitigation measures are recommended in order to reduce significant impacts to a less than significant level. These mitigation measures are called "Conditions of Certification" by the CEC and were formulated after receiving comments from Kern County and other interested parties. However, several of the specific mitigation measures requested by Kern County Staff were not included in the PSA.

Table 3, *Inclusion of County Mitigation Measures in CEC PSA Document (Summary)*, includes a comparison of the County-recommended mitigation measure and its relationship to the mitigation measures included by the CEC.

A more detailed list that fully spells out each of the County-requested MMs is included as Appendix A of this report.

Table 3. Inclusion of County Mitigation Measures in CEC PSA Document (Summary)

Kern County Mitigation Request Per March 6, 2013 Letter	Kern County Requested MMR (Topic Summary, all listing available in Appendix A)	CEC Equivalent Mitigation Measure (Summary)	Sufficiently Addressed by CEC?
Planning-1	Mitigate for loss of Ag land at 1:1 ratio	LAND-1 & 2	Yes
Planning-2	Mitigate to restrict fertilizer production activities to Agricultural fertilizer only	LAND-6	Yes
Planning-3	Mitigate impacts to public services by ensuring sales tax during construction are paid to Kem	SOCIO-1 Use best efforts to ensure as much sales and use tax are attributed to Kem	Partially
Fire-1	HECA to purchase an Industrial Foam Pumper Truck and Tender	WORKER SAFETY-8 Mitigation for overall one-time payment of \$2,000,000 to KCFD	No Insufficient one-time payment amount
Fire-2	HECA to provide funding for Fire Protection Specialist	WORKER SAFETY-8 Mitigation for overall one-time payment of \$2,000,000 to KCFD	No Insufficient one-time payment amount
Fire-3	HECA to provide funding for purchase of 3.5-5 acre plot to relocate fire station	WORKER SAFETY-8 Mitigation for overall one-time payment of \$2,000,000 to KCFD	No Insufficient one-time payment amount
Fire-4	HECA to provide annual funding for 50% of cost of a County Fire Prevention Inspector	WORKER SAFETY-8 Mitigation for annual payment of \$850,000 to KCFD	No Insufficient annual payment amount
Fire-5	HECA to provide annual training to KC Fire Staff	WORKER SAFETY-8 Mitigation for overall one-time payment of \$2,000,000 to KCFD	No Insufficient one-time payment amount
Fire-6	HECA to provide funding for a new Fire Rescue Truck	WORKER SAFETY-8 Mitigation for overall one-time payment of \$2,000,000 to KCFD	No Insufficient one-time payment amount
Fire-7	HECA to provide Air Monitoring Equipment	WORKER SAFETY-8 Mitigation for overall one-time payment of \$2,000,000 to KCFD	No Insufficient one-time payment amount
Fire-8	HECA to contribute annual funds for salaries for 6 Fire Engineers	WORKER SAFETY-8 Mitigation for annual payment of \$850,000 to KCFD	No Insufficient annual payment amount
Fire-9	HECA shall contribute to reverse 9-1-1 system and shelter-in-place program	WORKER SAFETY-8 Mitigation for annual payment of \$850,000 to KCFD	No Insufficient annual payment amount
EHS-1	Crash Protection around Secondary Containment	HAZ-4 Discusses specs for ammonia storage, but no barriers	No
EHS-2	Spill Sensors and Detectors, as approved by EHS for Early Notification	HAZ-3 Develop a Safety Management Plan, including monitors	Yes

Table 3. Inclusion of County Mitigation Measures in CEC PSA Document (Summary)			
Kern County Mitigation Request Per March 6, 2013 Letter	Kern County Requested MM Topic Summary (Full listing available in Appendix A)	CEC Equivalent Mitigation Measure (Summary)	Sufficiently Addressed by CEC?
EHS-3	Comply with CUPA (Certified Unified Program Agency)	HAZ-2 Requires inclusion of EHS comments but no CUPA compliance	No
EHS-4	Provide Knox Box (locked document storage box) at main entrance for 1 st responders.	None	No
EHS-5	Video Monitoring System	HAZ-7 Security Plan w/closed circuit	Yes
EHS-6	Secondary ingress/egress	WORKER SAFETY-6 3 secure access points	Yes
EHS-7	Prepare Training brochure for residents for "off-site consequences"	None	No
EHS-8	Complete a Process Hazard Analysis (PHA) approved by EHS	HAZ-9 CEC approves PHA, not EHS	Partially
EHS-9	Prepare an Emergency Response Plan for accidental hazardous Release	HAZ-2/WORKER SAFETY-2 Spill Prevention, Control, Counter-measures Plan & Emergency Action Plan	Partially
EHS-10	Permanent weather station with wind direction in case of accidental release	None	No
Engineering-1	Applicant to pay for all County costs to review, inspect and issue permits and plans	GEN-3 Payments to County based on a negotiated fee schedule; not adopted County fee code.	Partially
Engineering-2	Applicant to provide a qualified person, approved by County, to prepare hazards reports.	None	No
Engineering-3	Applicant to provided CA registered civil engineer to act as Resident Engineer during construction	GEN-4 Assign a CA architect/engineer to act as Resident Engineer	Yes
Engineering-4	Applicant to provide an on-site office for County inspector.	None	No
Roads-1	<i>Specific Final Mitigation Measures are Forthcoming</i>	<i>Place-holder</i>	<i>Place-holder</i>

Table 3. Inclusion of County Mitigation Measures in CEC PSA Document (Summary)			
Kern County Mitigation Request Per March 6, 2013 Letter	Kern County Requested MM Topic Summary, full listing available in Appendix A	CEC Equivalent Mitigation Measure (Summary)	Sufficiently Addressed by CEC?
Waste-1	Provide Waste characterization to County for compliance with Kern landfill operations/fees	WASTE-7 Requires discussion of local regulations, but no approval from Kern County or specific regulations.	No
Waste-2	Conduct a market analysis of potential beneficial uses of waste	WASTE-8 Develop a Gasification Waste Diversion Program.	Yes
Waste-3	Payment of specific tipping fees (per ton) to compensate Kern County for impacts to Jurisdictional Reporting and to fund alternative diversion programs to help Kern meeting State requirements	None	No
Waste-4	Divide waste streams among multiple facilities to reduce impacts to any one facility	None	No
Sheriff-1	Increase private security during construction	HAZ-6 Construction Site & Security Plan, including Fencing	Yes
Sheriff-2	Use building/security alarms	HAZ-7 Operational Security Plan including guards and detectors.	Yes

As demonstrated by Table 3, there are a number of mitigation measures requested by Kern County that were either not included by the CEC, that were re-worded to eliminate important details, or that were not adequately addressed. Specifically, mitigation measures from Kern County Planning, Fire, Environmental Health Services, Engineering and Survey Services, Waste Management and the Roads Department were not included in the CEC's document.

Fire Mitigation

With regard to the requested Fire mitigation measures, the CEC did not include the specific mitigation language requested by the Kern County Fire Department. Instead, language was included that would require HECA to make (1) a one-time payment of \$2,000,000.00 and (2) an annual payment of \$850,000, less any allocation of funds provided to the Fire Department via local property taxes.

Staff consulted with the Fire Department and found that these amounts are insufficient to implement the specific mitigation measures requested by Fire in order to adequately mitigate the impacts of HECA; which is a fertilizer production facility that also produces power. This County-requested mitigation is based on Kern County Fire's demonstrated experience with chemical and industry facilities that are distinct from power plants.

In addition, the CEC specifically determined that the established fees for fire inspections and building permits would be "waived" and replaced by the proposed payment. Staff notes that the established Fire fee ordinances contain no provisions for waiver by the CEC or the Fire Chief. Further they are to support the entire inspection and permit review system and not just specific

projects. Even if an outside consultant is hired with the compensation provided, they would still need to be managed by a County Fire Inspector. Therefore, no waiver of fees is warranted.

Further, the mitigation states that the annual amount proposed for operations, monitoring and training would be "off-set" by the property tax revenue to the County Fire fund that would result from the increase of property tax revenue if HECA is built. The Fire fund revenue is not intended to benefit one specific property but is used to maintain a County-wide system. The substantial additional costs, equipment, and staffing that will be required by HECA are impacts under CEQA and are directly related to the fertilizer production and related increased risks to the public safety, first responders, and employees of the plant. Any off-set is not warranted and is unacceptable.

Therefore, the specific line item costs of the requested mitigation measures can be measured as listed in Table 4 below. It is noted that, at the request of the CEC, County Staff has provided background information to the CEC which supports the listed costs.

Table 4. Fire Mitigation Costs		
Requested MM Number	Mitigation Measure Request	Anticipate d Cost
One Time Costs (Paid prior to initiation of construction)		
Fire-1	HECA to purchase an Industrial Foam Pumper Truck and Tender	\$850,000
Fire-2	HECA to provide funding for Fire Protection Specialist (Estimated at \$125,000/year for duration of Construction through Commencement of Operations: 4 years [2014-2018])	\$500,000
Fire-3	HECA to provide funding for purchase of 3.5-5 acre plot to relocate fire station	\$250,000
Fire-4	HECA to provide annual funding for 50% of cost of a County Fire Prevention Inspector (Estimated at \$88,600/year for duration of Construction through Commencement of Operations: 4 years [2014-2018])	\$354,400
Fire-6	HECA to provide funding for a new Fire Rescue Truck	\$850,000
Fire-7	HECA to provide Air Monitoring Equipment	\$50,000
Total One Time Payment Required		\$2,854,400
Amount Proposed by CEC		\$2,000,000
Shortage/ Adjustment Amount Needed		\$854,400
Annual Costs (Recurring)		
Fire-5	HECA to provide annual training to KC Fire Staff	\$25,000
Fire-8	HECA to contribute annual funds for salaries for 6 Fire Engineers	\$950,000
Fire-9	HECA shall contribute to reverse 9-1-1 system and shelter-in-place program (\$2.50 per address, per year. Estimated at 5,000 addresses)	\$12,500
Total Annual Payment Required		\$987,500
Amount Proposed by CEC		\$850,000
Shortage/ Adjustment Amount Needed		\$137,500
+ Remove language regarding "off-set" for Property Tax Allocation + Remove language regarding waiver of County-related inspection fees		

Roads Mitigation Measures

The HECA Applicant is continuing to work with the Roads Department to resolve issues with the Traffic Study that was prepared for the HECA Project. As of the preparation of this Report, the Roads Department has indicated that they are in the final stages of reviewing the Traffic Impact Study prepared by URS in June 2013 and the Roads Department is finalizing their list of necessary mitigation measures.

Though not final at this time, the mitigation measures will likely include, but may not be limited to, the following improvements:

1. Reconstruct specified portions of the following roads, to County Standards: Morris Road, Station Road, Dairy Road and Ador Road.
2. Provide an asphaltic concrete overlay and additional pavement at intersection road returns, to County Standards, along portions of the following roads: Stockdale Highway (including a 4.7-mile segment from SR43 to I-5; a 2.3 mile segment from I-5 to Dairy Road; and a 3-mile segment from Dairy Road to Wasco Way); and to Wasco Way along a 3-mile segment from Stockdale Hwy. to SR 58.
3. Construct improvements, to County and Caltrans standards, (including additional turn-lanes, traffic signals, and intersection improvements) to multiple intersections throughout the project's transportation route.
4. Submit a Traffic Control Plan for Kern County and Caltrans approval.
5. Schedule land and road closures during off-peak hours.
6. Limit construction traffic to specified roads and encourage carpooling.
7. Provide an offer of dedication to the County for additional right-of-way in specified areas.
8. Keep all easements open and clear.
9. Enter into a secured agreement with Kern County to ensure improvements are made and repairs for project-related impacts and damage to existing roadways.
10. Limit operational traffic to designated roads and contribute funds for annual maintenance of project roadways.

The anticipated costs associated with the draft mitigation measures have not been finalized at the time of the preparation of this report. However, Staff anticipates having a finalized cost estimate to provide for your Board's review prior to the CEC's release of the Final Staff Assessment; which is projected to be in the last quarter of 2013.

Staff Conclusions

As demonstrated in this Report, there are a number of issues that have not yet been addressed by the CEC, or that are pending further information. As such, several of the Kern-County requested mitigation measures were not included in the PSA. Therefore, Staff is recommending that your Board authorize Staff to prepare a written request to the CEC to make the following revisions to the PSA:

Table 5. Kern County Requested Changes/Additions to Mitigation Measures in the CEC's June 2013 PSA

Kern County Mitigation Request	Kern County Requested Mitigation Measure (Topic Summary)	Kern County Requested Change to CEC Mitigation Measure (Requested changes in strike-out and underline)	Kern County Justification for Revision
Planning-3	Mitigate impacts to public services by ensuring sales tax during construction are paid to Kern	<p>Revise SOCIO-1 to read as follows:</p> <p><i>The project owner shall use best efforts to ensure as much sales and use tax revenue resulting from project construction and operation is attributed to Kern County. <u>To ensure this, the project owner shall adhere to the following:</u></i></p> <ol style="list-style-type: none"> <i>1. <u>Prior to the issuance of the first grading or building permit for the project, the Project Proponent shall obtain a local street address within the unincorporated portion of Kern County and shall register this address with the State Board of Equalization. The address shall be used for all activities related to the acquisition of construction materials and for all construction-related purchase and billing purposes associated with the project. The Project Operator shall allow the County to use this sales tax information publicly for reporting purposes.</u></i> <i>2. <u>The project proponent shall continuously comply with the following during construction and operation:</u></i> <ol style="list-style-type: none"> <i>a. <u>Make a good-faith effort to have all transactions that will generate sales and use taxes, including transactions of project owner's contractors, occur in the unincorporated area of the county;</u></i> <p><i>(No further changes to remainder of Mitigation Measure)</i></p>	<p>This revision will facilitate implementation of the rest of the mitigation measure as listed by the CEC.</p> <p>See above</p>
Fire-1	HECA to purchase an Industrial Foam Pumper Truck and Tender	Revise WORKER SAFETY-8 one-time payment to KCFD of \$2,854,400	Amount insufficient per Table 4 of this Report
Fire-2	HECA to provide funding for Fire Protection Specialist	Revise WORKER SAFETY-8 one-time payment to KCFD of \$2,854,400	Amount insufficient per Table 4 of this Report
Fire-3	HECA to provide funding for purchase of 3.5-5 acre plot to relocate fire station	Revise WORKER SAFETY-8 one-time payment to KCFD of \$2,854,400	Amount insufficient per Table 4 of this Report
Fire-4	HECA to provide annual funding for 50% cost of County Fire Prevention Inspector	Revise WORKER SAFETY-8 one-time payment to KCFD of \$2,854,400	Amount insufficient per Table 4 of this Report
Fire-5	HECA to provide annual training to KC Fire Staff	Revise WORKER SAFETY-8 annual payment of to KCFD of \$987,500	Amount insufficient per Table 4 of this Report

Table 5. Kern County Requested Changes/Additions to Mitigation Measures in the CEC's June 2013 PSA

Kern County Mitigation Request	Kern County Requested Mitigation Measure (Topic Summary)	Kern County Requested Change to CEC Mitigation Measure (Requested changes in strike out and <u>underline</u>)	Kern County Justification for Revision
Fire-6	HECA to provide funding for a new Fire Rescue Truck	Revise WORKER SAFETY-8 one-time payment to KCFD of \$2,854,400	Amount insufficient per Table 4 of this Report
Fire-7	HECA to provide Air Monitoring Equipment	Revise WORKER SAFETY-8 one-time payment to KCFD of \$2,854,400	Amount insufficient per Table 4 of this Report
Fire-8	HECA to contribute annual funds for salaries for 6 Fire Engineers	Revise WORKER SAFETY-8 annual payment of to KCFD of \$987,500	Amount insufficient per Table 4 of this Report
Fire-8	HECA shall contribute to reverse 911 system and shelter-in-place program	Revise WORKER SAFETY-8 annual payment of to KCFD of \$987,500	Amount insufficient per Table 4 of this Report
EHS-1	Crash Protection around Secondary Containment	Revise HAZ-4 to read as follows: <i>The two anhydrous ammonia storage tanks shall be double-walled tanks designed to API 620 Appendix R. The storage tanks shall be protected by a secondary containment basin capable of holding 125% of the storage volume and that drains to an underground vault. The final design drawings and specifications for the ammonia storage tanks and secondary containment basin and vault shall be submitted to the CPM for review and approval.</i> <u>Additionally, the applicant shall provide crash protection around the proposed secondary containment areas as appropriate to accommodate stacking/moving equipment. The applicant shall provide physical barriers and site security for the proposed project site as approved by the Environmental Health Division to reduce the potential of a chemical release.</u>	Though barriers are discussed in the analysis that could assist with crash protection, Kern requests that specific language be added to the measure to ensure implementation
EHS-3	Comply with CUPA (Certified Unified Program Agency)	Revise HAZ-2 to read as follows: <i>The project owner shall concurrently provide the following to the Kern County Environmental Health Service Department (KCEHSD) and the CPM for review:</i> a. <i>a Hazardous Materials Business Plan (HMBP);</i> b. <i>a Spill Prevention, Control, and Countermeasure Plan (SPCC Plan); and</i> c. <i>a Risk Management Plan (RMP) specifically for the use and storage of anhydrous ammonia, methanol, and liquid oxygen/nitrogen and prepared pursuant to the California Accidental Release Program (CalARP).</i> d. <u>Any other documents deemed necessary by KCEHSD for compliance with Certified Unified Program Agency</u>	Revision Necessary for clarification

Table 5. Kern County Requested Changes/Additions to Mitigation Measures in the CEC's June 2013 PSA			
Kern County Mitigation Request #	Kern County Requested Mitigation Measure (Topic Summary)	Kern County Requested Change to CEC Mitigation Measure (Requested changes in strike-out and underline)	Kern County Justification for Revision
		<p><u>(CUPA).</u></p> <p>After receiving comments from the KCEHSD and the CPM, the project owner shall reflect all recommendations in the final documents. Copies of the final plans shall then be provided to the KCEHSD for information and to the CPM for approval.</p>	
EHS-4	Provide Knox Box (locked document storage box) at main entrance for 1 st responders.	<p>Include additional HAZ mitigation measure to read as follows:</p> <p><u>The applicant shall provide a locked storage box (Knox box) outside the main entrance that can be accessed by first responders. It shall provide first responders with the ability to access the site immediately. It shall contain the following information:</u></p> <ul style="list-style-type: none"> • <u>Hazardous materials business plan</u> • <u>MSDS sheets for all chemicals stored at the site</u> • <u>Emergency contact numbers</u> 	Though a Knox Box may be needed as part of the HMBP, revision necessary for clarification
EHS-7	Prepare Training brochure for residents for "off-site consequences"	<p>Include additional HAZ mitigation measure to read as follows:</p> <p><u>The applicant shall develop a letter/pamphlet/brochure to be reviewed and approved by the Planning Department and Environmental Health Division that provides information to the residences/businesses within the impact area of the off-site consequence analysis (OCA). The information must describe the OCA findings and actions to follow in the event of a release from any covered Cal ARP process.</u></p>	This revision helps ensure that the applicant prepares appropriate public information for an OCA that is reviewed by the County prior to distribution.
EHS-8	Complete a Process Hazard Analysis (PHA) approved by EHS	Revise HAZ-9 to include Kern County EHS as a reviewing/approving agency for PHA.	Revision necessary for clarification
EHS-9	Prepare an Emergency Response Plan for accidental hazardous Release	Revise HAZ-2 to include provision for preparation of an Emergency Response Plan for accidental hazardous Release.	Revision necessary for clarification
EHS-10	Permanent weather station with wind direction in case of accidental release	<p>Include additional HAZ mitigation measure to read as follows:</p> <p><u>The applicant shall provide a permanent weather station with remote internet access for monitoring of wind direction in case of an accidental release at the facility. The data shall be kept on site or made available electronically for review by the Environmental Health Division on a 24/7 basis.</u></p>	Will provide County a method to direct first responders and evacuations in the event of an accidental release.

Table 5. Kern County Requested Changes/Additions to Mitigation Measures in the CEC's June 2013 PSA

Kern County Mitigation Request	Kern County Requested Mitigation Measure (Topic Summary)	Kern County Requested Change to CEC Mitigation Measure (Requested changes in strike-out and <u>underline</u>)	Kern County Justification for Revision
Engineering-1	Applicant to pay for all County costs to review, inspect and issue permits and plans	Revise GEN-3 to ensure that payments made to County are based on adopted County fee code; not a negotiated fee schedule.	Required by County Code
Engineering-2	Applicant to provide a qualified person, approved by County, to prepare hazards reports.	Include additional GEN Mitigation Measure to read as follows: <u>The applicant shall provide a qualified person, approved by the Department, to prepare a report identifying all hazardous materials, classified in accordance with the California Building Code, to be used or stored. The report shall be submitted with their plan review documents and include recommendations for fire protection, as well as storage and handling of materials.</u>	Necessary per CBC
Engineering-4	Applicant to provide an on-site office for County inspector.	Include additional GEN Mitigation Measure to read as follows: <u>The applicant shall provide an on-site office, plan rack, desk and adequate accommodations for the County's building inspector(s) for the duration of the project.</u>	No sufficient County facilities at this time
Roads-1	- Place-holder - Mitigation Measures Forthcoming from Kern County	- Place-holder - Mitigation Measures Forthcoming from Kern County	Pending
Waste-1	Provide Waste characterization to County for compliance with Kern landfill operations/fees	Revise WASTE-7 to include review and approval from Kern County Waste Management Department	Revision necessary for clarification
Waste-3	Payment of specific tipping fees (per ton) to compensate Kern County for impacts to Jurisdictional Reporting and to fund alternative diversion programs to help Kern meeting State requirements	Include additional WASTE Mitigation Measure to read as follows: <u>If residual gasification solids, or other waste products, are subject to Jurisdictional Reporting and credited to the Kern County unincorporated area as disposal, HECA shall compensate Kern County via payment based on the following schedule: \$30 a ton (0-100 tons per day); \$50 a ton (101 – 200 tons per day); \$75 a ton (greater than 200 tons per day); or other amount as approved by the Board of Supervisors, to mitigate impacts to diversion programs. The County shall deposit the money in a Diversion Mitigation Reserve Account that will be used to fund diversion programs in Kern County. This is in addition to any gate/tipping fees for disposal.</u>	Revision needed to ensure that County is adequately compensated for impacts to County facilities and State Diversion Program Requirements

Table 5. Kern County Requested Changes/Additions to Mitigation Measures in the CEC's June 2013 PSA			
Kern County Mitigation Request #	Kern County Requested Mitigation Measure (Topic Summary)	Kern County Requested Change to CEC Mitigation Measure (Requested changes in strike out and underline)	Kern County Justification for Revision
Waste-4	Divide waste streams among multiple facilities to reduce impacts to any one facility	Include additional WASTE Mitigation Measure to Read as follows: <u>HECA waste stream shall be subdivided between several facilities to reduce the potential impacts to any one facility. Facilities to be considered include the Bakersfield Metropolitan (Bena) RSLF, the Shafter-Wasco RSLF and the Taft RSLF.</u>	Revision needed to ensure that impacts to County facilities are appropriately distributed.
¹ See Appendix A of this Report for a complete "verbatim" listing of all Kern County Requested Mitigation Measures.			

Staff concludes that the listed revisions to the CEC's proposed Mitigation Measures that have been included in the Preliminary Staff Assessment will provide protection for public safety and certainty for the applicant and public on the proposed mitigation measures. Staff continues to discuss our concerns with the CEC staff and the applicant and has no recommendation on the overall HECA Project at this time.

Therefore, **IT IS RECOMMENDED** that your Board (a) Direct Staff to review the Final Staff Assessment when it is issued by the California Energy Commission; (b) Report back to your Board with additional comments and recommendations after review of the Final Staff Assessment; and, (c) authorize the Director of the Kern County Planning and Community Development Department to prepare and mail formal written comments to the California Energy Commission that includes specific requests for mitigation measures requested by Kern County Departments to address potential impacts of the HECA project in Kern County.

Sincerely,



LORELEI H. OVIATT, AICP, Director
Kern County Planning and Community Development Department

By: JACQUELYN R. KITCHEN, Supervising Planner
Kern County Planning and Community Development Department

Attachments

I:\ADM\Allison\Board Letters\7-23-13 HECA Board letter.docx

CC: Kern County Administrative Office
Kern County Counsel
Kern County Fire Department

Kern County Public Health Services Department, Environmental Health Division
Kern County Engineering, Survey and Permit Services Department
Kern County Roads Department
Kern County Waste Management Department
Kern County Sheriff's Department
California Energy Commission; Attn: Ellie Townsend-Hough, Chemical Engineer
California Energy Commission; Attn: John Heiser, Siting Project Manager
Hydrogen Energy California; Attn: Jim Croyle, CEO of SCS Energy
Hydrogen Energy California; Attn: Tom Daniels, Managing Director
SCS Energy California, LLC.; Attn: Marisa Mascaro
Latham & Watkins, LLP; Attn: Michael J. Carroll
URS Corporation; Attn: Dale Shilekis, Vice President
Kern County Development Services Agency
Kern County Grand Jury

Appendix A

Inclusion of County Mitigation Measures in CEC PSA Document (Detailed Listing)

Appendix A: Inclusion of County Mitigation Measures in CEC PSA Document (Detailed Listing)

KC Agency	CEQA Impact Section	Requested MM	Requested MM Included?	CEC Equivalent MM Included in PSA
PCDD	Agriculture	Recommended Mitigation Measure Concept: Include MM to mitigate for the loss of Prime Farmland at a 1:1 ratio, with mitigation lands to occur within Kern County.	Yes	LAND-1 & 2 (Mitigate at a 1:1 ratio for conversation of Ag Land)
PCDD	Land Use Hazards and Hazardous Materials	Recommended Mitigation Measure Concept: Include MM to restrict the items produced on site and in the Manufacturing Complex to "fertilizer manufacture and storage for agricultural use only" per Section 19.12.030.A of the Kern County Zoning Ordinance.	Yes	LAND-6 Compliance with 19.12.030.A.2 to restrict chemical manufacturing to Ag fertilizers only
Fire	Hazards and Hazardous Materials Utilities and Service Systems	<p>Verbatim Requested Mitigation Measures:</p> <p>1. Prior to the issuance of the first grading or building permit for the HECA Project, the Project Proponent shall fund the purchase and delivery to the Fire Department of a fully equipped Industrial Foam pumper/tender, which will be housed and maintained by the Kern County Fire Department, and an additional 2,500 gallon cache of Class B foam to be provided to the Department to be stored at an off-site location. The Industrial Foam pumper/tender, with its onboard foam capabilities, and the 2,500 gallon cache of Class B foam will allow the Department to have the specialized capabilities and equipment necessary to control and contain a fire or product leak emergency that occurs at the HECA plant.</p> <p>Therefore, in order to mitigate the significant impact that this project creates, HECA is required to purchase and deliver to the County a fully equipped Industrial Foam pumper/tender with its onboard foam storage capabilities, and an additional 2,500 gallon cache of foam, which adheres to the following minimum standards.</p> <ol style="list-style-type: none"> The Industrial Foam pumper/tender shall be manufactured to the Department's standards with no substitutions. The Industrial Foam pumper/tender must be purchased, constructed, and delivered (construction and delivery time is estimated to be nine months) to the Department 30 days prior to the start-up of the project. Additional time may be required in order to place the Industrial Foam pumper/tender in service and to allow for training personnel assigned to operate the pumper. The Industrial Foam pumper/tender shall be fully equipped to Department specifications. The final authority on the specifications for the Industrial Foam Pumper/Tender shall rest with the Department. The Title for the Industrial Foam Pumper/Tender shall be transferred to the County upon delivery. The cache of foam shall meet the Department's standards. If the Department responds to an emergency at HECA and uses the cache of foam to control or contain the emergency, HECA will be required to replace the amount used within 30 days of the incident. <p>The estimated cost for the Industrial Foam Pumper/Tender is \$800,000 and the 2,500 gallon cache is \$50,000. Please note: Foam storage data derived from calculations based on satisfactorily extinguishing a two-dimensional tank fire involving the largest tank containing HECA's most volatile/dangerous commodity.</p>	Yes/No*, Concept	WORKER SAFETY-8 One-time payment of \$2,000,000 for capital improvements.

	<p>2. Prior to the application for the first grading or building permit for the HECA Project, the Project Proponent shall provide a Fire Protection Specialist to the Kern County Fire Department for use during the plan review process. HECA will be allowed to select the Specialist from a list of qualified individuals provided by the Department. Furthermore, HECA and the Fire Protection Specialist shall develop a comprehensive <i>Fire and Life Safety</i> plan that describes the methods to reduce the potential of an uncontrolled fire thus reducing the threat to life and property. These plans must be submitted and approved by the Department prior to building permit approval.</p>	Yes/No*, Concept	WORKER SAFETY-8 Annual payment of \$850,000 for operations and maintenance.
	<p>3. Prior to the issuance of the first grading or building permit for the HECA Project, the Project Proponent shall provide, or reimburse Kern County for the purchase of, a 3 ½ to 5 acre plot of land in which to relocate Kern County Fire Station 53. The Fire Department intends to relocate Fire Station 53 in the vicinity of Interstate 5 and Highway 119 in order to better serve HECA and the surrounding communities. The new Fire Station site would include a standard fire station capable of housing three to six on-duty firefighters, a three-bay engine house, and a helipad capable of handling emergency helicopters. The Fire Department shall have final authority on the exact location for the fire station.</p>	Yes/No, Concept	WORKER SAFETY-8 One-time payment.
	<p>4. During the active construction phase of the project, the Project Proponent shall provide 50% of the operating cost of a Kern County Fire Department fire prevention inspector, estimated to be \$88,600 who will be actively involved with fire prevention measures on a daily basis.</p>	Yes/No, Concept	WORKER SAFETY-8 Annual payment.
	<p>5. Prior to the issuance of the first certificate of occupancy, the Project Proponent shall provide training to Kern County Fire Department Staff, as identified by the Fire Department, in the areas needed to mitigate Hydrogen and other related hazardous material emergencies that might arise at the plant for the crews that are stationed at Buttonwillow (25), Taft (21), Old River (53), Maricopa (22) and Fellows (23). This will also be an annual requirement to train at least three (3) Kern County Fire Department personnel in these station areas.</p>	Yes/No, Concept	WORKER SAFETY-9 Joint training established with exercises every two years.
	<p>6. Prior to the issuance of the first grading or building permit for the HECA Project, the Project Proponent shall provide full funding to purchase a fire rescue truck, to be housed and maintained by the Kern County Fire Department, and capable of lifting heavy loads in order to extricate trapped passengers in the event of a semi-truck vehicle accident. Fire Rescue Truck specifications/capabilities, and purchasing details, are as follows:</p> <ol style="list-style-type: none"> A fire rescue truck with a 50-ton rotator crane, manufactured to the Fire Department's specifications with no substitutions. The fire rescue truck must be purchased, constructed, and delivered (construction and delivery time is estimated to be nine months) to the Fire Department 30 days prior to the start-up of the project. Additional time may be required in order to place the fire rescue truck in service and to allow for training personnel assigned to operate the vehicle. The fire rescue truck shall be fully equipped to Department specifications. The final authority on the specifications for the fire rescue truck shall rest with the Fire Department. The vehicle title for the fire rescue truck shall be transferred to the County upon delivery. 	Yes/No, Concept	WORKER SAFETY-8 One-time payment.

		<p>7. Prior to the issuance of the first certificate of occupancy, the Project Proponent shall provide the Kern County Fire Department with air monitoring equipment that provides first responders with the capability to monitor for multiple toxic gases during an emergency at the facility.</p> <p>8. The Project Proponent shall continuously comply with the following: The Project Proponent shall be responsible to contribute annually funds to the Kern County Fire Department for the full salaries of six Fire Engineer positions to drive and operate the Industrial Foam Pumper/Tender and the Fire Rescue Truck.</p> <p>9. The Project Proponent shall continuously comply with the following: The Project Proponent shall be responsible to contribute annually to the Kern County Fire Department for the reverse 9-1-1 system, based upon the number of addresses that would be directly affected by a major emergency at the facility requiring surrounding residences to shelter-in-place or evacuate.</p>	<p>Yes/No, Concept</p> <p>Yes/No, Concept</p> <p>Yes/No, Concept</p>	<p>WORKER SAFETY-8 One-time payment.</p> <p>WORKER SAFETY-8 Annual payment.</p> <p>WORKER SAFETY-8 Annual payment.</p>
EHS	Hazards and Hazardous Materials	<p>Verbatim Requested Mitigation Measures:</p> <p>Prior to the commencement of project operations, the Project Proponent shall comply with the following:</p> <p>1. The applicant shall provide crash protection around the proposed secondary containment areas as appropriate to accommodate stacking/moving equipment. The applicant shall provide physical barriers and site security for the proposed project site as approved by the Environmental Health Division to reduce the potential of a chemical release.</p> <p>2. The applicant shall provide sensors and/or detectors, as approved by the Environmental Health Division, at the site that will provide early notification of an accidental release of large quantities of toxic and flammable gasses/vapors from hazardous materials stored or generated on site. Chemicals of concern proposed for storage include anhydrous ammonia (toxic), hydrogen sulfide (toxic and flammable) and alcohol (flammable) and are to be monitored by an appropriate sensor array sufficient in scope to reasonably detect the materials before going offsite.</p> <p>3. The applicant shall apply for a permit and comply with all regulations pertaining to the Certified Unified Program Agency (CUPA). Program elements consolidated under the CUPA are: Hazardous Materials Release Response Plan, Chemical Inventory, Hazardous Waste Generator, Onsite Hazardous Waste Treatment Programs, California Accidental Release Prevention Program (CalARP), Underground Storage Tanks, and Aboveground Petroleum Storage Tank Spill Prevention Control and Countermeasure Plan (SPCC). The Hazardous Materials Business Plan must be completed prior to operations of the facility into the California Environmental Reporting System (CERS).</p> <p>4. The applicant shall provide a locked storage box (Knox box) outside the main entrance that can be accessed by first responders. It shall provide first responders with the ability to access the site immediately. It shall contain the following information:</p> <ul style="list-style-type: none"> Hazardous materials business plan MSDS sheets for all chemicals stored at the site Emergency contact numbers 	<p>No</p> <p>Yes, Concept</p> <p>No</p> <p>No</p>	<p>HAZ-3 Develop a Safety Management Plan including hazardous gas monitors.</p>

		<p>5. The applicant shall provide a video monitoring system around the containment areas which can be used by first responders.</p> <p>6. The applicant shall provide a means of secondary ingress/egress to the site for emergency use.</p> <p>7. The applicant shall develop a letter/pamphlet/brochure to be reviewed and approved by the Planning Department and Environmental Health Division that provides information to the residences/businesses within the impact area of the off-site consequence analysis (OCA). The information must describe the OCA findings and actions to follow in the event of a release from any covered Cal ARP process.</p> <p>8. The applicant must complete a Process Hazard Analysis (PHA) for all applicable hazardous materials and incorporate mitigation measures into the project design prior to commencement of operations. All PHA recommendations must be addressed prior to beginning facility operations. The Environmental Health Division must be notified of any scheduled PHA and given the opportunity to attend any session. The PHA must address issues of concern which include an uninterrupted power supply, safety system redundancies established to ensure the safe handling of the chemical at all times, and remote monitoring and surveillance. All PHAs and corrective actions must also be reviewed by this Division prior to implementation.</p> <p>9. The applicant must provide documentation of an Emergency Response Plan for the accidental release of all applicable hazardous materials. The plan must address an intentional release or one caused by a natural disaster. A continuous training program for employees must be established to ensure a proper response to a release will occur and public health will be protected. Issues of site security, off-site monitoring, and public notification in the event of a release must be included. The Emergency Response Plan must be developed in conjunction with the Environmental Health Division and the Kern County Fire Department.</p> <p>10. The applicant shall provide a permanent weather station with remote internet access for monitoring of wind direction in case of an accidental release at the facility. The data shall be kept on site or made available electronically for review by the Environmental Health Division on a 24/7 basis.</p>	<p>Yes, Concept</p> <p>Yes, Concept</p> <p>No</p> <p>Yes/No, Concept</p> <p>Yes/No, Concept</p> <p>No</p>	<p>HAZ-7 Prepare a site-specific security plan including a closed-circuit monitoring system.</p> <p>WORKER SAFETY-6 At least three secure access points for security personnel access.</p> <p>HAZ-9 Conduct a PHA and prepare a Process Safety Management Plan approved by CEC.</p> <p>HAZ-2 & WORKER SAFETY-2 Prepare a Spill Prevention, Control and Countermeasure Plan and an Emergency Action Plan.</p>
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ESPS	<p>Utilities and Service Systems</p> <p>Land Use</p>	<p>Verbatim Requested Mitigation Measures:</p> <p>If the CEC requests the Building Inspection Division to provide CBO services related to plan reviews and/or inspections of this project, the following conditions shall be required:</p> <ol style="list-style-type: none"> 1. The applicant shall be responsible to pay the County all plan review, inspection, and other related fees in accordance with the Department's adopted fee resolution. 2. The applicant shall provide a qualified person, approved by the Department, to prepare a report identifying all hazardous materials, classified in accordance with the California Building Code, to be used or stored. The report shall be submitted with their plan review documents and include recommendations for fire protection, as well as storage and handling of materials. 3. The applicant shall provide a California registered civil engineer to act as the Resident Engineer (RE) during the construction of the project. The RE shall be approved by the Department and paid for by the applicant. Duties and responsibilities of the RE shall be identified prior to construction. 4. The applicant shall provide an on-site office, plan rack, desk and adequate accommodations for the County's building inspector(s) for the duration of the project. 	<p>Yes/No, Concept</p> <p>No</p> <p>Yes, Concept</p> <p>No</p>	<p>GEN-3 Payments to the CBO based upon a negotiated fee schedule.</p> <p>GEN-4 Assign a California registered architect or structural or civil engineer as the RE.</p>
Roads	Traffic	<p align="center">– Placeholder –</p> <p>Comments Pending Further Conversations with HECA Applicant and Applicant Preparation of an Adequate Traffic Impact Study.</p>	Placeholder	– Placeholder –
Waste	Utilities and Service Systems	<p>Verbatim Requested Mitigation Measures:</p> <ol style="list-style-type: none"> 1. Prior to the acceptance of residual material from the HECA Project at a Kern County public landfill, the applicant shall supply the KCWMD a characterization of the waste for chemical and physical characteristics, and secure written approval from the Director of the KCWMD to ensure compatibility with our landfill operations and fee schedules. 2. Based on the characteristics of the gasification solid, HECA shall conduct a market analysis of potential beneficial uses of the waste. 	<p>No</p> <p>Yes, Concept</p>	<p>WASTE-8 Develop a Gasification Waste</p>

		<p>3. If residual gasification solids, or other waste products, are subject to Jurisdictional Reporting and credited to the Kern County unincorporated area as disposal, HECA shall compensate Kern County via payment based on the following schedule: \$30 a ton (0-100 tons per day); \$50 a ton (101 – 200 tons per day); \$75 a ton (greater than 200 tons per day); or other amount as approved by the Board of Supervisors, to mitigate impacts to diversion programs. The County shall deposit the money in a Diversion Mitigation Reserve Account that will be used to fund diversion programs in Kern County. This is in addition to any gate/tipping fees for disposal.</p> <p>4. HECA waste stream shall be subdivided between several facilities to reduce the potential impacts to any one facility. Facilities to be considered include the Bakersfield Metropolitan (Bena) RSLF, the Shafter-Wasco RSLF and the Taft RSLF.</p>	No	Diversion Plan.
PCDD	Public Services	<p>Recommended Mitigation Measure Concept: Include the following mitigation measures to address impacts to public services: <i>Prior to the issuance of building permits for the HECA project, the Project Proponent/Operator shall comply with the following:</i> The Project Proponent shall work with the appropriate Kern County Staff to determine how the receipt of sales and use taxes related to the construction of the project will be maximized. This process shall include, but is not necessarily limited to: the Project Proponent/Operator obtaining a street address within the unincorporated portion of Kern County for acquisition, purchasing and billing purposes, registering this address with the State Board of Equalization, using this address for acquisition, purchasing and billing purposes associated with the proposed project. The Project Proponent/Operator shall allow the County to use this sales tax information publicly for reporting purposes.</p>	Yes	<p>SOCIO-1</p> <p>Use best efforts to ensure as much sales and use tax are attributed to Kern County.</p>
Sheriff	Public Services	<p>Verbatim Requested Mitigation Measures:</p> <p>1. Recommends increased private security during the initial construction phase of the project to prevent theft and states that preventing theft could also be accomplished with proper fencing, lighting, and video surveillance.</p> <p>2. After the project is completed, building security and alarms would help minimize potential thefts.</p>	<p>Yes, Concept</p> <p>Yes, Concept</p>	<p>HAZ-6</p> <p>Construction Site Security Plan including fencing.</p> <p>HAZ-7</p> <p>Operational Security Plan including security guards and breach or motion detectors.</p>

Maps








California Energy
Commission
(CEC)
Application

CEC Docket
No. 08-AFC-8A

Hydrogen Energy
California Project
(HECA)
by
Hydrogen Energy
International LLC.

Vicinity Map

Legend

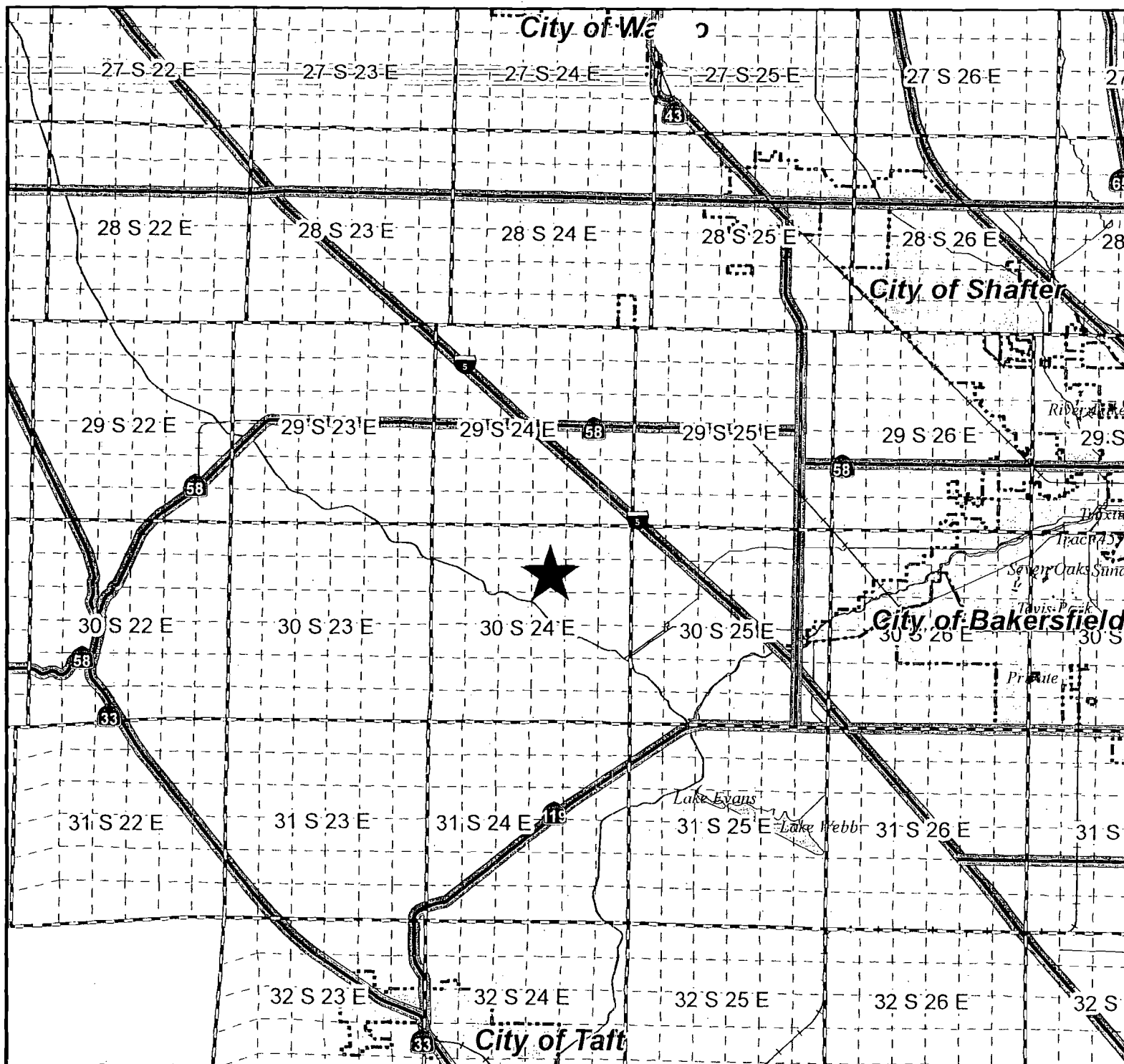
-  Township/Range
-  Sections
-  railroad
-  KernHwys
-  water bodies
-  City Limits
-  Project Site

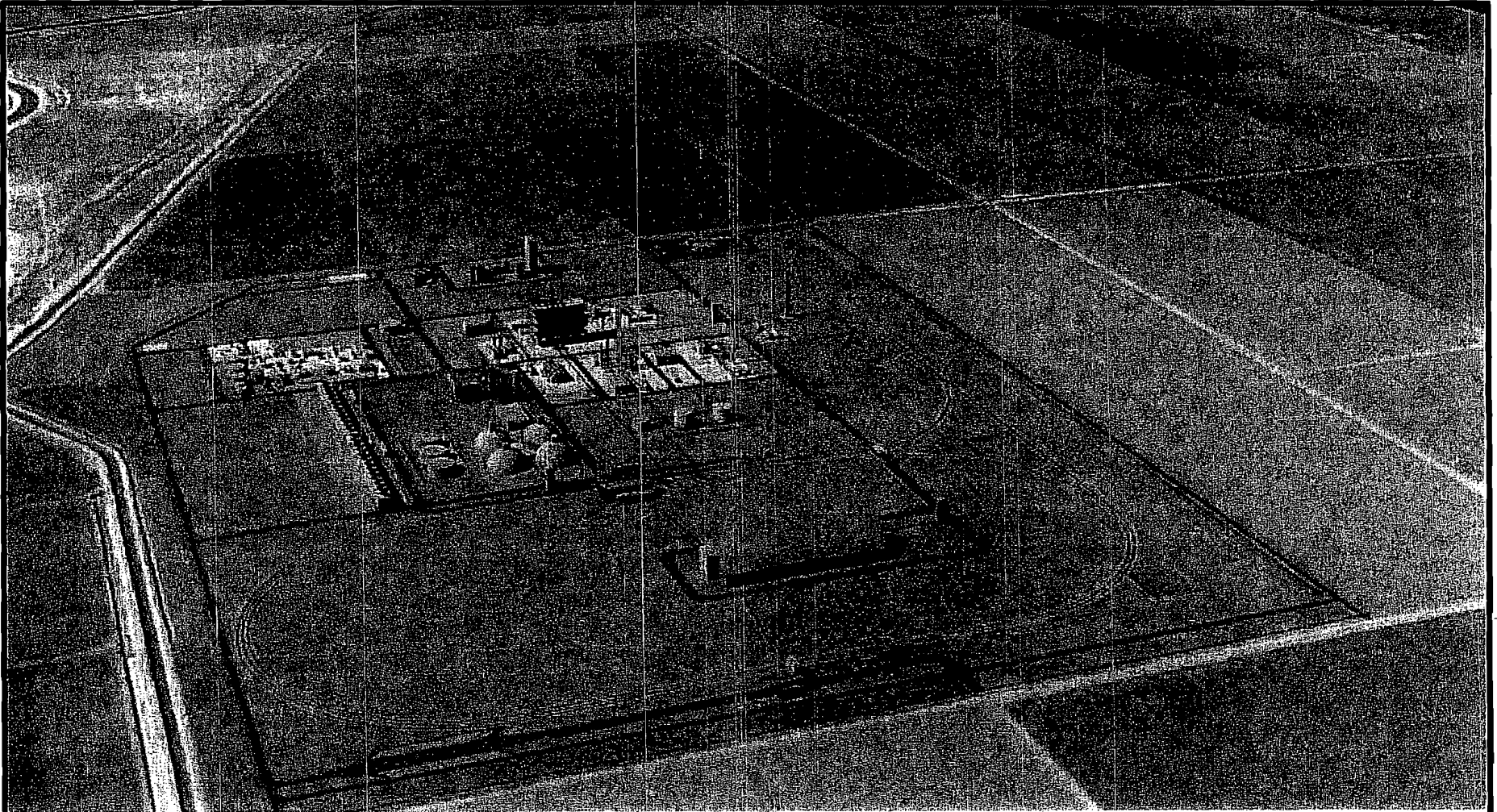


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Kern County
Planning & Community
Development Department

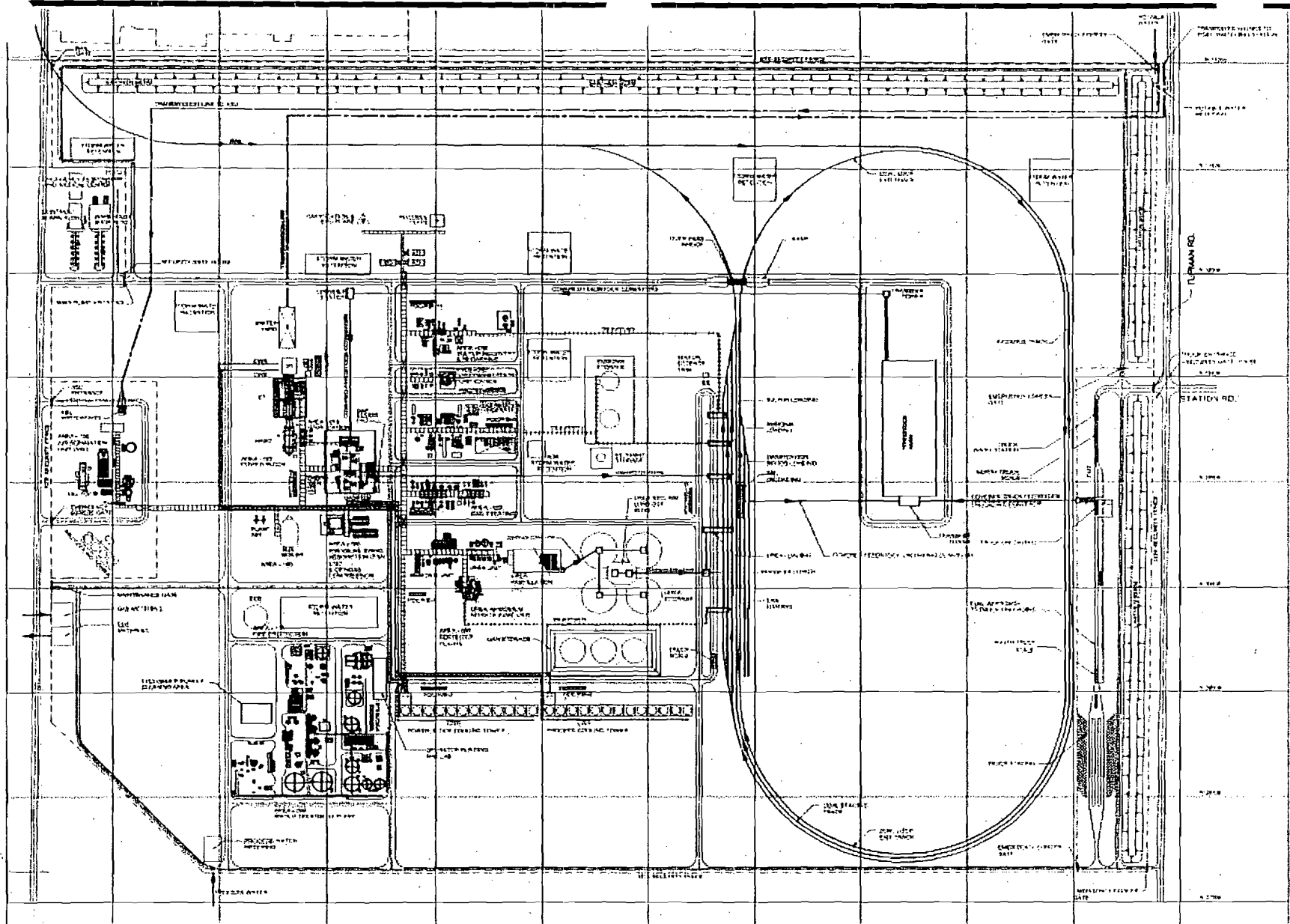




California Energy
Commission
(CEC)
Application
CEC Docket
No. 08-AFC-8A

Hydrogen Energy
California Project
(HECA)
by
Hydrogen Energy
International LLC

Site Plan
(Rendering by Applicant)



California Energy Commission
(CEC) Application
CEC Docket No. 08-AFC-8A

Hydrogen Energy California Project
(HECA) by
Hydrogen Energy International LLC

Plot Plan
(Rendering by Applicant)

California Energy
Commission
(CEC)
Application

CEC Docket
No. 08-AFC-8A

Hydrogen Energy
California Project
(HECA)
by
Hydrogen Energy
International LLC.

Williamson Act
Cancellation

Legend

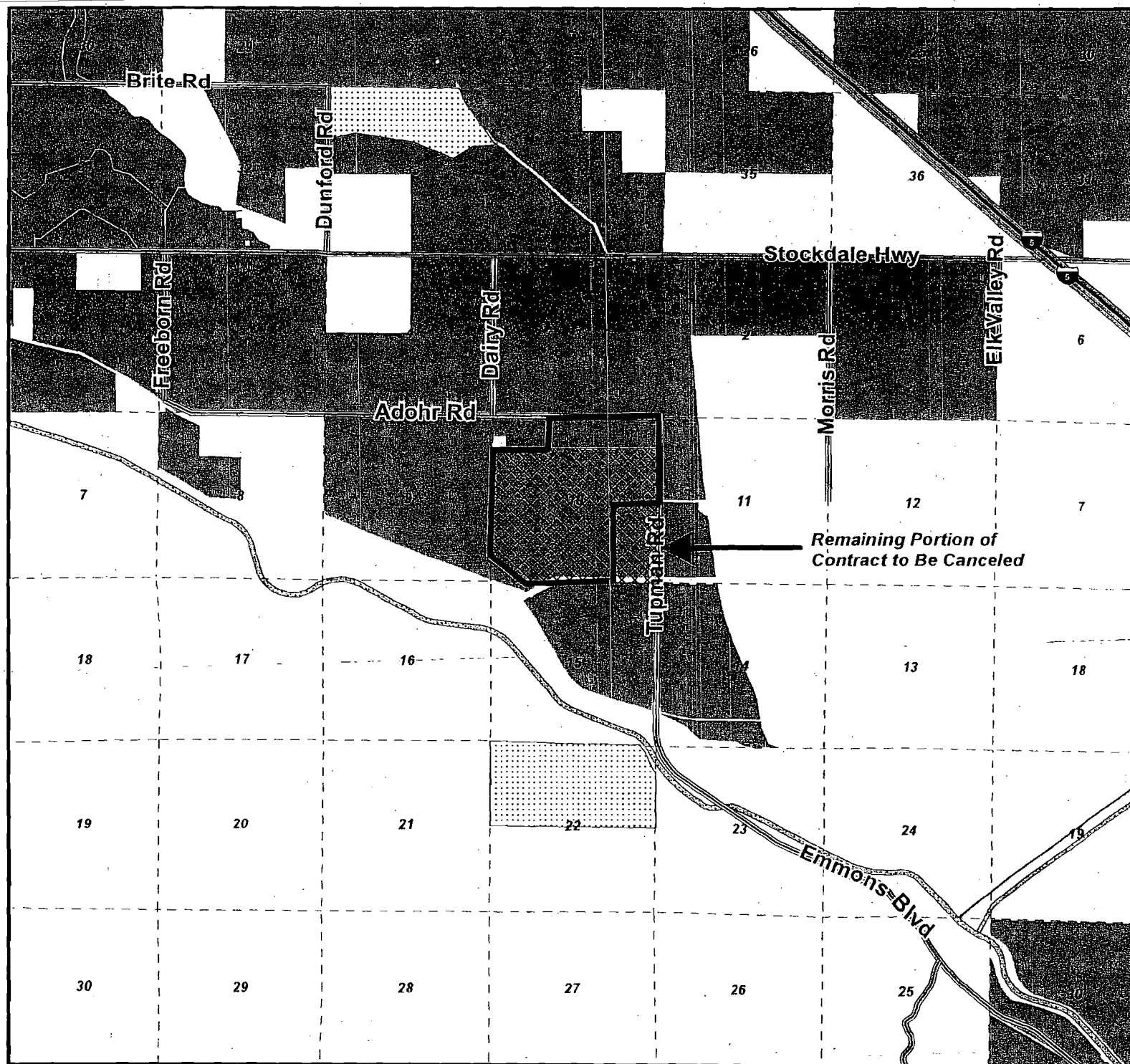
- Sections
- railroad
- == KernHwys
- ▨ Canal
- ▤ City Limits
- ▧ Active Williamson Act
- ▩ NonRenewal Williamson Act
- ▦ Project Site
- ▧ Portion of WA Contract
- ▨ Previously Canceled per Resolution 2010-168



0 0.4 0.8 1.2 Miles



Kern County
Planning & Community
Development Department



California Energy Commission (CEC) Application








**CEC Docket
No. 08-AFC-8A**

**Hydrogen Energy
California Project
(HECA)
by
Hydrogen Energy
International LLC.**

Truck Transport Route

(Per 08-AFC-8A submitted to
CEC May 2012; Chapter 5.10)

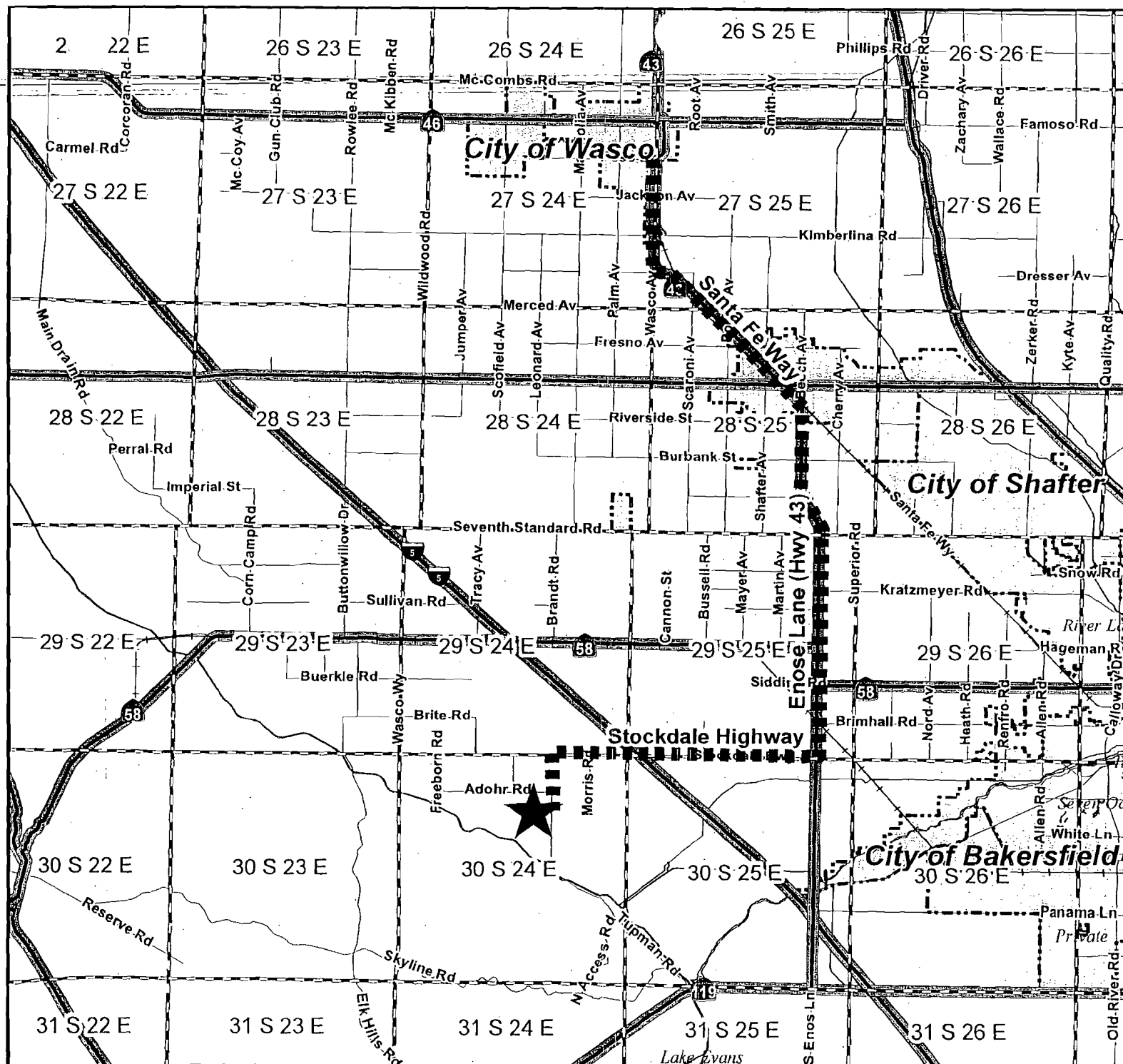
Legend

-  Township/Range
-  railroad
-  KernHwys
-  water bodies
-  City Limits
-  Project Site
-  Proposed Truck Route

0 1 2 3 Miles



Kern County
Planning & Community
Development Department



Kern County Letter to CEC

PLANNING AND COMMUNITY
DEVELOPMENT DEPARTMENT

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DEVELOPMENT SERVICES AGENCY

Planning and Community Development
Engineering, Surveying and Permit Services
Roads Department

March 6, 2013

File: Hydrogen Energy, California (HECA)
Zone Map No. 120

California Energy Commission
Attn: Robert Worl, Project Manager
1516 9th Street, MS-15
Sacramento, CA 95814-5512

RE: Hydrogen Energy California – Amended Application for Certification (08-AFC-8A)

Presentation of specific Kern County Comments and recommended Mitigation Measures to address potential impacts of the proposed HECA Project located within Kern County.

California Energy Commission Representatives:

Kern County is in receipt of the notice from the California Energy Commission, dated May 15, 2012, requesting Agency participation in the review of the amended application submitted to the California Energy Commission (CEC) on May 2, 2012 for the Hydrogen Energy California (HECA) Project. The County appreciates this opportunity to participate in the review of this project. As noted in our July 12, 2012 letter, Kern County staff has worked with the CEC in the past to coordinate information on a variety of renewable energy projects, including large power plants, and will continue participate in review of this project. As such, we have developed a procedure for the effective management of this coordination role.

Throughout the review coordination process for the HECA Project, the Kern County Planning and Community Development Department (PCDD) has acted as the clearinghouse for all County communications with the CEC. In order to facilitate this County coordination effort, the PCDD has coordinated internally with other County Departments to compile the County's comments and recommended mitigation measures related to this project. During that process, the PCDD facilitated numerous meetings among County staff, the applicant, affected stake-holders, and local decision-makers to discuss the types of mitigation measures that would be needed to address the potential impacts of the HECA Project, should the CEC ultimately approve construction of HECA within Kern County. As a result of that process, the PCDD received numerous written comments and recommended mitigation measures from County Departments, as well as specific inquiries from local stakeholders and decision-makers.

The comments received from Kern County Departments and stakeholders were presented to the Kern County Board of Supervisors on February 26, 2013. The purpose of the presentation was to seek direction and authorization from the Board to forward the comments and recommended mitigation measures to the CEC. The Board took action to authorize the Director of the PCDD to prepare and mail formal written comments to the CEC. Therefore, this letter includes requests for additional information on the HECA project, a listing of the specific mitigation measures requested by the Kern County Departments to address potential impacts of the HECA Project in Kern County (see Attachment 1), and reiterates that Kern County does not support the use of eminent domain for acquisition of any rail lines or other infrastructure related to the HECA Project. **The full video transcript of the Board hearing is incorporated into this letter by reference and can be found at the following web-link: <http://www.co.kern.ca.us/bos/AgendaMinutesVideo.aspx>.**

Kern County's specific comments related to the HECA Project are listed below. Data Request and Mitigation Measures are listed within the text with supporting information; and are also listed comprehensively in one table at the end of this letter (Attachment 1).

KERN COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT (PCDD)

(As of February 26, 2013)

1. Land Use Compatibility. This Department has several concerns related to the land use compatibility of the revised project application, as it was submitted to the CEC in May 2012.

Specifically, the “manufacturing complex” component of the HECA Project, as described in the official May 2012 application package, is a chemical-plant type facility that is not compatible with the existing agricultural general plan designation and zoning that is at the HECA site. The May 2012 application describes the “manufacturing complex” as a facility that will produce products (including urea, urea ammonium nitrate [UAN], anhydrous ammonia, etc.) that will be used for transportation and industrial applications. These types of industrial uses are not permitted in the agriculturally designated areas within Kern County.

While the Kern County Zoning Ordinance (section 19.12.030.A) lists “fertilizer manufacture and storage for agricultural use only” as a conditionally permitted use in the A District, the project described in the May 2012 application is a “chemical plant” that would require industrial general plan designations and zoning.

To address this concern, the PCDD sent letters to the applicant and to the CEC in June and July of 2012 indicating that the chemical plant component of the project would require a General Plan Amendment and Zone Changes.

In response to the concerns raised by the PCDD, the applicant submitted a letter to the PCDD dated December 20, 2012 which indicated that HECA would revise the project to restrict production of “nitrogen-based products” (including urea, urea ammonium nitrate (UAN) and anhydrous ammonia) to manufactured products for the purpose of “fertilizer manufacture and storage for agricultural use only.” It appears that the applicant also referred to this letter in their response to CEC Data Request #A103 related to this topic.

While this change addresses the concerns raised by the PCDD, Staff notes that this restriction should also be made a mitigation measure and/or condition of any project approval by the CEC.

Therefore, the PCDD recommends that the project, if approved by the CEC, include Mitigation Measure(s) to restrict the items produced on site and in the Manufacturing Complex to “fertilizer manufacture and storage for agricultural use only” per Section 19.12.030.A of the Kern County Zoning Ordinance.

The PCDD also notes the following information that may be relevant:

Applicable Kern County Zoning Ordinance Information

Specific Listed Use	Zone District	Ordinance Section
“Electrical power generating plant”	A (CUP)	19.12.030.G
“Fertilizer manufacture and storage for agricultural use only”	A (CUP)	19.12.030.A.2
“Transmission lines and supporting towers, poles, and underground facilities for gas, water, electricity, telephone, or telegraph service owned and operated by a public utility company or other company under the jurisdiction of the California Public Utilities Commission pursuant to Section 19.08.090 of this title”	A	19.12.020.D
“Liquid fuel storage tanks, above ground, for dispensing purposes”	A	19.12.020.F
“Chemical blending or Manufacture”	M-2 (CUP)	19.38.030.D.1
“Chemical blending or Manufacture”	M-3	19.40.020.E
“Chemical storage when accessory to a permitted use”	M-2	19.38.020.E.2
“Chemical storage”	M-3	19.40.020.E.2

2. Mitigation for Loss of Agricultural Lands. The PCDD notes that the project will result in the loss of more than 400-acres of Prime agricultural land. The applicant's presentation that the loss of more than 400-acres of Prime farmland is "not significant" and therefore requires no mitigation is incorrect. All Kern County projects, for which an EIR is prepared, requires that the loss of prime, unique or farmland of statewide importance be mitigated at a ratio of 1:1, as required by CEQA. Such mitigation involves the acquisition of agricultural easements on similar quality land and Staff is recommending that the replacement easements be located in Kern County. Even with this mitigation, Staff notes the determination regarding the significance of the loss of prime farmland is based on the findings of the Kern County General Plan EIR and other County-prepared EIRs in the valley; and that the loss of 400+ acres of Prime farmland is both project and cumulatively significant.

- a. *Therefore, the PCDD recommends that the project, if approved by the CEC, include appropriate Mitigation Measures for loss of prime agricultural land at a 1 to 1 ratio as required by CEQA, and with mitigation lands to occur within Kern County.*
- b. *The Kern County Board of Supervisors also notes that the CEC's CEQA Evaluation should review alternative sites for the project that do not contain Prime Agricultural Farmland.*

Additionally, the PCDD notes that, in response to the Kern County Farm Bureau's presentation at the February 26, 2013 Board hearing, the Board of Supervisors directed inclusion of the Farm Bureau's concerns within this comment letter. Therefore, a letter dated February 26, 2013 from the Kern County Farm Bureau representative is attached for your consideration.

3. Impacts to County Services (Sales Tax). If approved by the CEC, the HECA Project would be sited and will operate within Kern County. The impacts of the project will affect Kern County property owners, residents, and County services. To address such impacts, the Kern County Board of Supervisors requires that renewable energy projects, specifically wind and solar PV, identify their place of origin as an address within an unincorporated area Kern County and register that address with the State Board of Equalization; such that the purchase of project equipment and other materials which generate sales tax payments will benefit Kern County residents. Staff notes that the HECA applicant has an office located in Buttonwillow (an unincorporated area of Kern) and that this sales-tax mitigation measure has been implemented for over 15 other projects with no objection from those applicants; including international and out-of-state companies. Therefore, there should be no objection from the applicant to inclusion of this measure on the HECA Project, and the applicant expressed no objection at the hearing before the Board of Supervisors.

Therefore, the recommended mitigation measure is as follows:

Prior to the issuance of building permits for the HECA project, the Project Proponent/Operator shall comply with the following: The Project Proponent shall work with the appropriate Kern County Staff to determine how the receipt of sales and use taxes related to the construction of the project will be maximized. This process shall include, but is not necessarily limited to: the Project Proponent/Operator obtaining a street address within the unincorporated portion of Kern County for acquisition, purchasing and billing purposes, registering this address with the State Board of Equalization, using this address for acquisition, purchasing and billing purposes associated with the proposed project. The Project Proponent/Operator shall allow the County to use this sales tax information publicly for reporting purposes.

4. Transparency of CEQA Analysis (Air Quality Emissions Data). According to a CEC letter dated January 23, 2013 (TN #69231), HECA filed an application to the CEC in January, 2013 requesting confidentiality for the calculations and formulas used to calculate HECA's potential air emissions of criteria pollutants, greenhouse gases and toxic air contaminants. The application states that the formulas and calculations are confidential as a "trade secret" that provides a business advantage

because the data is technical in nature and required time and resources to develop. HECA also stated that the information is proprietary in nature and exempt from disclosure under Government Code section 6254.15.

The CEC approved the request for confidentiality and, in doing so, made note that the application "does not seek to have the emissions data designated as confidential but only the underlying formulas and calculations." The PCDD concludes that a "blanket" restriction of data is not in the spirit of CEQA, which requires full public disclosure of a project's environmental impacts and the assumptions used to determine those impacts. In order for public agencies (such as Kern County) and the general public to be able to conduct a meaningful and adequate review of the HECA Project, all of the materials used to calculate the project's emissions must be made readily available.

Subsequent to the CEC's approval of the request for confidentiality, the applicant verbally explained to PCDD Staff that the confidentiality request only applied to specific details of the mechanical-configuration of the gasification machine; and that only those details would be redacted from the emissions report. The applicant indicated that they would revise their request to the CEC to reflect this more focused confidentiality request. PCDD Staff concluded that a narrow and focused redaction of the scope described by the applicant may be appropriate and consistent with standard industry practices.

On February 25, 2013, HECA submitted a revised letter to the CEC (Attn: Director Ogelsby) to clarify the purpose of the confidentiality request.

Therefore, the PCDD recommends that the CEC review the applicant's clarification and issue a revised letter to clarify that the confidentiality approval is for focused confidentiality of air quality emissions data in lieu of providing "blanket" confidentiality approval.

5. Alternatives used in CEQA Analysis. Chapter 6 of the applicant's HECA application to the CEC lists 4 "Alternative Sites" for the HECA Project. The applicant appears to have provided this information to comply with Section 15126.6 of the CEQA requirements, which state that an environmental analysis must describe a range of reasonable alternatives or locations for the project that could feasibly avoid or lessen any significant environmental impacts of the project while attaining most of the project's basic objectives.

Staff notes that Alternative Site 1, as identified by HECA, is located on property that is owned by the Romanini Family Trust. The Romaninis are opposed to the HECA project and have been officially designated by the CEC as interveners against the project. The Romaninis have expressed to Staff that they have not had discussions with SCS Energy regarding acquisition of their property. Therefore, PCDD Staff does not believe that it is appropriate for the applicant to have included the Romanini parcels as a potential alternative because use of this site is not feasible.

Therefore, the PCDD recommends that the CEC not include this site as an Alternative in the CEQA document. Staff also notes that the CEC should inquire as to whether the applicant has contacted all property owners listed in Alternative 4 prior to including that as a viable alternative option.

6. Project Water Usage. Page 2-18 of the Project Description portion of the May 2012 application to the CEC states that the HECA project will use between 4,600 – 5,150 gallons per minute (gpm) of brackish local groundwater, which equals 7,425 – 8,312 acre feet per year (afy). The range in use is due to temperature changes during summer months. The water will be provided by the Buena Vista Water Storage District (BVWSD) and will be used to cool critical components of the power plant as follows. In light of the water usage rates that would be generated by this project, Staff has concerns that need to be further addressed by the CEC in the CEQA document.

Therefore, the PCDD requests that the CEC's CEQA document include information on the following: (a) Will the brackish water source be available for the life of the project? Please include substantial data to support conclusions; (b) What is the alternative water source if the BWVSD supply becomes unavailable? Section 6.7 of the application lists several alternatives; including municipal effluent, State Water Project and fresh groundwater supplies; however, Staff notes that none of these listed alternatives are feasible because the site is not near a municipal effluent supplier, State Water Project waters have not been allocated, and State law does not allow power plants to use fresh groundwater sources; (c) Could the proposed brackish water be used for agricultural irrigation purposes?

7. Use of 75% Coal with 25% Petcoke and Future source of Petcoke. The Project Description of the May 2012 application (Section 2) states that the HECA Project would operate on a fuel blend consisting of 75% coal and 25% California petcoke; thereby using 1.6 million short tons of coal and 400,000 tons of petcoke per year.

Staff notes the use of 75% coal is notably different than the initial application submitted to the CEC in 2008. Specifically, the 2008 application stated that petcoke would be the primary feedstock for the HECA Project and that coal would be a secondary feedstock not to exceed 60%. This new change in ratios of coal vs. petcoke is of concern to Kern County because petcoke is a by-product of existing refinery processes, while coal is produce that would be specifically mined and transported into Kern County for use as a feedstock at the HECA plant.

Additionally, the application states that the coal would be primarily obtained from sources in New Mexico and that the coal would be transported to the site via trucking from a facility in Wasco or via a new railroad spur that would deliver the coal directly to the site. Both of these transport options would impact County infrastructure systems, as noted in the comments submitted by the Roads Department. Additionally, gas and vehicles coming from other States are subject to different environmental regulations that could be less stringent than California regulations.

Staff also notes that the application states that the petcoke component of the HECA feedstock will be "readily available" to the project and that the petcoke will be trucked in from refineries. Staff has concerns regarding the variable sources of this petcoke and notes that the material may not be readily available for the life of the project if any of the source-refineries cease or change their operations.

Therefore, the PCDD recommends that the CEQA document include a discussion of the environmental regulations that the trucks and fuel will be subject to, for those vehicles coming to Kern County from other States; as well as a discussion on the long-term availability of coal and petcoke fuel sources for the HECA project.

8. Use of Eminent Domain. Several Kern County residents have expressed concerns that the HECA Project will use eminent domain to obtain right-of-way for transmission lines and/or railroad spurs to serve the project. Several property owners have indicated that they do not want to lose portions of their land to the project because such development would make remaining portions of their farms unusable. Staff notes that the CEC has the power of eminent domain.

Therefore, the PCDD notes that the Kern County Board of Supervisors would like to go on record to not support the use of eminent domain in association with this project; including for the acquisition of transportation and/or transmission infrastructure.

KERN COUNTY FIRE DEPARTMENT (KCFD)

(February 13, 2013)

The Kern County Fire Department has performed an exhaustive review of the proposed HECA Project and has concluded that the HECA project will have significant impacts on Kern County Fire facilities, if left unmitigated. The KCFD has identified the specific impacts in detail, as outlined in the attached comment letter dated February 13, 2013.

To address the impacts of the proposed HECA Project on County Fire facilities, the KCFD has identified the following *mitigation measures* that, at minimum, should be included in any project approval:

1. Prior to the issuance of the first grading or building permit for the HECA Project, the Project Proponent shall fund the purchase and delivery to the Fire Department of a fully equipped Industrial Foam pumper/tender, which will be housed and maintained by the Kern County Fire Department, and an additional 2,500 gallon cache of Class B foam to be provided to the Department to be stored at an off-site location. The Industrial Foam pumper/tender, with its onboard foam capabilities, and the 2,500 gallon cache of Class B foam will allow the Department to have the specialized capabilities and equipment necessary to control and contain a fire or product leak emergency that occurs at the HECA plant.

Therefore, in order to mitigate the significant impact that this project creates, HECA is required to purchase and deliver to the County a fully equipped Industrial Foam pumper/tender with its onboard foam storage capabilities, and an additional 2,500 gallon cache of foam, which adheres to the following minimum standards.

- a. The Industrial Foam pumper/tender shall be manufactured to the Department's standards with no substitutions.
- b. The Industrial Foam pumper/tender must be purchased, constructed, and delivered (construction and delivery time is estimated to be nine months) to the Department 30 days prior to the start-up of the project. Additional time may be required in order to place the Industrial Foam pumper/tender in service and to allow for training personnel assigned to operate the pumper.
- c. The Industrial Foam pumper/tender shall be fully equipped to Department specifications.
- d. The final authority on the specifications for the Industrial Foam Pumper/Tender shall rest with the Department.
- e. The Title for the Industrial Foam Pumper/Tender shall be transferred to the County upon delivery.
- f. The cache of foam shall meet the Department's standards.
- g. If the Department responds to an emergency at HECA and uses the cache of foam to control or contain the emergency, HECA will be required to replace the amount used within 30 days of the incident.

The estimated cost for the Industrial Foam Pumper/Tender is \$800,000 and the 2,500 gallon cache is \$50,000. Please note: Foam storage data derived from calculations based on satisfactorily extinguishing a two-dimensional tank fire involving the largest tank containing HECA's most volatile/dangerous commodity.

2. Prior to the application for the first grading or building permit for the HECA Project, the Project Proponent shall provide a Fire Protection Specialist to the Kern County Fire Department for use during the plan review process. HECA will be allowed to select the Specialist from a list of qualified individuals provided by the Department. Furthermore, HECA and the Fire Protection Specialist shall develop a comprehensive *Fire and Life Safety* plan that describes the methods to reduce the potential of an uncontrolled fire thus reducing the threat to life and property. These plans must be submitted and approved by the Department prior to building permit approval.

3. Prior to the issuance of the first grading or building permit for the HECA Project, the Project Proponent shall provide, or reimburse Kern County for the purchase of, a 3 ½ to 5 acre plot of land in which to relocate Kern County Fire Station 53. The Fire Department intends to relocate Fire Station 53 in the vicinity of Interstate 5 and Highway 119 in order to better serve HECA and the surrounding communities. The new Fire Station site would include a standard fire station capable of housing three to six on-duty firefighters, a three-bay engine house, and a helipad capable of handling emergency helicopters. The Fire Department shall have final authority on the exact location for the fire station.
4. During the active construction phase of the project, the Project Proponent shall provide 50% of the operating cost of a Kern County Fire Department fire prevention inspector, estimated to be \$88,600 who will be actively involved with fire prevention measures on a daily basis.
5. Prior to the issuance of the first certificate of occupancy, the Project Proponent shall provide training to Kern County Fire Department Staff, as identified by the Fire Department, in the areas needed to mitigate Hydrogen and other related hazardous material emergencies that might arise at the plant for the crews that are stationed at Buttonwillow (25), Taft (21), Old River (53), Maricopa (22) and Fellows (23). This will also be an annual requirement to train at least three (3) Kern County Fire Department personnel in these station areas.
6. Prior to the issuance of the first grading or building permit for the HECA Project, the Project Proponent shall provide full funding to purchase a fire rescue truck, to be housed and maintained by the Kern County Fire Department, and capable of lifting heavy loads in order to extricate trapped passengers in the event of a semi-truck vehicle accident. Fire Rescue Truck specifications/capabilities, and purchasing details, are as follows:
 - a. A fire rescue truck with a 50-ton rotator crane, manufactured to the Fire Department's specifications with no substitutions.
 - b. The fire rescue truck must be purchased, constructed, and delivered (construction and delivery time is estimated to be nine months) to the Fire Department 30 days prior to the start-up of the project. Additional time may be required in order to place the fire rescue truck in service and to allow for training personnel assigned to operate the vehicle.
 - c. The fire rescue truck shall be fully equipped to Department specifications.
 - d. The final authority on the specifications for the fire rescue truck shall rest with the Fire Department.
 - e. The vehicle title for the fire rescue truck shall be transferred to the County upon delivery.
7. Prior to the issuance of the first certificate of occupancy, the Project Proponent shall provide the Kern County Fire Department with air monitoring equipment that provides first responders with the capability to monitor for multiple toxic gases during an emergency at the facility.
8. The Project Proponent shall continuously comply with the following: The Project Proponent shall be responsible to contribute annually funds to the Kern County Fire Department for the full salaries of six Fire Engineer positions to drive and operate the Industrial Foam Pumper/Tender and the Fire Rescue Truck.
9. The Project Proponent shall continuously comply with the following: The Project Proponent shall be responsible to contribute annually to the Kern County Fire Department for the reverse 9-1-1 system, based upon the number of addresses that would be directly affected by a major emergency at the facility requiring surrounding residences to shelter-in-place or evacuate.

**KERN COUNTY PUBLIC HEALTH SERVICES DEPARTMENT, ENVIRONMENTAL
HEALTH DIVISION (EHS)**

(As of 12/20/12)

The Environmental Health Division has reviewed the project and has the local regulatory authority to enforce state regulations and local codes as they relate to hazardous materials management, waste management and discharge, water supply requirements, and other items that may affect the health and safety of the public or that may be detrimental to the environment.

The Division requests the following *mitigation measures* be satisfied prior to project operation:

1. The applicant shall provide crash protection around the proposed secondary containment areas as appropriate to accommodate stacking/moving equipment. The applicant shall provide physical barriers and site security for the proposed project site as approved by the Environmental Health Division to reduce the potential of a chemical release.
2. The applicant shall provide sensors and/or detectors, as approved by the Environmental Health Division, at the site that will provide early notification of an accidental release of large quantities of toxic and flammable gasses/vapors from hazardous materials stored or generated on site. Chemicals of concern proposed for storage include anhydrous ammonia (toxic), hydrogen sulfide (toxic and flammable) and alcohol (flammable) and are to be monitored by an appropriate sensor array sufficient in scope to reasonably detect the materials before going offsite.
3. The applicant shall apply for a permit and comply with all regulations pertaining to the Certified Unified Program Agency (CUPA). Program elements consolidated under the CUPA are: Hazardous Materials Release Response Plan, Chemical Inventory, Hazardous Waste Generator, Onsite Hazardous Waste Treatment Programs, California Accidental Release Prevention Program (CalARP), Underground Storage Tanks, and Aboveground Petroleum Storage Tank Spill Prevention Control and Countermeasure Plan (SPCC). The Hazardous Materials Business Plan must be completed prior to operations of the facility into the California Environmental Reporting System (CERS).
4. The applicant shall provide a locked storage box (Knox box) outside the main entrance that can be accessed by first responders. It shall provide first responders with the ability to access the site immediately. It shall contain the following information:
 - Hazardous materials business plan
 - MSDS sheets for all chemicals stored at the site
 - Emergency contact numbers
5. The applicant shall provide a video monitoring system around the containment areas which can be used by first responders.
6. The applicant shall provide a means of secondary ingress/egress to the site for emergency use.
7. The applicant shall develop a letter/pamphlet/brochure to be reviewed and approved by the Planning Department and Environmental Health Division that provides information to the residences/businesses within the impact area of the off-site consequence analysis (OCA). The information must describe the OCA findings and actions to follow in the event of a release from any covered Cal ARP process.

8. The applicant must complete a Process Hazard Analysis (PHA) for all applicable hazardous materials and incorporate mitigation measures into the project design prior to commencement of operations. All PHA recommendations must be addressed prior to beginning facility operations. The Environmental Health Division must be notified of any scheduled PHA and given the opportunity to attend any session. The PHA must address issues of concern which include an uninterrupted power supply, safety system redundancies established to ensure the safe handling of the chemical at all times, and remote monitoring and surveillance. All PHAs and corrective actions must also be reviewed by this Division prior to implementation.
9. The applicant must provide documentation of an Emergency Response Plan for the accidental release of all applicable hazardous materials. The plan must address an intentional release or one caused by a natural disaster. A continuous training program for employees must be established to ensure a proper response to a release will occur and public health will be protected. Issues of site security, off-site monitoring, and public notification in the event of a release must be included. The Emergency Response Plan must be developed in conjunction with the Environmental Health Division and the Kern County Fire Department.
10. The applicant shall provide a permanent weather station with remote internet access for monitoring of wind direction in case of an accidental release at the facility. The data shall be kept on site or made available electronically for review by the Environmental Health Division on a 24/7 basis.

KERN COUNTY ENGINEERING, SURVEYING AND PERMIT SERVICES DEPARTMENT

ESPS has reviewed the project and stated that if the CEC requests the Building Inspection Division to provide CBO services related to plan reviews and/or inspections of this project, the following conditions shall be required:

1. The applicant shall be responsible to pay the County all plan review, inspection, and other related fees in accordance with the Department's adopted fee resolution.
2. The applicant shall provide a qualified person, approved by the Department, to prepare a report identifying all hazardous materials, classified in accordance with the California Building Code, to be used or stored. The report shall be submitted with their plan review documents and include recommendations for fire protection, as well as storage and handling of materials.
3. The applicant shall provide a California registered civil engineer to act as the Resident Engineer (RE) during the construction of the project. The RE shall be approved by the Department and paid for by the applicant. Duties and responsibilities of the RE shall be identified prior to construction.
4. The applicant shall provide an on-site office, plan rack, desk and adequate accommodations for the County's building inspector(s) for the duration of the project.

KERN COUNTY ROADS DEPARTMENT

The Kern County Roads Department has reviewed the traffic information included in HECA's application to the CEC and has found that there is not sufficient information available to make specific, detailed recommendations. Specifically, Kern County has not approved a Traffic Impact Study for the project.

The Roads Department reviewed Section 5, *Traffic* of the May 2012 application submitted to the CEC and concluded that the proposed mitigation measures appear to address construction only, as the operational impacts appear to have been deemed less than significant. Without an approved Traffic Impact Study, the Roads Department cannot confirm the assertions made in the application. The Roads Department also found that the application does not address the impacts to the roadway segments as far as the capacity of the road to accommodate the number of heavy vehicles. The Roads Department has preliminarily concluded that Dairy Road, Adohr Road, Station Road, and Morris Road will not be able to withstand the impacts without mitigation; requiring reconstruction of those roadways.

To date, the project applicant is continuing to work with the Roads Department but has not yet submitted a Traffic Impact Study to the Kern County Roads Department.

Therefore, the Roads Department recommends that the CEC require the HECA applicant to work with the Kern County Roads Department to provide a technical memo to the County Roads Department to supplement the information and analysis provided in the Application for Certification (AFC) Amendment. The technical memo will incorporate clarification and confirmation of mitigation measures required to address the construction and operational impacts of the HECA Project. The technical memo shall be reviewed and approved by the County Roads Department.

KERN COUNTY WASTE MANAGEMENT DEPARTMENT

The Kern County Waste Management Department (KCWMD) operates the County-owned public solid waste facilities and is the Responsible Agency for maintaining the unincorporated Kern County jurisdiction's compliance with the Integrated Waste Management Plan (IWMP). The IWMP includes elements dealing with source reduction and recycling of waste, disposal facility siting criteria, and non-disposal facility identification.

The KCWMD has reviewed the proposed HECA project and has concluded that the project would have significant impacts on Kern County facilities. Those impacts are laid out in detail in the attached comment letter, dated January 22, 2013.

Most notably, the HECA Project would generate an extremely high-volume of waste, mainly from the gasification process. If these wastes (coarse solids) are credited to Kern County as disposal, Kern County would be forced into extreme non-compliance with current State-mandated Diversion Rates which would result in substantial increased costs to the County. These costs could include fines from the State (CalRecycle) for not meeting diversion goals, increased costs associated with improvements made to local landfills to accommodate HECA waste, etc.

The KCWMD reserves the right to continue to review the HECA Project as the applicant and the CEC continue to have on-going conversations with CalRecycle and other State agencies regarding concerns on this project; including but not limited to the project's effect on Kern County Diversion Rates. However, in the interim, the WMD recommends that the following additional information be obtained from the applicant and that the following mitigation measures be added to the project:

CEQA Analysis Recommendation: Quantify the volume of waste to be generated during construction of the HECA Project and describe how these waste materials will be handled to meet State requirements.

CEQA Analysis Recommendation: The HECA Project Proponent shall evaluate the characteristics of the gasification solids, based on a similar representative facility and then conduct a market analysis of potential uses based on the gasification solid characterization; with data to be included in the CEC's CEQA Analysis.

Mitigation Measures:

1. Prior to the acceptance of residual material from the HECA Project at a Kern County public landfill, the applicant shall supply the KCWMD a characterization of the waste for chemical and physical characteristics, and secure written approval from the Director of the KCWMD to ensure compatibility with our landfill operations and fee schedules.
2. Based on the characteristics of the gasification solid, HECA shall conduct a market analysis of potential beneficial uses of the waste.
3. If residual gasification solids, or other waste products, are subject to Jurisdictional Reporting and credited to the Kern County unincorporated area as disposal, HECA shall compensate Kern County via payment based on the following schedule: \$30 a ton (0-100 tons per day); \$50 a ton (101 – 200 tons per day); \$75 a ton (greater than 200 tons per day); or other amount as approved by the Board of Supervisors, to mitigate impacts to diversion programs. The County shall deposit the money in a Diversion Mitigation Reserve Account that will be used to fund diversion programs in Kern County. This is in addition to any gate/tipping fees for disposal.
4. HECA waste stream shall be subdivided between several facilities to reduce the potential impacts to any one facility. Facilities to be considered include the Bakersfield Metropolitan (Bena) RSLF, the Shafter-Wasco RSLF and the Taft RSLF.

With the inclusion of the above mitigation measures, the Kern County Waste Management System may be able to accept the residual gasification solids and other waste materials generated by the HECA Project. However, the Project will still result in a significant impact to the unincorporated area of Kern County to comply with SB 1016 and AB 939 by resulting in a significant increase in per capita disposal, and reducing the diversion and recycling rate below the 50 percent mandate achieved by the County. The KCWMD reserves the right to refuse to accept any load that it deems to be unacceptable based on its potential impact to the health or safety of the customers, employees and/or environment. The KCWMD may provide additional comments if necessary.

KERN COUNTY SHERIFF'S OFFICE

The Kern County Sheriff's Office has reviewed the proposed project and has completed the Law Enforcement Needs Assessment Form. The Sheriff's Office recommends the following mitigation measures:

1. Recommends increased private security during the initial construction phase of the project to prevent theft and states that preventing theft could also be accomplished with proper fencing, lighting, and video surveillance.
2. After the project is completed, building security and alarms would help minimize potential thefts.

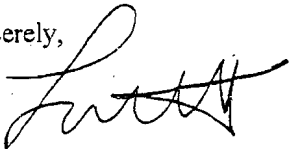
CLOSING COMMENTS

On behalf of the Kern County Board of Supervisors and Kern County Departments listed in this letter, the Planning and Community Development Department would like to thank the CEC for your consideration of the comments listed in this letter and requests the following:

1. Please include the comments, mitigation measures, and requests for additional information, as listed in this letter and attachments, in the Preliminary and Final "Staff Assessment/Draft Environmental Impacts Statement" that is being prepared by CEC Staff;
2. Please ensure that this letter and all attachments are provided to the Commissioners for consideration in preparation of the "Presiding Member's Proposed Decision" and also to the full California Energy Commission for consideration in issuing the "Final Decision" on the project;
3. Please note that additional comments are forthcoming from the Kern County Roads Department;
4. Please note that the Kern County Board of Supervisors has directed PCDD Staff to bring this project back before the Board for review and preparation of additional Kern County comments on the CEC's "Final Staff Assessment/ Draft Environmental Impacts Statement."

Should you have any questions, please contact me at the contact information listed above. You may also contact the Supervising Planner coordinating Kern County's review of this project, Jacquelyn R. Kitchen, at (661) 862-8619 or via email at kitchenj@co.kern.ca.us.

Sincerely,



Lorelei H. Oviatt, AICP, Director
Kern County Planning & Community Development Department

By: Jacquelyn R. Kitchen, Supervising Planner
Advanced Planning Division

cc: SCS Energy California, LLC.
Attn: Marisa Mascaro
30 Monument Square, Suite 235
Concord, MA 01742

Hydrogen Energy California
Attn: Tom Daniels, Managing Director, Commercial Business
PO Box 100, PMB 271
Mammoth Lakes, CA 93546

Occidental of Elk Hills, Inc.
Attn: William H. Barrett, EOR Business Manager
10800 Stockdale Highway
Bakersfield, CA 93311

cc: (cont.)

Kern County Administrative Office

Kern County Clerk of the Board

Kern County Fire Department

Kern County Environmental Health Services

Kern County Engineering Services

Kern County Roads

Kern County Waste Management

Kern County Sheriff's Department

Kern County Farm Bureau, Inc.

Attn: Benjamin McFarland

801 South Mt. Vernon Avenue

Bakersfield, CA 93307-2048

Kern-Kaweah Chapter of the Sierra Club

Andrea Issod; Matthew Vespa

85 Second Street, 2nd Floor

San Francisco, CA 94105

HECA Neighbors

c/o Chris Romanini

P.O. Box 786

Buttonwillow, CA 93206

Association of Irrigated Residents

Tom Frantz

30100 Orange Street

Shafter, CA 93263



KERN COUNTY FARM BUREAU, inc.

801 South Mt. Vernon Avenue
Bakersfield, CA 93307-2048
Phone: (661) 397-9635 - Fax: (661) 397-3403
Web: kerncfb.com - Email: kcfb@kerncfb.com

Steve Maniaci
President

Greg Wegis
1st Vice President

Jeff Rasmussen
2nd Vice President

Benjamin McFarland
Executive Director

February 26, 2013

Kern County Board of Supervisors Meeting
1115 Truxtun Avenue
Bakersfield, CA 93301

Good Afternoon Supervisors:

My name is Ben McFarland, I am the Executive Director of the Kern County Farm Bureau. As way of background, the Kern County Farm Bureau is a formal intervenor in the California Energy Commission's siting process for the Hydrogen Energy California Power Plant.

As you consider proposed mitigation measures, conditions and payments I am here to share with you our concerns as it relates to the impacts to Kern County agriculture. Specifically, the following five issues that were brought to the attention of the California Energy Commission at the July 2012 Scoping Meeting in Tupman;

- Potential bifurcation of farming operations as a result of new rail lines,
- Loss of state-designated important farmland,
- Disruption of neighboring farming activities, and
- Contribution of emissions negatively impacting local air quality, in which farming operations in the area are already significantly regulated.

In addition, after meeting again with our impacted members within the vicinity of the project, we support a plan in place for a financial commitment as mitigation to protect neighboring agricultural production in the event unforeseen negative events impact surrounding crop production.

Thank you for your consideration and continued support of agriculture in Kern County.

Sincerely,

Benjamin McFarland
Executive Director
Kern County Farm Bureau, inc.

Attachment 1

**Kern County
Requested Mitigation Measures &
Requests for Additional Information
Regarding Proposed HECA Project**

– Attachment 1 –

Kern County's Requested Mitigation Measures & Requests for Additional Information Regarding Proposed HECA Project

KERN COUNTY PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT (PCDD)

As of February 26, 2013

1. **Mitigation Measure Recommendation:** Include MM to restrict the items produced on site and in the Manufacturing Complex to "fertilizer manufacture and storage for agricultural use only" per Section 19.12.030.A of the Kern County Zoning Ordinance.
2. **Comments on Agriculture and Site Selection:**
 - a. **Mitigation Measure Recommendation:** Include MM to mitigate for the loss of Prime Farmland at a 1:1 ratio, with mitigation lands to occur within Kern County.
 - b. **CEQA Analysis Recommendation:** Request that the CEC's CEQA evaluation include meaningful review alternative sites for the project that do not contain Prime Agricultural Farmland.
3. **Mitigation Measure Recommendation:** Include the following mitigation measures to address impacts to public services: Prior to the issuance of building permits for the HECA project, the Project Proponent/Operator shall comply with the following: The Project Proponent shall work with the appropriate Kern County Staff to determine how the receipt of sales and use taxes related to the construction of the project will be maximized. This process shall include, but is not necessarily limited to: the Project Proponent/Operator obtaining a street address within the unincorporated portion of Kern County for acquisition, purchasing and billing purposes, registering this address with the State Board of Equalization, using this address for acquisition, purchasing and billing purposes associated with the proposed project. The Project Proponent/Operator shall allow the County to use this sales tax information publicly for reporting purposes.
4. **Information Request:** PCDD requests that the CEC review the applicant's 2/25/13 clarification letter and issue a revised letter to clarify that the confidentiality approval is for focused confidentiality of air quality emissions data in lieu of providing "blanket" confidentiality approval.
5. **CEQA Analysis Recommendation:** PCDD recommends that the CEC not include this site listed as Alternative 1 (owned by Romanini) as an Alternative in the CEQA document. PCDD also recommends that CEC inquire as to whether the applicant has contacted all property owners listed in Alternative 4 prior to including that as a viable alternative option.
6. **CEQA Analysis Recommendation:** PCDD recommends that the CEC's CEQA document include information on the following hydrology and water issues:
 - a. Will the brackish water source be available for the life of the project? Please include substantial data to support conclusions.
 - b. What is the alternative water source if the BWVSD supply becomes unavailable? Section 6.7 of the application lists several alternatives; including municipal effluent, State Water Project and fresh groundwater supplies; however, Staff notes that none of these listed alternatives are feasible because the site is not near a municipal effluent supplier, State Water Project waters have not been allocated, and State law does not allow power plants to use fresh groundwater sources.
 - c. Could the proposed brackish water be used for agricultural irrigation purposes?

7. **CEQA Analysis Recommendation:** PCDD recommends that the CEQA document include a discussion of the environmental regulations that the trucks and fuel will be subject to, for those vehicles coming to Kern County from other States; as well as a discussion on the long-term availability of coal and petcoke fuel sources for the HECA project.
8. **CEQA Analysis Recommendation:** Therefore, the PCDD notes that the Kern County Board of Supervisors is on record to not support the use of eminent domain in association with this project; including for the acquisition of transportation and/or transmission infrastructure.

KERN COUNTY FIRE DEPARTMENT
(As of February 13, 2013)

Recommended Mitigation Measures:

1. Prior to the issuance of the first grading or building permit for the HECA Project, the Project Proponent shall fund the purchase and delivery to the Fire Department of a fully equipped Industrial Foam pumper/tender, which will be housed and maintained by the Kern County Fire Department, and an additional 2,500 gallon cache of Class B foam to be provided to the Department to be stored at an off-site location. The Industrial Foam pumper/tender, with its onboard foam capabilities, and the 2,500 gallon cache of Class B foam will allow the Department to have the specialized capabilities and equipment necessary to control and contain a fire or product leak emergency that occurs at the HECA plant.

Therefore, in order to mitigate the significant impact that this project creates, HECA is required to purchase and deliver to the County a fully equipped Industrial Foam pumper/tender with its onboard foam storage capabilities, and an additional 2,500 gallon cache of foam, which adheres to the following minimum standards.

- a. The Industrial Foam pumper/tender shall be manufactured to the Department's standards with no substitutions.
- b. The Industrial Foam pumper/tender must be purchased, constructed, and delivered (construction and delivery time is estimated to be nine months) to the Department 30 days prior to the start-up of the project. Additional time may be required in order to place the Industrial Foam pumper/tender in service and to allow for training personnel assigned to operate the pumper.
- c. The Industrial Foam pumper/tender shall be fully equipped to Department specifications.
- d. The final authority on the specifications for the Industrial Foam Pumper/Tender shall rest with the Department.
- e. The Title for the Industrial Foam Pumper/Tender shall be transferred to the County upon delivery.
- f. The cache of foam shall meet the Department's standards.
- g. If the Department responds to an emergency at HECA and uses the cache of foam to control or contain the emergency, HECA will be required to replace the amount used within 30 days of the incident.

The estimated cost for the Industrial Foam Pumper/Tender is \$800,000 and the 2,500 gallon cache is \$50,000. Please note: Foam storage data derived from calculations based on satisfactorily extinguishing a two-dimensional tank fire involving the largest tank containing HECA's most volatile/dangerous commodity.

2. Prior to the application for the first grading or building permit for the HECA Project, the Project Proponent shall provide a Fire Protection Specialist to the Kern County Fire Department for use during the plan review process. HECA will be allowed to select the Specialist from a list of qualified individuals provided by the Department. Furthermore, HECA and the Fire Protection Specialist shall develop a comprehensive *Fire and Life Safety* plan that describes the methods to reduce the potential of an uncontrolled fire thus reducing the threat to life and property. These plans must be submitted and approved by the Department prior to building permit approval.

3. Prior to the issuance of the first grading or building permit for the HECA Project, the Project Proponent shall provide, or reimburse Kern County for the purchase of, a 3 ½ to 5 acre plot of land in which to relocate Kern County Fire Station 53. The Fire Department intends to relocate Fire Station 53 in the vicinity of Interstate 5 and Highway 119 in order to better serve HECA and the surrounding communities. The new Fire Station site would include a standard fire station capable of housing three to six on-duty firefighters, a three-bay engine house, and a helipad capable of handling emergency helicopters. The Fire Department shall have final authority on the exact location for the fire station.
4. During the active construction phase of the project, the Project Proponent shall provide 50% of the operating cost of a Kern County Fire Department fire prevention inspector, estimated to be \$88,600 who will be actively involved with fire prevention measures on a daily basis.
5. Prior to the issuance of the first certificate of occupancy, the Project Proponent shall provide training to Kern County Fire Department Staff, as identified by the Fire Department, in the areas needed to mitigate Hydrogen and other related hazardous material emergencies that might arise at the plant for the crews that are stationed at Buttonwillow (25), Taft (21), Old River (53), Maricopa (22) and Fellows (23). This will also be an annual requirement to train at least three (3) Kern County Fire Department personnel in these station areas.
6. Prior to the issuance of the first grading or building permit for the HECA Project, the Project Proponent shall provide full funding to purchase a fire rescue truck, to be housed and maintained by the Kern County Fire Department, and capable of lifting heavy loads in order to extricate trapped passengers in the event of a semi-truck vehicle accident. Fire Rescue Truck specifications/capabilities, and purchasing details, are as follows:
 - a. A fire rescue truck with a 50-ton rotator crane, manufactured to the Fire Department's specifications with no substitutions.
 - b. The fire rescue truck must be purchased, constructed, and delivered (construction and delivery time is estimated to be nine months) to the Fire Department 30 days prior to the start-up of the project. Additional time may be required in order to place the fire rescue truck in service and to allow for training personnel assigned to operate the vehicle.
 - c. The fire rescue truck shall be fully equipped to Department specifications.
 - d. The final authority on the specifications for the fire rescue truck shall rest with the Fire Department.
 - e. The vehicle title for the fire rescue truck shall be transferred to the County upon delivery.
7. Prior to the issuance of the first certificate of occupancy, the Project Proponent shall provide the Kern County Fire Department with air monitoring equipment that provides first responders with the capability to monitor for multiple toxic gases during an emergency at the facility.
8. The Project Proponent shall continuously comply with the following: The Project Proponent shall be responsible to contribute annually funds to the Kern County Fire Department for the full salaries of six Fire Engineer positions to drive and operate the Industrial Foam Pumper/Tender and the Fire Rescue Truck.
9. The Project Proponent shall continuously comply with the following: The Project Proponent shall be responsible to contribute annually to the Kern County Fire Department for the reverse 9-1-1 system, based upon the number of addresses that would be directly affected by a major emergency at the facility requiring surrounding residences to shelter-in-place or evacuate.

**KERN COUNTY PUBLIC HEALTH SERVICES DEPARTMENT, ENVIRONMENTAL HEALTH
DIVISION**

(As of 12/20/12)

Recommended Mitigation Measures:

Prior to the commencement of project operations, the Project Proponent shall comply with the following:

1. The applicant shall provide crash protection around the proposed secondary containment areas as appropriate to accommodate stacking/moving equipment. The applicant shall provide physical barriers and site security for the proposed project site as approved by the Environmental Health Division to reduce the potential of a chemical release.
2. The applicant shall provide sensors and/or detectors, as approved by the Environmental Health Division, at the site that will provide early notification of an accidental release of large quantities of toxic and flammable gasses/vapors from hazardous materials stored or generated on site. Chemicals of concern proposed for storage include anhydrous ammonia (toxic), hydrogen sulfide (toxic and flammable) and alcohol (flammable) and are to be monitored by an appropriate sensor array sufficient in scope to reasonably detect the materials before going offsite.
3. The applicant shall apply for a permit and comply with all regulations pertaining to the Certified Unified Program Agency (CUPA). Program elements consolidated under the CUPA are: Hazardous Materials Release Response Plan, Chemical Inventory, Hazardous Waste Generator, Onsite Hazardous Waste Treatment Programs, California Accidental Release Prevention Program (CalARP), Underground Storage Tanks, and Aboveground Petroleum Storage Tank Spill Prevention Control and Countermeasure Plan (SPCC). The Hazardous Materials Business Plan must be completed prior to operations of the facility into the California Environmental Reporting System (CERS).
4. The applicant shall provide a locked storage box (Knox box) outside the main entrance that can be accessed by first responders. It shall provide first responders with the ability to access the site immediately. It shall contain the following information:
 - Hazardous materials business plan
 - MSDS sheets for all chemicals stored at the site
 - Emergency contact numbers
5. The applicant shall provide a video monitoring system around the containment areas which can be used by first responders.
6. The applicant shall provide a means of secondary ingress/egress to the site for emergency use.
7. The applicant shall develop a letter/pamphlet/brochure to be reviewed and approved by the Planning Department and Environmental Health Division that provides information to the residences/businesses within the impact area of the off-site consequence analysis (OCA). The information must describe the OCA findings and actions to follow in the event of a release from any covered Cal ARP process.
8. The applicant must complete a Process Hazard Analysis (PHA) for all applicable hazardous materials and incorporate mitigation measures into the project design prior to commencement of operations. All PHA recommendations must be addressed prior to beginning facility operations. The Environmental Health Division must be notified of any scheduled PHA and given the opportunity to attend any session. The PHA must address issues of concern which include an uninterrupted power supply, safety system redundancies established to ensure the safe handling of the chemical at all times, and remote monitoring and surveillance. All PHAs and corrective actions must also be reviewed by this Division prior to implementation.

9. The applicant must provide documentation of an Emergency Response Plan for the accidental release of all applicable hazardous materials. The plan must address an intentional release or one caused by a natural disaster. A continuous training program for employees must be established to ensure a proper response to a release will occur and public health will be protected. Issues of site security, off-site monitoring, and public notification in the event of a release must be included. The Emergency Response Plan must be developed in conjunction with the Environmental Health Division and the Kern County Fire Department.
10. The applicant shall provide a permanent weather station with remote internet access for monitoring of wind direction in case of an accidental release at the facility. The data shall be kept on site or made available electronically for review by the Environmental Health Division on a 24/7 basis.

KERN COUNTY ENGINEERING, SURVEYING AND PERMIT SERVICES DEPARTMENT

(As of 12/18/12)

If the CEC requests the Building Inspection Division to provide CBO services related to plan reviews and/or inspections of this project, the following conditions shall be required:

1. The applicant shall be responsible to pay the County all plan review, inspection, and other related fees in accordance with the Department's adopted fee resolution.
2. The applicant shall provide a qualified person, approved by the Department, to prepare a report identifying all hazardous materials, classified in accordance with the California Building Code, to be used or stored. The report shall be submitted with their plan review documents and include recommendations for fire protection, as well as storage and handling of materials.
3. The applicant shall provide a California registered civil engineer to act as the Resident Engineer (RE) during the construction of the project. The RE shall be approved by the Department and paid for by the applicant. Duties and responsibilities of the RE shall be identified prior to construction.
4. The applicant shall provide an on-site office, plan rack, desk and adequate accommodations for the County's building inspector(s) for the duration of the project.

KERN COUNTY ROADS DEPARTMENT

(As of 2/26/13)

- Placeholder -

Comments Pending Further Conversations with HECA Applicant and Applicant Preparation of an Adequate Traffic Impact Study

The Roads Department recommends that the CEC require the HECA applicant to work with the Kern County Roads Department to provide a technical memo to the County Roads Department to supplement the information and analysis provided in the Application for Certification (AFC) Amendment. The technical memo will incorporate clarification and confirmation of mitigation measures required to address the construction and operational impacts of the HECA Project. The technical memo shall be reviewed and approved by the County Roads Department.

KERN COUNTY WASTE MANAGEMENT DEPARTMENT

(As of 1/22/13)

CEQA Analysis Recommendation: Quantify the volume of waste to be generated during construction of the HECA Project and describe how these waste materials will be handled to meet State requirements.

CEQA Analysis Recommendation: The HECA Project Proponent shall evaluate the characteristics of the gasification solids, based on a similar representative facility and then conduct a market analysis of potential uses based on the gasification solid characterization; with data to be included in the CEC's CEQA Analysis.

Mitigation Measures:

1. Prior to the acceptance of residual material from the HECA Project at a Kern County public landfill, the applicant shall supply the KCWMD a characterization of the waste for chemical and physical characteristics, and secure written approval from the Director of the KCWMD to ensure compatibility with our landfill operations and fee schedules.
2. Based on the characteristics of the gasification solid, HECA shall conduct a market analysis of potential beneficial uses of the waste.
3. If residual gasification solids, or other waste products, are subject to Jurisdictional Reporting and credited to the Kern County unincorporated area as disposal, HECA shall compensate Kern County via payment based on the following schedule: \$30 a ton (0-100 tons per day); \$50 a ton (101 – 200 tons per day); \$75 a ton (greater than 200 tons per day); or other amount as approved by the Board of Supervisors, to mitigate impacts to diversion programs. The County shall deposit the money in a Diversion Mitigation Reserve Account that will be used to fund diversion programs in Kern County. This is in addition to any gate/tipping fees for disposal.
4. HECA waste stream shall be subdivided between several facilities to reduce the potential impacts to any one facility. Facilities to be considered include the Bakersfield Metropolitan (Bena) RSLF, the Shafter-Wasco RSLF and the Taft RSLF.

KERN COUNTY SHERIFF'S OFFICE

(As of 10/10/12)

The Sheriff's Offices recommends the following mitigation measures:

1. Recommends increased private security during the initial construction phase of the project to prevent theft and states that preventing theft could also be accomplished with proper fencing, lighting, and video surveillance.
2. After the project is completed, building security and alarms would help minimize potential thefts.

Attachment 2

Comments from Kern County Departments

Kern County Fire Department

(As of February 13, 2013)

Kern County Public Health Services Department, Environmental Health Division

(As of 12/20/12)

Kern County Engineering, Surveying and Permit Services Department

(As of 12/18/12)

Kern County Roads Department

(Placeholder - As of 2/26/13)

Kern County Waste Management Department

(As of 1/22/13)

Kern County Sheriff's Office

(As of 10/10/12)

Brian S. Marshall
Fire Chief & Director of Emergency Services

Fire Department Headquarters

5642 Victor Street • Bakersfield, CA 93308 • www.kerncountyfire.org

Telephone 661-391-7000 • FAX 661-399-2915 • TTY Relay 800-735-2929



February 13, 2013

Lorelei H. Oviatt, Director
Kern County Planning and Community Development
2700 "M" Street
Suite 100
Bakersfield, California, 93301

RE: Hydrogen Energy California Plant

Lorelei,

The Kern County Fire Department (Department) has performed an exhaustive review of the proposed 473 acre Hydrogen Energy California (HECA) plant that is to be constructed 1.5 miles northwest of the unincorporated community of Tupman. The HECA plant will gasify petroleum coke (petcoke) (or blends of petcoke and coal) to produce hydrogen to fuel a combustion turbine operating in a combined cycle mode. The Gasification Block feeds a 390-megawatt combined cycle plant generating approximately 250 MW of low-carbon baseload power to the electrical grid.

HECA will be served by fire stations located in Taft, Fellows, McKittrick, and Buttonwillow. Specialized firefighting and rescue resources are located in Metropolitan Bakersfield, approximately 30 miles away.

Using information provided by HECA and commonly available information including MSDS sheets, the Department has determined that Petcoke (15,000 tons of active storage and at least 30 days inactive emergency storage), Molten Sulfur (150,000 gallons), and Methanol (550,000 gallons) provide the greatest hazards due to their hazard characteristics and flammability.

Petcoke is a hydrocarbon based by-product from refineries primary fuel source for HECA. The active petcoke is stored in three 5,000-ton silos and the inactive storage will be stored in a storage pile, covered with a stabilizer. Petcoke is subject to spontaneous heating and combustion. The suitable extinguishing media is large volumes of water or foam. Firefighting may expose firefighters to high heat, smoke, or toxic by-products. A petcoke fire will produce large quantities of dense black smoke containing toxic and hazardous products that will spread out over large areas.

Molten Sulfur is a flammable solid that has a flash point of 404.6° F and a wide flammable limit of 4% to 44%. The molten sulfur is a by-product of the gasification process and will be trucked off site. Approximately five trucks per day will be used to remove the molten sulfur. Molten sulfur is highly toxic to the respiratory tract and direct contact will cause severe thermal burns. If large trucks or tank cars become involved in fire, the recommended course of action is to let the fire burn and evacuate ½ mile in all directions.

Proudly Serving the cities of Arvin, Bakersfield, Delano, Maricopa, McFarland, Ridgecrest, Shafter,
Taft, Tehachapi, Wasco, and all Unincorporated Areas of Kern County

Methanol is used in the cold startup process. Methanol is a Poison-Class B that has a flash point of 520° F and a flammable range of 6.0% to 36%. Ingestion of as little as one ounce can cause irreversible injury to the nervous system, blindness, or death. Methanol is extremely flammable and may explode in confined space conditions. Water is ineffective in extinguishing this type of fire. The suitable extinguishing media is large volumes of alcohol resistant foam. If large trucks or tank cars become involved in fire, the recommended course of actions is to let the fire burn and evacuate ½ mile in all directions.

HECA presents significant challenges to the Department due to confined space hazards, hazardous material use and storage, large population of workers, tall structures, and large machinery. Additionally, increased truck and train traffic to deliver the required amount of feedstock presents increased emergency activity throughout the County particularly on Highway 33, Interstate 5, and the major railroads.

It is the professional opinion of the Department that HECA will adversely impact the Department's ability to continue to provide a high level of service to not only this project, but also the surrounding communities and property owners. Furthermore, the mitigation measures provided to the Department by HECA are not adequate to mitigate the risk of an uncontrolled fire.

In the expert experience of the Department, the appropriate mitigation measures are as follows:

- Purchase, and delivery to the Department, a fully equipped Industrial Foam pumper/tender, which will be housed and maintained by the Kern County Fire Department, and an additional 2,500 gallon cache of Class B foam to be provided to the Department to be stored at an off-site location. The Industrial Foam pumper/tender, with its onboard foam capabilities, and the 2,500 gallon cache of Class B foam will allow the Department to have the specialized capabilities and equipment necessary to control and contain a fire or product leak emergency that occurs at the HECA plant. Therefore, in order to mitigate the significant impact that this project creates, HECA is required to purchase and deliver to the County a fully equipped Industrial Foam pumper/tender with its onboard foam storage capabilities, and an additional 2,500 gallon cache of foam.
 - 1) The Industrial Foam pumper/tender shall be manufactured to the Department's standards with no substitutions.
 - 2) The Industrial Foam pumper/tender must be purchased, constructed, and delivered (construction and delivery time is estimated to be nine months) to the Department 30 days prior to the start-up of the project. Additional time may be required in order to place the Industrial Foam pumper/tender in service and to allow for training personnel assigned to operate the pumper.
 - 3) The Industrial Foam pumper/tender shall be fully equipped to Department specifications.
 - 4) The final authority on the specifications for the Industrial Foam Pumper/Tender shall rest with the Department.
 - 5) The Title for the Industrial Foam Pumper/Tender shall be transferred to the County upon delivery.
 - 6) The cache of foam shall meet the Department's standards.
 - 7) If the Department responds to an emergency at HECA and uses the cache of foam to control or contain the emergency, HECA will be required to replace the amount used within 30 days of the incident.

The estimated cost for the Industrial Foam Pumper/Tender is \$800,000 and the 2,500 gallon cache is \$50,000. Please note: Foam storage data derived from calculations based on satisfactorily extinguishing a two-dimensional tank fire involving the largest tank containing HECA's most volatile/dangerous commodity.

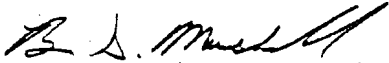
- HECA shall provide a Fire Protection Specialist to the Department during the plan review process. HECA will be allowed to select the Specialist from a list of qualified individuals provided by the Department. Furthermore, HECA and the Fire Protection Specialist shall develop a comprehensive *Fire and Life Safety* plan that describes the methods to reduce the potential of an uncontrolled fire thus reducing the threat to life and property. These plans must be submitted and approved by the Department prior to building permit approval.
- HECA shall provide a 3 ½ to 5 acre plot of land in which to relocate Kern County Fire Station 53. The Department intends to relocate Fire Station 53 in the vicinity of Interstate 5 and Highway 119 in order to better serve HECA and the surrounding communities. The new Fire Station site would include a standard fire station capable of housing three to six on-duty firefighters, a three-bay engine house, and a helipad capable of handling emergency helicopters.
 - 1) The Department shall have final authority on the exact location for the fire station.
- During the active construction phase of the project, HECA, shall provide 50% of the operating cost of a Kern County Fire Department fire prevention inspector, estimated to be \$88,600 who will be actively involved with fire prevention measures on a daily basis.
- Before certificate of occupancy is issued, HECA will provide training in the areas needed to mitigate Hydrogen and other related hazardous material emergencies that might arise at the plant for the crews that are stationed at Buttonwillow (25), Taft (21), Old River (53), Maricopa (22) and Fellows (23). This will also be an annual requirement to train at least three (3) Kern County Fire Department personnel in these station areas.
- A fire rescue truck, housed and maintained by the Kern County Fire Department, capable of lifting heavy loads in order to extricate trapped passengers in the event of a semi-truck vehicle accident. Fire Rescue Truck specifications/capabilities, and purchasing details, are as follows:
 - 1) A fire rescue truck with a 50-ton rotator crane, manufactured to the Fire Department's specifications with no substitutions.
 - 2) The fire rescue truck must be purchased, constructed, and delivered (construction and delivery time is estimated to be nine months) to the Fire Department 30 days prior to the start-up of the project. Additional time may be required in order to place the fire rescue truck in service and to allow for training personnel assigned to operate the vehicle.
 - 3) The fire rescue truck shall be fully equipped to Department specifications.
 - 4) The final authority on the specifications for the fire rescue truck shall rest with the Fire Department.
 - 5) The vehicle title for the fire rescue truck shall be transferred to the County upon delivery.
- HECA shall provide the Kern County Fire Department with air monitoring equipment that provides first responders with the capability to monitor for multiple toxic gases during an emergency at the facility.
- HECA shall be responsible to contribute annually to the Kern County Fire Department for six Fire Engineer positions to drive and operate the Industrial Foam Pumper/Tender and the Fire Rescue Truck.
- HECA shall be responsible to contribute annually to the Kern County Fire Department for the reverse 9-1-1 system, based upon the number of addresses that would be directly affected by a major emergency at the facility requiring surrounding residences to shelter-in-place or evacuate.

The Department has determined that the risk of an uncontrolled fire at the HECA plant is a significant environmental impact and must be mitigated. This letter outlines the minimum mitigation requested by the Department.

The Department looks forward to working with the management and sub-contractors of HECA during the construction phase of the project. In addition, the Department recognizes the need for HECA and the Department to have a good working relationship during the day-to-day activities at the plant and during any future expansion projects that may occur at the plant.

If additional information is required, please contact Fire Chief Brian Marshall by phone at (661) 391-7011, by fax at (661) 391-7013, or send an e-mail to bmarshall@co.kern.ca.us.

Respectfully Submitted,



Brian S. Marshall,
Fire Chief & Director of Emergency Services

Cc: John Silliman, Acting Deputy Fire Chief
Benny Wofford, Fire Marshal
John Nilon, County Administrative Officer
Sandra Quigly, Administrative Analyst



ENVIRONMENTAL HEALTH DIVISION

2700 M STREET, SUITE 300, BAKERSFIELD, CA 93301-2370

VOICE: (661) 862-8740 FAX: (661) 862-8701

Web: www.co.kern.ca.us/eh E-mail: eh@co.kern.ca.us

"ONE VOICE"



MATTHEW CONSTANTINE, DIRECTOR
PUBLIC HEALTH SERVICES

CLAUDIA JONAH, MD
PUBLIC HEALTH OFFICER

INTEROFFICE MEMORANDUM

To:	Jacqui Kitchen	Date:	December 20, 2012
From:	Environmental Health Division		
Subject:	HECA Project		

The Kern County Environmental Health Division has reviewed the above referenced project. This Division has the local regulatory authority to enforce state regulations and local codes as they relate to hazardous materials management, waste management and discharge, water supply requirements, and other items that may affect the health and safety of the public or that may be detrimental to the environment.

The Environmental Health Division requests that the following conditions be placed on the subject project and be satisfied prior to operation:

- 1) The applicant shall provide crash protection around the proposed secondary containment areas as appropriate to accommodate stacking/moving equipment. The applicant shall provide physical barriers and site security for the proposed project site as approved by the Environmental Health Division to reduce the potential of a chemical release.
- 2) The applicant shall provide sensors and/or detectors, as approved by the Environmental Health Division, at the site that will provide early notification of an accidental release of large quantities of toxic and flammable gasses/vapors from hazardous materials stored or generated on site. Chemicals of concern proposed for storage include anhydrous ammonia (toxic), hydrogen sulfide (toxic and flammable) and alcohol (flammable) and are to be monitored by an appropriate sensor array sufficient in scope to reasonably detect the materials before going offsite.
- 3) The applicant shall apply for a permit and comply with all regulations pertaining to the Certified Unified Program Agency (CUPA). Program elements consolidated under the CUPA are: Hazardous Materials Release Response Plan, Chemical Inventory, Hazardous Waste Generator, Onsite Hazardous Waste Treatment Programs, California Accidental Release Prevention Program (CalARP), Underground Storage Tanks, and Aboveground Petroleum Storage Tank Spill Prevention Control and Countermeasure Plan (SPCC). The Hazardous Materials Business Plan must be completed prior to operations of the facility into the California Environmental Reporting System (CERS).
- 4) The applicant shall provide a locked storage box (Knox box) outside the main entrance that can be accessed by first responders. It shall provide first responders with the ability to access the site immediately. It shall contain the following information:



Printed on Recycled Paper

- Hazardous materials business plan
 - MSDS sheets for all chemicals stored at the site
 - Emergency contact numbers
- 5) The applicant shall provide a video monitoring system around the containment areas which can be used by first responders.
 - 6) The applicant shall provide a means of secondary ingress/egress to the site for emergency use.
 - 7) The applicant shall develop a letter/pamphlet/brochure to be reviewed and approved by the Planning Department and Environmental Health Division that provides information to the residences/ businesses within the impact area of the off-site consequence analysis (OCA). The information must describe the OCA findings and actions to follow in the event of a release from any covered Cal ARP process.
 - 8) The applicant must complete a Process Hazard Analysis (PHA) for all applicable hazardous materials and incorporate mitigation measures into the project design prior to commencement of operations. All PHA recommendations must be addressed prior to beginning facility operations. The Environmental Health Division must be notified of any scheduled PHA and given the opportunity to attend any session. The PHA must address issues of concern which include an uninterrupted power supply, safety system redundancies established to ensure the safe handling of the chemical at all times, and remote monitoring and surveillance. All PHAs and corrective actions must also be reviewed by this Division prior to implementation.
 - 9) The applicant must provide documentation of an Emergency Response Plan for the accidental release of all applicable hazardous materials. The plan must address an intentional release or one caused by a natural disaster. A continuous training program for employees must be established to ensure a proper response to a release will occur and public health will be protected. Issues of site security, off-site monitoring, and public notification in the event of a release must be included. The Emergency Response Plan must be developed in conjunction with the Environmental Health Division and the Kern County Fire Department.
 - 10) The applicant shall provide a permanent weather station with remote internet access for monitoring of wind direction in case of an accidental release at the facility. The data shall be kept on site or made available electronically for review by the Environmental Health Division on a 24/7 basis.

KERN COUNTY

Engineering, Surveying and Permit Services Department

Memorandum

Charles Lackey, P.E., Director

To: Jacquelyn Kitchen
Supervising Planner

Date: December 18, 2012

From: Greg Fenton, PE, CBO
Senior Engineering Manager

Phone: 862-5061

Fax: 862-5101

Subject: Hydrogen Energy of California Project (HECA)

The California Energy Commission (CEC) has authority over this project regarding building permits and related plan reviews and inspections. However, on other energy projects constructed in Kern County, the CEC has previously requested the Kern County Building Inspection Division to provide the services of a Chief Building Official (CBO) on their behalf. It is likely the CEC will again request the County to provide CBO services on this project.

If the CEC requests the Building Inspection Division to provide CBO services related to plan reviews and/or inspections of this project, the following conditions shall be required:

1. The applicant shall be responsible to pay the County all plan review, inspection, and other related fees in accordance with the Department's adopted fee resolution.
2. The applicant shall provide a qualified person, approved by the Department, to prepare a report identifying all hazardous materials, classified in accordance with the California Building Code, to be used or stored. The report shall be submitted with their plan review documents and include recommendations for fire protection, as well as storage and handling of materials.
3. The applicant shall provide a California registered civil engineer to act as the Resident Engineer (RE) during the construction of the project. The RE shall be approved by the Department and paid for by the applicant. Duties and responsibilities of the RE shall be identified prior to construction.
4. The applicant shall provide an on-site office, plan rack, desk and adequate accommodations for the County's building inspector(s) for the duration of the project.

KERN COUNTY ROADS DEPARTMENT

(As of 2/26/13)

– Placeholder –

Comments Pending Further Conversations with HECA Applicant and Applicant Preparation of an Adequate Traffic Impact Study

The Roads Department recommends that the CEC require the HECA applicant to work with the Kern County Roads Department to provide a technical memo to the County Roads Department to supplement the information and analysis provided in the Application for Certification (AFC) Amendment. The technical memo will incorporate clarification and confirmation of mitigation measures required to address the construction and operational impacts of the HECA Project. The technical memo shall be reviewed and approved by the County Roads Department.



KERN COUNTY WASTE MANAGEMENT DEPARTMENT

Douglas E. Landon, Director
2700 "M" Street, Suite 500
Bakersfield, CA 93301-2372
(661) 862-8900
(800) 552-KERN (option 6)
Fax: (661) 862-8905
<http://www.kerncountywaste.com>

January 22, 2013

Ms. Jacquelyn Kitchen, Supervising Planner
Planning and Community Development Department
2700 "M" Street, Suite 100
Bakersfield, CA 93301

Dear Ms. Kitchen:

SUBJECT: Hydrogen Energy California – 2012 Revised Application for Certification

Thank you for the opportunity to comment on the 2012 Revised Application for Certification of the Hydrogen Energy California plant. The Project will gasify a fuel blend of 75 percent coal and 25 percent petroleum coke (petcoke) to produce synthesis gas (syngas). Syngas produced via gasification will be purified to hydrogen rich fuel, and used to generate a nominal 300 megawatts (MW) of low-carbon baseload electricity in a Combined Cycle Power Block, low-carbon nitrogen-based products in an integrated Manufacturing Complex, and carbon dioxide (CO₂) for use in enhanced oil recovery (EOR).

The Project is located on a 473-acre site approximately seven miles west of the City of Bakersfield in the unincorporated area of Kern County.

The Kern County Waste Management Department (KCWMD) operates the County owned public solid waste facilities, and is the Responsible Agency for maintaining the unincorporated Kern County jurisdiction's compliance with the Integrated Waste Management Plan (IWMP). The IWMP includes elements dealing with source reduction and recycling of waste, disposal facility siting criteria and non-disposal facility identification.

The KCWMD has reviewed the proposed Project. The KCWMD focuses on, but is not limited to, two questions identified in the CEQA checklist related to solid waste for which every project is to be evaluated. These questions include:

1. Would the Project be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?
2. Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain performance objectives for public facilities?

This comment letter will address each question in order.

Would the Project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Sufficient permitted capacity involves three components: (1) daily tonnage, (2) daily traffic, and (3) permitted volume. The KCWMD must also evaluate operational concerns primarily

■
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due to the physical characteristics of the waste. The closest public solid waste facility in the vicinity of the HECA Project is the Taft Recycling and Sanitary Landfill.

The HECA Project will consist of three phases: construction, start-up and ongoing operation. The existing Project Description does not describe the construction phase or the quantity of waste generated during the construction phase. The 2008 California Green Building Standards Code requires all construction projects to develop a recycling plan to divert and/or recycle at least 50 percent of waste generated during construction. Please refer to the 2008 California Green Building Standards Code Section 708 Construction Waste Reduction, Disposal and Recycling for specific details. **The KCWMD requests that HECA Project quantify the volume of waste to be generated during construction and briefly describe how these waste materials will be handled to meet State requirements.**

The third phase of the HECA Project is the ongoing operation in which the facility will be fueled by a combination of petroleum coke (petcoke) and coal. The Project will gasify a fuel blend of 75 percent coal and 25 percent petcoke to produce synthesis gas (syngas). This phase of the Project is projected to generate approximately 770 tpd of gasification solids. The Project is anticipated to produce an additional 57 tpd of waste that could be classified as either hazardous or non-hazardous and could be disposed in a Class III solid waste facility depending on characterization.

**Taft Recycling and Sanitary Landfill
Permit/Operational Conditions**

	Permit	Current Operation	HECA Project
Daily Tonnage (tpd)	800	112	57 - 827
Daily Traffic (vpd)	350	54	

During the 2012 year, the Taft Recycling and Sanitary Landfill (RSLF) accepted an average of 112 tons per day. A 57 tpd to 827 tpd increase at the facility would significantly impact the permitted capacity and the operational conditions at the facility. As stated above however, the KCWMD operates the County-owned public solid waste facilities. **The KCWMD requests that the HECA waste stream be subdivided between several facilities to reduce the potential impacts to any one facility. Facilities to be considered include the Bakersfield Metropolitan (Bena) RSLF, the Shafter-Wasco RSLF and the Taft RSLF. The HECA Project may also consider several private facilities, including but not limited to, Clean Harbors, H. M. Holloway or McKittrick Disposal.**

Additionally, prior to the acceptance of residual material from the proposed Project at any Kern County public landfill, the applicant shall supply the KCWMD a characterization of the waste for chemical and physical characteristics, and secure written approval from the Director of the KCWMD to ensure compatibility with landfill operations and fee schedules. A special handling fee may be assessed pending results of the characterization and impacts on landfill operations.

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause

significant environmental impacts, in order to maintain performance objectives for public facilities?

The HECA Project is described as a gasification process. The Project Description projects that the facility will generate between 57 tpd and 827 tpd of non-hazardous industrial waste that could be disposed in a Class III solid waste facility. The California Integrated Waste Management Act (AB 939) required all California cities, counties and approved regional solid waste management agencies responsible for enacting plans and implementing programs to divert 25 percent of their solid waste by 1995 and 50 percent by year 2000.

In 2008, the California State Senate passed Senate Bill 1016 (SB 1016) to make the process of goal measurement (obtaining and maintaining a 50 percent diversion rate) established by AB 939 simpler, more timely, and more accurate. SB 1016 accomplishes this by changing to a disposal-based indicator, the per capita disposal rate, which uses only two factors: a jurisdiction's population (or in some cases employment) and its disposal as reported by disposal facilities. The Kern County unincorporated jurisdiction's per capita disposal equivalent to a 50 percent diversion rate was set at 7.6 lbs/person/day.

The proposed Project is located within the unincorporated area of Kern County; the disposal rate for this area is currently 5.7 lbs/person/day. In order to remain in compliance with SB 1016 and AB 939, the unincorporated area cannot exceed a disposal rate of 7.6 lbs/person/day. The HECA Project is projected to dispose of 292,118 tons/year (tpy) during operation, which equates to 5.36 lbs/person/day from the project alone. The HECA project would raise the County per capita disposal to 11.06 lbs/person/day, a 48.5% increase, exceeding the County's disposal cap of 7.6 lbs/person/day. The HECA Project is a significant impact and will place Kern County in jeopardy of non-compliance with mandated recycling goals. The following strategies may be used to negate this impact:

1. Recycle or reuse residual waste as a beneficial use.
2. Dispose of the material and receive confirmation from CalRecycle that the waste material cannot be recycled and have CalRecycle concurrence that the waste can be adjusted out of the jurisdictional reporting as disposal.
3. Seek/receive legislative or regulatory exemption.

The HECA Project Description indicates that the gasification solids, slag, may be recycled. The KCWMD acknowledges that there are limited local markets for slag; however, existing markets appear to be saturated as significant volumes of slag are disposed locally. Additionally, the chemical and physical characteristics of slag are variable and highly dependant on the feedstock and method of processing. Suitability of the HECA slag for beneficial use or disposal cannot be accurately evaluated until the material has been characterized. Therefore, the KCWMD requests that HECA evaluate the characteristics of the gasification solids, based on a similar representative facility and then conduct a market analysis of potential uses based on the gasification solid characterization.

If the Project cannot negate the impact of disposal on Kern County's diversion/recycling mandates, the KCWMD requests the following mitigation. If residual gasification solids, or other waste products, are subject to Jurisdictional Reporting and credited to the Kern County unincorporated area as disposal, HECA shall compensate Kern County \$75/ton for

implementation of additional recycling facilities and programs to maintain compliance with State diversion mandates. This is in addition to any gate/tipping fees for disposal.

Recommended Mitigation Measures:

The Waste Management Department recommends the following mitigation measure to decrease the Project's potential impacts to the Taft RSLF or other Department facilities and programs to less than significant:

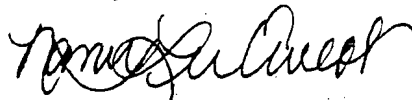
1. Prior to the acceptance of residual material from the proposed Project at a Kern County public landfill, the applicant shall supply the KCWMD a characterization of the waste for chemical and physical characteristics, and secure written approval from the Director of the KCWMD to ensure compatibility with our landfill operations and fee schedules.
2. Based on the characteristics of the gasification solid, HECA shall conduct a market analysis of potential beneficial uses of the waste.
3. If residual gasification solids or other waste products, are subject to Jurisdictional Reporting and credited to the Kern County unincorporated area as disposal, HECA shall compensate Kern County \$75/ton for implementation of additional recycling facilities and programs to maintain compliance with State diversion mandates. This is in addition to any gate/tipping fees for disposal.

With the inclusion of the above mitigation measures, the Kern County Waste Management System may be able to accept the residual gasification solids and other waste materials generated by the HECA Project. However, the Project will still result in a significant impact to the unincorporated area of Kern County to comply with SB 1016 and AB 939 by resulting in a significant increase in per capita disposal, and reducing the diversion and recycling rate below the 50 percent mandate achieved by the County.

The KCWMD reserves the right to refuse to accept any load that it deems to be unacceptable based on its potential impact to the health or safety of the customers, employees and/or environment. The KCWMD may provide additional comments if necessary.

If you have any further questions, please contact Katrina Slayton at (661) 862-8810.

Sincerely,



Nancy L. Ewert, P.E.
Senior Engineering Manager



1350 Norris Road
Bakersfield, California 93308-2231

October 10, 2012

Aaron Nousaine
California Energy Commission
Sitting, Transmission, and Environmental Protection Division
1516 Ninth Street, MS 40
Sacramento, CA 95814

RE: Law Enforcement Needs Assessment Form relating to the proposed Hydrogen
Energy California Power Plant Project (08-AFC-8)

Mr. Nousaine,

The Kern County Sheriff's Office has reviewed the project characteristics, as proposed by the project applicant, reviewed the map for the proposed project, and completed the Law Enforcement Needs Assessment Form. Please refer to the attached document.

Oil Field and rural crime is prevalent in this area. There is always a possibility of vandalism and/or theft related crimes during the initial stages of this type of construction project. Once construction is completed on a project such as this, there are potential impacts on law enforcement services. Those types of service impacts are burglary alarm calls, burglary reports, and miscellaneous theft investigations.

The impact of this project on the Sheriff's Office resources will result in an increase in the number of calls for service. This increase should be negligible and could be mitigated by increased private security during the initial construction phase of the project to prevent thefts. Preventing thefts could also be accomplished with proper fencing, lighting, and video surveillance. After the project is completed, proper building security and alarms would help to minimize potential thefts.

In conclusion, there is a potential for an increase in calls for service during the construction of the project. Once construction is complete, however, the impact on the Sheriff's Office services should be minimal.

PLEASE ADDRESS ALL COMMUNICATIONS TO THE SHERIFF

October 10, 2012

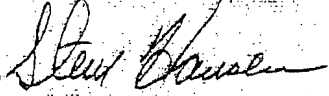
Law Enforcement Needs Assessment Form relating to the proposed Hydrogen Energy California
Power Plant Project (08-AFC-8)

Page 2

Thank you for the opportunity to respond to the law enforcement needs for this project.
Please feel free to contact Sergeant Haiungs at (661) 764-6954 if you have any further
questions or inquiries.

Sincerely,

DONNY YOUNGBLOOD, Sheriff-Coroner



By: Lieutenant Steve Hansen
South Area Substations Section

Attachment

Hydrogen Energy California Power Plant Project (08-AFC-8)

Law Enforcement Needs Assessment Form Responses

EXISTING LAW ENFORCEMENT RESOURCES AND SERVICES IN THE PROJECT AREA:

Names and addresses of the facilities (e.g., sheriff substations) serving the project area, and distance of closest dispatch facility to the project site:

Taft Substation	North County Substation	KSCD Communication Center
315 N. Lincoln Street	181 E. 1 st Street	2601 Panorama Drive
Taft, CA 93268	Buttonwillow, CA 93206	Bakersfield, CA 93306

Adopted or desired service standard (e.g., one sworn officer per 1,000 population) applicable to the project site:

N/A; the project will not significantly impact permanent population to the area.

Existing staffing levels for facilities serving the project area (including sworn officers and civilians, totals and per shift):

Taft Substation	North County Substation - Buttonwillow
Fourteen (14) Sworn Deputies	Thirteen (13) Sworn Deputies
One (1) Civilian Clerk	Two (2) Civilian Clerks

* Most shifts have at least two (2) patrol deputies on duty per shift

Estimated response times to the project site:

Taft Substation	North County Substation - Buttonwillow
Priority Calls: 15 to 25 minutes	Priority Calls: 10 to 40 minutes
Non-Priority Calls: 25 to 35 minutes	Non-Priority Calls: 15 to 60 minutes

* Response times fluctuate due to where the deputies are responding from.

Current projected needs (e.g., facilities and staff) to maintain or meet existing service levels:

The North County Substation does not foresee any additional facilities or staffing needs as a direct result of this project.

Additional needs beyond those identified above to maintain or meet existing service levels with the project:

N/A

Hydrogen Energy California Power Plant Project (08-AFC-8)
Law Enforcement Needs Assessment Form Responses

Exchange of general law enforcement responsibilities (e.g., formal and/or informal agreements with local municipalities for provision of services) in the project area:

N/A

Current inventory of specialized equipment (e.g., helicopters or other aircraft):

The Kern County Sheriff's Office has helicopters and fixed wing aircraft in its inventory. These resources are based at Meadow Field in Bakersfield, California, which is 27 miles from the proposed project.

ESTIMATED NEED FOR LAW ENFORCEMENT SERVICES, EQUIPMENT, AND FACILITIES:

Is there a process or formula used by your department to determine the need for additional law enforcement services to serve a new large-scale power plant? Please explain.

I am not aware of any specific process or formula used to evaluate any additional needs resulting from a project such as this.

Could the project trigger a need for additional law enforcement services for on-site crimes against persons, theft of materials, and/or vandalism? Please explain.

During project construction:

Oil field and rural crime is prevalent in this area. There is always the possibility of theft of materials during construction. Therefore, additional law enforcement services might be needed for extra patrol by on duty deputies to discourage criminal activity. Additional time would be required to take theft reports and to conduct investigations.

During project operation:

The likelihood of theft during this project would be significantly reduced with the proposed 24/7 on-site security.

Could increased project-related traffic affect circulation and access on roads near the project site to the extent that an impact to emergency response times might occur? Please explain.

During project construction:

There are only two lane roads in the area around this site. There will be possible road delays during construction; however, the project is far enough away from major highways (CA HWY 58 and Interstate 5) that no significant traffic problems should be expected.

During project operation:

There would be increased traffic during shift change, but I do not expect any significant traffic issues.

Hydrogen Energy California Power Plant Project (08-AFC-8)

Law Enforcement Needs Assessment Form Responses

Do law enforcement personnel review development site plans for projects to assess potential law enforcement issues (e.g., lighting and other safety factors)? Please explain.

We review site plans and planning documents to ascertain the impact of law enforcement services. With this project being located in the unincorporated area of Kern County, all lighting, traffic, and roads needs and/or assessments requests should be forwarded to the California Highway Patrol.

Are specific measures recommended to reduce the potential for crimes to occur at or near the project site (e.g., specific types of security fencing)? Please explain.

Chain link fence around perimeter
24 hour private security patrols
Large motion sensor lights
Alarm systems
Recorded video monitoring system

Please explain any other law enforcement concerns that have not been addressed by this needs assessment form.

This site is at the most Northern boundary for the Taft Substation response area and the most Southern boundary for the North County Substation. The distance from our normal patrol areas to this site could be impacted during our response to the project/plant.

Person(s) Completing This Needs Assessment Form

Name: Marc Haiungs
Title/Position: Sergeant
Telephone No: (661) 599-0157
E-mail Address: haiungsm@kernsheriff.com

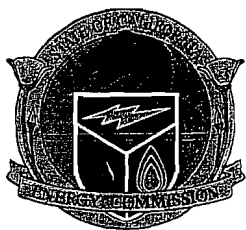
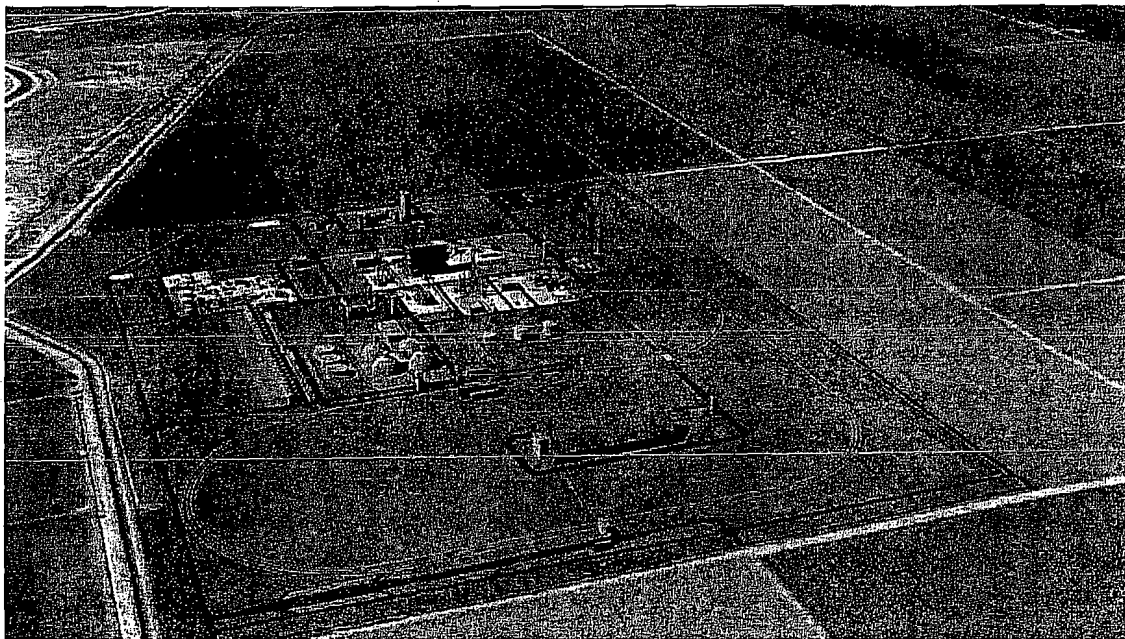
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TN 71444

JUN. 28 2013

HYDROGEN ENERGY CALIFORNIA PROJECT

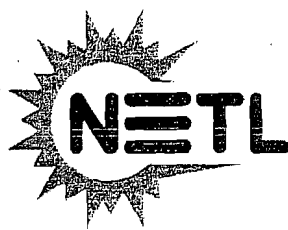
Preliminary Staff Assessment, Draft Environmental Impact Statement



**CALIFORNIA
ENERGY COMMISSION**
Edmund G. Brown, Jr.
Governor



DEPARTMENT OF ENERGY



JUNE, 2013
CEC-700-2013-001-PSA

DOCKET NUMBER 08-AFC-8A

**CALIFORNIA
ENERGY COMMISSION**

1516 Ninth Street
Sacramento, CA 95814

http://www.energy.ca.gov/sitingcases/hydrogen_energy/index.html

JOHN HEISER
Project Manager

CHRIS DAVIS
Siting Office Manager

ERIC KNIGHT
Environmental Office Manager

MATT LAYTON
Engineering Office Manager

ROGER E. JOHNSON
*Deputy Director
Siting, Transmission and
Environmental Protection Division*

ROBERT P. OGLESBY
Executive Director

DISCLAIMER

Staff members of the California Energy Commission prepared this report. As such, it does not necessarily represent the views of the Energy Commission, its employees, or the State of California. The Energy Commission, the State of California, its employees, contractors and subcontractors make no warrant, express or implied, and assume no legal liability for the information in this report; nor does any part represent that the uses of this information will not infringe upon privately owned rights. This report has not been approved or disapproved by the Energy Commission nor has the Commission passed upon the accuracy or adequacy of the information in this report.

COVER SHEET

Responsible Agencies: U.S. Department of Energy (DOE)
California Energy Commission (Energy Commission)

Title: *Preliminary Staff Assessment and Draft Environmental Impact Statement (PSA/DEIS) for the Hydrogen Energy California's Integrated Gasification Combined Cycle Project, Recovery Act: Demonstration of Integrated Gasification Combined Cycle (IGCC) and of CO₂ Capture and Sequestration technology on a commercial scale, located in Kern County California, near the City of Bakersfield (DOE/EIS-0431D)*

Contact: For additional copies or more information concerning this PSA/DEIS, please contact

Mr. Fred Pozzuto

or

Mr. John Heiser

U.S. Department of Energy

California Energy Commission

National Energy Technology Laboratory

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Abstract: Enclosed for your review and comment is DOE's and the California Energy Commission's joint *Preliminary Staff Assessment/Draft Environmental Impact Statement (PSA/DEIS)* (DOE/EIS-0431D). This document was prepared in accordance with the *National Environmental Policy Act of 1969* (NEPA) and applicable implementing regulations. The CEC must also comply with Title 20, California Code of Regulations section 1701 et seq., and the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The Energy Commission must decide whether to certify the Hydrogen Energy California's Integrated Gasification Combined Cycle Project (HECA); this certification is in lieu of any permits required by state, regional, or local agencies, and federal agencies to the extent permitted by federal law (Pub. Resources Code, § 25500). The PSA/DEIS analyzes the potential environmental impacts of DOE providing financial assistance under the Industrial Carbon Capture and Sequestration (CCS) program to the HECA project.

This PSA/DEIS addresses DOE's proposed action, which is to provide approximately \$408 million in financial assistance to HECA, LLC to support the construction and demonstration of the HECA project. The HECA project would demonstrate integrated gasification combined cycle (IGCC) and carbon capture technology on a commercial scale turning a fuel blend consisting of 75% western sub-bituminous coal and 25% petroleum coke (petcoke) into a synthesis gas (syngas) in a new power plant consisting of a single gasifier with gas cleanup systems, a gas combustion turbine, a heat recovery steam generator, a steam turbine, and associated facilities capable of generating 405 MW gross power. Because of its multiple production capabilities, the plant is referred to as a poly-generation (or polygen) plant designed so that it could sell urea, ammonia, and perhaps other nitrogenous compounds.

DOE invites interested parties to comment on this draft EIS during the 45-day comment period that will begin when the U.S. Environmental Protection Agency (EPA) publishes a notice of availability in the *Federal Register*.

Availability: DOE encourages public participation in the NEPA review process. A Notice of Availability will be placed in the Bakersfield Californian. This draft PSA/DEIS is also being made available for public review on DOE's National Energy Technology Laboratory web site, <http://www.netl.doe.gov/publications/others/nepa/ea.html>, and DOE's NEPA web site at http://nepa.energy.gov/DOE_NEPA_documents.html and posted on the California Energy Commission Docket at, http://www.energy.ca.gov/sitingcases/hydrogen_energy/

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(08-AFC-08A)
PRELIMINARY STAFF ASSESSMENT AND
DRAFT ENVIRONMENTAL IMPACT STATEMENT**

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EXECUTIVE SUMMARY

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INTRODUCTION

This Preliminary Staff Assessment and Draft Environmental Impact Statement (PSA/DEIS) contains the California Energy Commission (Energy Commission) staff's and the US Department of Energy's (DOE) independent evaluation of Hydrogen Energy California, LLC's (applicant) Amended Application for Certification (08-AFC-8A) for the proposed Hydrogen Energy California project (HECA).

Energy Commission staff has completed an independent assessment under the California Environmental Quality Act (CEQA) and has revealed significant, and for the most part, unresolved issues. The issues are summarized as follows and discussed further in the Executive Summary and in detail in each related section of the PSA/DEIS.

DOE has completed its assessment pursuant to the National Environmental Policy Act. In accordance with Council on Environmental Quality implementing regulations (40 CFR 1500 thru 1508) and DOE's implementing procedures (10 CFR 1021), DOE has identified and evaluated the potential environmental impacts of the Proposed Action (providing financial assistance for the construction and operation of the applicant's project) and the alternatives. The PSA/DEIS describes the affected environment and the environmental consequences of the alternatives among various resource areas. DOE is also using the PSA/DEIS to fulfill certain responsibilities for documenting wetlands and floodplain impacts (10 CFR 1022), conformity with air quality standards (40 CFR Part 93), and consulting with expert agencies and tribes as required by the National Historic Preservation Act (Section 106), the Endangered Species Act (Section 7), and the Native American Graves Protection and Repatriation Act.

Air Quality

The San Joaquin Valley Air Pollution Control District has completed the Preliminary Determination of Compliance (PDOC) for HECA, and the District's analysis concluded that the HECA facility as proposed would comply with all applicable laws, ordinances, regulations and standards and would not create a health risk to the residents of the Valley. The PDOC contains upwards of 1,000 conditions applicable to the project. The District has approved two mitigation agreements with HECA to receive funds in the amount of \$8,747,160 for the purpose of mitigating air quality impacts of the facility.

Greenhouse Gas Emissions

The applicant has described the facility's expected electrical capacity and hours of operation using more than one potential operating profile. Different operating profiles may need to be evaluated to determine which set of conditions represent actual operations and worst case impacts. Some operating profiles may result in the facility not complying with certain regulatory requirements. The California Air Resources Board (ARB) currently has not finalized regulations for geologic sequestration under the cap

and trade program. If a methodology is not in place once the project is operational, it would have to purchase allowances or offsets for all CO₂ that HECA would sequester in addition to the direct CO₂ emissions. Once the methodology is in place, the project would still be required to purchase allowances for the CO₂ it is unable to sequester.

Biological Resources

The proposed HECA project would result in a significant, unavoidable impact to Blunt Nosed Leopard Lizard, a California Fully Protected species. During May 2013, the applicant submitted a Section 2081 Incidental Take Permit application for project impacts to state-listed wildlife species for which the applicant would be seeking incidental take coverage which staff has preliminarily reviewed. The U.S. Fish and Wildlife Service (Service) is reviewing the Biological Assessment that DOE sent to the Service on March 1, 2013. This is the process by which DOE complies with the consultation requirements of Section 7 of the Endangered Species Act.

Cultural Resources

Staff is still awaiting additional information from the applicant and has not reached any final conclusions regarding impacts to cultural resources. Approximately 75 percent of the HECA project components are located in areas considered sensitive for the presence of buried archaeological sites. There are potentially 21 known archaeological resources that would require mitigation along the proposed process water pipeline. At least five archaeological resources at the Enhanced Oil Recovery (EOR) site have been identified so far that would need to be mitigated. Additional sensitive resources may be identified as additional information is submitted prior to the publication of the FSA/FEIS.

Environmental Justice

Socioeconomics Figure 1 identifies an environmental justice population in the buffer area surrounding HECA and associated Elk Hills Oil Field EOR operation. Currently, several members of the technical staff have identified significant impacts from the construction and operation of the proposed HECA project, including the associated EOR operation. Staff does not have the necessary information to determine if these impacts can be mitigated below a significant level. If not, some or all of these impacts could have adverse or disproportionate impacts on an environmental justice population. Staff has requested the information they need to complete their impact analysis for inclusion in the FSA/FEIS.

HECA may result in an increased use of the Wasco coal transloading facility which could result in impacts related to air quality, public health, and traffic and transportation, among others. The potential need for expansion and improvements of the coal transloading facility near Wasco was not analyzed in the PSA/DEIS. Staff will be analyzing these potential impacts in the FSA/FEIS. **Socioeconomic Table 2** shows that on April 1, 2010 there was an 86 percent minority population in Wasco. Staff will assess whether there is an environmental justice population in the immediate vicinity of the transloading facility that could be adversely or disproportionately impacted. Staff will provide updated information in the FSA/FEIS

Land Use

HECA would result in a loss of 495 acres (for project site and rail spur) of Prime Farmland and Farmland of Statewide Importance. The project would require cancellation of Williamson-Act contracts for the facility site and lands associated with the rail spur. A Williamson Act contract cancellation request was scheduled for a public hearing with the Kern County Planning Commission on June 13, 2013. A continuation of this request has been re-scheduled for June 27, 2013 for Kern County Planning Commission consideration. Final determination of the cancellation request is to be made by the Kern County Board of Supervisors sometime thereafter. The proposed rail spur will require both private and public rail crossings to ensure that it will not divide the community, potentially resulting in a significant impact. Staff is waiting for additional information from the applicant.

Traffic and Transportation

HECA would result in a substantial increase in number of vehicles on local roads during construction and operation. Specifically, during construction the project would add 615 construction worker trips, 25 truck deliveries, and 80 trips for soil deliveries peak daily roundtrips.

Two alternatives are under consideration for transporting coal to the HECA facility: 1) constructing a rail spur or; 2) using trucks to deliver coal after it has been transported by rail from New Mexico. For the rail spur option (listed as Alternative 1 in the amended AFC), an approximately 5-mile-long new industrial railroad spur would be constructed to connect the HECA facility to the existing San Joaquin Valley Railroad (SJVRR) Buttonwillow railroad line. This railroad spur would also be used to transport some HECA products to market. For the no rail spur option (listed as Alternative 2 in the amended AFC), an approximately 27-mile-long truck transport route would be used via existing roads to transport the coal from an existing coal trans-loading facility located northeast of the HECA project site. The applicant is currently requesting that both options be certified.

During operation with the rail spur, the project would add 51 operations and maintenance, 71 process materials and byproducts, and 55 feedstock materials delivery peak daily roundtrips. Without the rail spur, the project operation would add 51 operations and maintenance, 133 process materials and byproducts, and up to 400 feedstock materials delivery daily roundtrips.

Visual Impacts

Staff's preliminary determination of HECA would likely result in unmitigable significant impacts to visual resources.

Water Supply

The applicant has estimated that the HECA project will use 7,500 acre feet of groundwater per year. Applicant believes that the water is high in total dissolved solids (TDS) and therefore acceptable for process use in accordance with SWRCB Resolution

75-58. However local farmers argue the groundwater has greater beneficial uses for irrigation of pistachio crops. Buena Vista Water Storage District (BVWSD) developed a Brackish Groundwater Remediation Plan, which indicates the HECA project could play a large role in its implementation. Staff has been unable to confirm that the plan for HECA to use this groundwater has any beneficial effect on water quality in the aquifer. In fact staff believes, given current data, that there could be a significant impact on water quality that could affect other users. In addition, staff has concluded that the planned well field extraction rate (7,500 AF/yr) may exceed the annual storage increase characterized by historical water level trends. This would be a significant impact for which no mitigation has been identified. The applicant and BVWSD have indicated there is additional information staff has not considered in the analysis. Staff has repeatedly requested this information and to date has not received it.

Staff is in the process of investigating the feasibility of dry cooling the facility, which would reduce project water demand by approximately 90 percent of the proposed amount and could reduce water costs by approximately \$76,000,000 over the 25-year life of the project. Such an analysis could mitigate potential impacts from overdraft and to water quality.

Waste Management

A major byproduct of the HECA project will be gasification solids (coal/petcoke/limestone ash and slag). The applicant is researching possible ash and slag markets, including for use in asphalt, sandblasting, or other industrial uses. If no market can be found, however, then it will have to be landfilled, which could cause Kern County to exceed CalRecycle's acceptable waste/recycle ratio. Kern County has requested a modification from CalRecycle that would exempt these wastes from the requirement, but so far CalRecycle has not responded. It would be helpful to get CalRecycle to weigh in on whether it would grant the modification prior to the Final Staff Assessment. The applicant is assessing the economics and logistics of train transportation of ash and slag to out-of-state landfills. It is unclear how this would affect Kern County's CalRecycle compliance. Additionally, as a result of previous site activities, recent soil sampling and analytical testing indicated elevated concentrations of petroleum hydrocarbons and other contaminants. Prior to publication of the FSA/FEIS staff recommends that the project owner develop a Soils Management Plan (SMP) to describe procedures to be followed during soil disturbance so workers can be protected from soil contamination that may be encountered. Staff proposes Condition of Certification **WASTE-1** to ensure the applicant has procedures in place to properly handle and dispose of contaminated soil.

PREPARATION AND USE OF A JOINT-ENVIRONMENTAL DOCUMENT

The Energy Commission has exclusive permitting jurisdiction for the siting of thermal power plants of 50 megawatts (MW) or more and their related facilities in California. The Energy Commission also has responsibility for ensuring compliance with the California Environmental Quality Act (CEQA) through the administration of its certified regulatory program and as the lead agency under CEQA. Through the Energy Commission's certified regulatory program, this document is functionally equivalent to an

Environmental Impact Report (EIR), and examines engineering, environmental, public health and safety aspects of the proposed HECA project, based on the information provided by the applicant and additional independent information available from other sources at the time the PSA/DEIS was prepared.

The U.S. Department of Energy (DOE) proposes to provide financial assistance to Hydrogen Energy California, LLC to design, construct and demonstrate the HECA. DOE selected HECA for funding through a competitive process under the Clean Coal Power Initiative program (CCPI), round three. Because DOE proposes to award funding to the HECA project, DOE's proposed action is subject to the National Environmental Policy Act (NEPA) process which, in this case, requires preparation of a Draft Environmental Impact Statement (DEIS) followed by a Final Environmental Impact Statement (FEIS).

The Energy Commission staff and the DOE have cooperated to complete an assessment of the project's engineering design and identify the potential impacts on the environment, the public's health and safety, as well as determine whether the project conforms to all applicable laws, ordinances, regulations and standards (LORS). Additionally, upon identifying any potentially significant environmental impacts, Energy Commission staff recommends mitigation measures in the form of conditions of certification for construction, operation and eventual closure of the project, in order to comply with CEQA.

This PSA/DEIS is not a decision document for DOE or the Energy Commission, nor does it contain findings of the Energy Commission related to environmental impacts or the project's compliance with local/state/federal legal requirements. This document serves as a precursor to the Final Staff Assessment/Final Environmental Impact Statement (FSA/FEIS).

Energy Commission and DOE staff will hold a joint PSA/DEIS public workshop to receive public and agency comment on the PSA/DEIS after its publication. The workshop is used to receive comments from individuals and organizations, to identify and resolve areas of disagreement and to discuss additional informational requirements. In addition, DOE and Commission staff will accept comments on the PSA/DEIS for at least 45 days after publication of the U.S. Environmental Protection Agency's notice of availability of the PSA/DEIS.

After close of the comment period on this PSA/DEIS, DOE and Energy Commission staff will prepare and publish the FSA/FEIS, the FSA portion of which will serve as Energy Commission staff's formal testimony in evidentiary hearings to be held by the Energy Commission Committee assigned to hear this case. The Committee will hold evidentiary hearings and will consider the recommendations presented by the staff, applicant, intervenors, government agencies, and the public, prior to issuing a proposed decision. Following a 30-day comment period and a public hearing(s), the full Energy Commission will make a final decision. The FSA/FEIS will also be used by the DOE to inform its decision on whether to award funding to Hydrogen Energy California, LLC. DOE's decision will be announced in a Record of Decision.

PROJECT HISTORY

The original Application for Certification (08-AFC-8) was filed with the Energy Commission on July 31, 2008; and a Revised AFC was submitted in 2009 to reflect a change of the project site to an alternative location. In 2011, Hydrogen Energy California, LLC was acquired from the previous owners by SCS Energy California, LLC. On May 2, 2012, SCS Energy, LLC, submitted an Amended Application for Certification (08-AFC-8A) reflecting several changes to the original project design.

The new Amended AFC has been assigned a separate distinguishing docket number, 08-AFC-8A. The Amended AFC for the project supersedes and replaces all previous filings from the earlier proceeding (08-AFC-8).

PROJECT LOCATION

The proposed project would be located on a 453 acre site (currently used for agricultural production of alfalfa, cotton, and onions). The applicant has an option (contract) to purchase an additional 653 acres adjacent to the project site, which would allow for controlled access and land use. The project site would be located in an unincorporated portion of Kern County, approximately 7 miles west of the western border of the city of Bakersfield. The proposed site is 1.5 miles northwest of the unincorporated community of Tupman, and approximately 4 miles southeast of the unincorporated community of Buttonwillow. Refer to **Project Description Figure 1** for a map showing the location of the project. An irrigation canal (California State Water Aqueduct) lies to the south, and the Elk Hills Oil Field is located approximately 3 miles southwest of the project site. The project would have a 13-mile long natural gas pipeline, 1-mile long potable water pipeline, 2-mile long transmission line interconnecting to a new Pacific Gas and Electric (PG&E) switching station east of the project site, approximately 3-mile long CO₂ pipeline, a 15-mile long process water pipeline and a 5-mile long rail spur.

The western border of the Tule Elk State Natural Reserve (California State Park) is located approximately 1,700 feet to the east of the project site. The nearest residential dwellings are located approximately 370 feet to the northwest, 1,400 feet to the east, 3,300 feet to the southeast of the proposed project site, and 4,000 feet to the north.

PROJECT DESCRIPTION

HECA would use an integrated gasification, combined-cycle power system to produce and sell electricity, carbon dioxide, and fertilizer. Coal and petroleum coke (a refinery byproduct), would be gasified with oxygen (obtained from the air separation unit - ASU) to produce synthesis gas (syngas). The ratio of coal and petroleum coke used would be approximately 75 percent and 25 percent, respectively. The syngas would be cleaned via scrubbers and absorbers to filter out chlorides, sulfur, mercury, particulates, and impurities. Lastly, the syngas would be stripped of carbon dioxide, leaving a hydrogen-rich gas.

The hydrogen rich gas would either be combined with air and used as fuel in a combustion turbine combined cycle facility to produce electricity (similar to a natural gas fired combined cycle) or sent to an integrated manufacturing complex to produce over 1,000,000 tons per year of nitrogen-based fertilizer. The manufacturing complex would manufacture anhydrous ammonia and nitric acid to produce urea ammonium nitrate (UAN) and urea pastilles. The anhydrous ammonia and nitric acid would only be intermediate products used to produce fertilizers and would not be sold as stand-alone products.

The project would capture up to 90 percent of the carbon dioxide in the syngas stream, which would then be piped a little over 3 miles to the Elk Hills Oil Field, where it would be used by Occidental of Elk Hills, Inc. (OEHI) for enhanced oil recovery (EOR). This use of captured CO₂ could result in the eventual sequestration of approximately 2.6 million tons of CO₂ per year. Some of the captured CO₂ and nitrogen from the air separation unit would be used to manufacture urea fertilizer and other nitrogenous compounds. While OEHI has stated that it can use as much carbon dioxide as HECA can produce, the stated lifespan of the OEHI operation (20 years) is shorter than the length of time HECA proposes to operate (25 years).

The project proposes to generate between 405 and 431 MW gross or an average of 416MW gross electrical power and between 151 to 266 MW net after accounting for onsite auxiliary power loads. The lower values apply during the periods of maximum fertilizer production and the higher values apply during periods of maximum electricity production. When considering the air separation unit and the electricity used by OEHI during enhanced oil recovery operations, which are both part of the project as described by the applicant, the net electricity generation available to California consumers drops to 52.5 MW of new electrical capacity added to the grid during periods of maximum electricity production. The project would be a net consumer of 61.8 MW from the grid during periods of maximum fertilizer production. These net power values include all project-wide power generation and power consumption sources, including the power consumption of the third-party owned air separation unit and the power consumption required by OEHI for CO₂ compression/injection/recovery/re-injection for EOR and, ultimately, carbon sequestration.

The coal would be transported from New Mexico via rail. The applicant has requested certification of two options for final transport to the project site. One option would be to construct a 5-mile long rail spur so that trains could go directly to the project site. The other option would be to offload the coal at the Wasco Transloading Facility into trucks for 400 round trips each day for the final 27 miles to the project site. In either case, the petroleum coke would be trucked in from the Santa Maria refinery or other refineries located in Southern California.

In addition to electricity and CO₂, other produced products would include degassed liquid sulfur, gasification solids and nitrogen-based fertilizers. HECA is expected to generate a maximum of 850 tons per day of gasification solids, 200 tons per day of sulfur, 2,800 tons per day of UAN and 1,670 tons per day of urea pastilles. The actual

production rates of these intermediate and final products are likely to vary as market conditions dictate.

The gasification solids would accumulate onsite (up to 7 days worth could be stored on site) and made available for appropriate recycling or beneficial use into roofing shingle aggregate and concrete pozzolanic admixtures. If these options are not available, HECA would dispose of these solids in accordance with applicable laws. The sulfur in the feed stocks would be removed and converted to a salable product, which would be transported offsite by truck or rail. The UAN and urea pastilles would also be exported offsite by truck or rail.

A portion of the hydrogen-rich fuel would be used as a feedstock for the ammonia synthesis unit, which would have a capacity of 2,000 tons per day of ammonia. The ammonia would be used as an intermediate for the production of urea for sale. The project's urea production unit would use pastillation technology, which converts urea melt into high quality urea pastilles (small solid pellets). The unit would have a capacity of about 1,670 tons per day.

The applicant proposes to use up to 7,500 acre feet per year of groundwater purchased from the Buena Vista Water Storage District, which is significantly more water per megawatt than other projects recently licensed by the Energy Commission. While the applicant and district refer to this water as brackish, there is evidence that it could be used for other more beneficial purposes.

For more detailed information about the project and its components, please see **Project Description**.

CUMULATIVE EFFECTS

Staff conducted an extensive search of past, present, and reasonably foreseeable "probable" future projects (see **Cumulative Project List Table 14** in the **Socioeconomics** section). Staff reviewed project tracking information and available environmental reports and notices through various resources, including websites of local, regional and state jurisdictions. Additionally, staff queried project managers from various California public agencies to compile a comprehensive list of past, present and probable future projects that resulted in its list of Cumulative Projects. **Table 1** below presents a master list of the projects considered part of the HECA cumulative setting.

CEQA Guidelines define cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." (Cal. Code Regs., tit. 14, § 15355.) The Guidelines continue: (a) "[t]he individual effects may be changes resulting from a single project or a number of separate projects" and (b) "[t]he cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." (*Ibid.*)

Accordingly, staff in each technical section of this PSA determined which of the projects from the Cumulative Projects list could create impacts specific to their technical area.

Using unique sets of criteria specific to each area, staff then evaluated whether the cumulative effects were significant, and if so, whether the project's contribution to that combined effect would be "cumulatively considerable". Therefore, this PSA/DEIS will identify and analyze the impacts of all aspects and phases of HECA, including the combined effect the proposed project will have in conjunction with other projects.

Table 1 -- HECA Master List of Cumulative Projects

Project Name	Location	Description
Abajo Transmission	Kern County	Installation of 18-inch diameter pipeline along Abajo Avenue connecting Sage Land and Santa Lucia water tanks.
Barren Ridge Transmission	Kern County; Los Angeles County	Expansion of Barren Ridge Switching Station; and construction of Haskell Canyon Switching Station; construction of 230 kV transmission lines and reconductoring of existing lines.
Berry Petroleum Steam Injection	Kern County	Construction of cyclic steam injection facilities for enhanced oil recovery.
Biodiesel Refinery	City of Fresno	Three phase construction of industrial biodiesel refining facility.
Borax Co-gen Plant Replacement	Kern County	Construct replacement co-generation plant with two natural-gas-fired turbine generators and steam recovery system.
California High Speed Rail	Fresno County; Kern County; Los Angeles County	Construction of dedicated, electrified high-speed rail system. If developed, Merced to Palmdale sections may utilize area labor.
Calnev Pipeline Expansion	San Bernardino County	Construction of a new 233-mile 16-inch diameter pipeline.
Crystal Geyser Bottling Plant	Inyo County	Construct water-bottling facility with associated warehouse and 8.3-acre solar photovoltaic power array.
Fremont Valley Preservation	Kern County	Construction of tertiary wastewater treatment and disinfection facility.
Fresno Tertiary Water Treatment	City of Fresno	Construct tertiary wastewater treatment and disinfection facility.
Lehigh Alternative Fuels	Kern County	Install equipment necessary to use alternative fuels to provide heat for cement production.
Liberty Energy Center	Kern County	Construct 19.5-megawatt gasification facility to supplement existing composting operation.
Northern Area Water	Kern County	Convert 18-miles of earthen canals to 25-miles of pipeline in Buttonwillow Service Area.
Red Rock Bridge Replacement	Kern County	Replace existing bridge on SR 14 at Red Rock Canyon Wash.
Sierra View Hospital Laboratory	City of Porterville	Construct new hospital laboratory facility.
Tulare County Sherriff Detention Facility	Tulare County	Construct new Tulare County detention facility.

Sources: Fresno County 2012, Kern County 2012b, Kern County 2012c, Kern County 2012d, OPR 2012.

In addition to the projects listed above, staff identified 132 solar photovoltaic power projects and 11 wind power projects that are planned, proposed, or under development in the defined labor market area for staff's socioeconomic analysis. Over half of the solar projects are proposed in Kern County, while the remaining projects are primarily in Fresno County. The photovoltaic projects range in size from one MW or less, to over 1,000 MW, in the case of the Kern Solar Ranch project. The majority of the proposed wind power projects are located in eastern Kern County. They range in size from 40 to 750 MW.

PUBLIC AND AGENCY COORDINATION AND OUTREACH EFFORTS

Energy Commission certification is in lieu of any permit required by state, regional, or local agencies, and federal agencies to the extent permitted by federal law (Pub. Resources Code, §25500). However, the Energy Commission seeks comments from and works closely with other regulatory agencies that administer LORS that may be applicable to proposed projects. These agencies may include, but are not limited to, the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, State Water Resources Control Board, Central Valley Water Quality Control Board, California Department of Fish and Wildlife, the California Air Resources Board, California Public Utilities Commission, California Department of Conservation (including the Division of Oil, Gas, and Geothermal Resources), California Department of Parks and Recreation (including the Office of Historic Preservation), California Department of Toxic Substances Control, the San Joaquin Valley Air Pollution Control District, Buena Vista Water Storage District, and Kern County.

On May 15, 2012, the Energy Commission staff sent a notice of receipt and a copy of the HECA Amended Application for Certification to a comprehensive list of all local, state, and federal agencies that administer LORS applicable to the project, as well as to other agencies that may have an interest in the proposed project and public libraries. Additionally, the notice of receipt of the Amended AFC was sent to property owners within 1,000 feet of the proposed project and those located within 500 feet of the linear facilities. In addition to providing notice of receipt of the AFC, the notices provided a brief description of the project, discussion of the Energy Commission's siting certification process, and information on how agencies and the public can comment and participate in the proceeding. Staff continues to seek cooperation and comments from regulatory agencies that administer LORS that are applicable to the proposed project as well as comments from the public. Staff also mailed notices on May 15, 2012, informing elected officials of the Commission's receipt and availability of the application 08-AFC-8A. Each notice contained a link to the Commission-maintained HECA project website (http://www.energy.ca.gov/sitingcases/hydrogen_energy/index.html).

On June 19, 2012 the U.S. Department of Energy placed in the *Federal Register* an Amended Notice of Intent Modifying the Scope of the Environmental Impact Statement for the Hydrogen Energy California's Integrated Gasification Combined Cycle Project.

LIBRARIES

On May 11, 2012, (08-AFC-8A) the Energy Commission staff sent the HECA Amended AFC to libraries in the city of Taft, Tehachapi, Boron, Bakersfield, and Buttonwillow. In addition, the Amended AFC was also sent to state libraries in Eureka, Fresno, Los Angeles, Sacramento, San Diego, and San Francisco.

PUBLIC WORKSHOPS

Energy Commission staff conducted several public workshops to facilitate public, agency, and intervenor participation. Furthermore, these workshops allowed a transparent and comprehensive discussion of several technical issues related to the proposed project and allowed for further staff, agency, and public understanding. The Energy Commission issued notices for all these workshops at least 10 days prior to each meeting. These workshops were conducted on the following dates:

On June 20, 2012, Energy Commission staff facilitated a workshop on the Amended AFC (08-AFC-8A), data requests, and the revised Monitoring, Reporting and Verification Plan (MRVP). The purpose of the workshop was to allow staff, the applicant, intervenors, interested agencies, and the public to discuss several technical disciplines related to the HECA Amended AFC, including but not limited to the project description, air quality, carbon capture and storage, coordination between local, state and federal agencies, traffic and transportation, water resources and other topics as needed.

On July 12, 2012, DOE and CEC held a joint publicly noticed meeting at the Elk Hills Elementary School, 501 Kern Street, Tupman, CA 93276. For the Energy Commission, this meeting constituted its Site Visit and Informational Hearing, which provided an opportunity for members of the community in the project vicinity to obtain information about the project and included a site visit and brief presentation at the proposed project site.

On September 27, 2012, staff conducted a publicly noticed data response workshop in Sacramento and discussed the topics of air quality, greenhouse gas, carbon capture and storage, land use, biology, cultural resources, socioeconomics, traffic and transportation, public health and safety, visual resources, public health, hazardous materials, hazardous waste, and soil and water resources. Participating in the workshop were the applicant, US DOE, California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Sierra Club, and the public.

On November 7, 2012, staff conducted a publicly noticed data response workshop in Bakersfield with the applicant, intervenors and public with discussions on air quality, greenhouse gas, carbon capture and storage, land use, biology, public health and safety and hazardous materials. Participating agencies in the workshop included the California Department of Fish and Wildlife, California Department of Conservation - Division of Oil, Gas, and Geothermal Resources (DOGGR), and Kern County.

On February 20, 2013, Energy Commission staff conducted a water supply issues resolution workshop at the California Energy Commission office in Sacramento,

California. The applicant, Buena Vista Water Storage District staff, intervenors, interested agencies, and public were in attendance.

After the PSA/DEIS has been published, PSA/DEIS Workshops (CEQA)/Public Meetings (NEPA) will be held in Buttonwillow (Kern County, California).

CONSULTATION WITH LOCAL NATIVE AMERICAN COMMUNITIES

The following is intended as a narrative record of Native American consultation for the project. Updates will be added as appropriate and dated. A separate list of participants in the Native American consultation process is kept by the Energy Commission team and U.S. Department of Energy.

Consultation with local Native American communities regarding the proposed HECA project was initiated by three entities: URS Corporation (consultant to the applicant), the U.S. Department of Energy (DOE), and Energy Commission staff.

URS contacted the California Native American Heritage Commission on four occasions from 2008 through 2009, requesting a records search of the Sacred Lands File, and a list of local Native American contacts (individuals and/or organizations) that might have knowledge of cultural resources within the project area of analysis. The Native American Heritage Commission provided lists of individuals and organizations that might have knowledge of cultural resources in the project area of analysis. URS sent letters to the listed contacts; the letters described the proposed project and contained a map depicting the proposed project. Letters were sent to the identified parties on March 14, 2008; June 24, 2008; and April 1, 2009. The letters inquired whether the recipients had any concerns regarding the proposed project or wished to provide input regarding cultural resources in the project area of analysis. URS also corresponded with Native American contacts by telephone between 2008 and 2010. Native American input consisted of recommendations for cultural resources monitoring during construction and preparation of a monitoring plan and burial agreement.

On May 10, 2012, DOE mailed consultation letters to three federally recognized Indian tribes in partial fulfillment of its obligations to consult with Indian tribes under Section 106 of the National Historic Preservation Act, among other federal laws, orders, regulations, and guidelines. These tribes were the Tejon Indian Tribe, Santa Rosa Rancheria of Tachi Yokuts, and Tule River Indian Tribe. The Tejon Indian Tribe responded by letter on June 5, 2012, indicating that it had no knowledge of specific cultural resources in the project area nor any conflict with the proposed project. Tejon Indian Tribe later indicated that it was interested in more information about the proposed project (see below).

Energy Commission staff consulted with Native American tribes and individuals regarding the proposed HECA project. Staff obtained a list of local Native American contacts from the State of California's Native American Heritage Commission on June 13, 2012. Staff mailed letters to these 10 contacts (representing eight tribes and Native American organizations) on June 21, 2012. The letters briefly described the proposed project, outlined the Energy Commission's siting review process, and requested

comments and information concerning cultural resources. On July 17, 2012, staff met with Dr. Donna Begay, then-tribal chairwoman of the Tubatulabal of Kern Valley, to discuss tribal concerns with the proposed project. Staff also had telephone conversations with several Native Americans and DOE staff.

Correspondence between staff, tribes, and DOE culminated in a September 26, 2012 meeting to examine the enhanced oil recovery area in Elk Hills. The meeting was attended by Energy Commission staff, members of the Tejon Indian Tribe, DOE personnel, and personnel from Occidental of Elk Hills. The purpose of the meeting was to acquaint the Tejon Indian Tribe with the setting of the proposed enhanced oil recovery facilities, the proposed HECA project as a whole, and discuss tribal concerns. Although the Tejon Indian Tribe did not share information about specific cultural resources in the project area of analysis, the tribe indicated that it is concerned about the proposed project's potential to damage Native American archaeological sites and human remains. All parties present discussed the level of effort needed to identify cultural resources in the proposed Occidental of Elk Hills enhanced oil recovery area, and the Tejon Indian Tribe requested information about how it can continue to participate in the siting review process.

During the weeks of October 8 and 15, 2012, staff mailed packets of information to the tribes and individuals that asked to participate further in the siting review process. Packets were sent to the Tejon Indian Tribe, Santa Rosa Rancheria of Tachi Yokuts, Kitanemuk & Yowlumne Tejon Indians, and Ron Wermuth. These packets contained information on how to participate in the siting process, project descriptions and associated maps.

DOE had a follow-up telephone conversation with the Tejon Indian Tribe on October 3, 2012, during which the tribe stated that it would be requesting confidential archaeological resource maps from the Energy Commission. Staff has not yet received the specific requests.

Participants in the meetings are on file with the Energy Commission and DOE.

ENERGY COMMISSION'S PUBLIC ADVISER'S OFFICE

The Energy Commission's outreach program is also facilitated by the Public Adviser's Office (PAO), which conducts an ongoing, consistent outreach process apart from the efforts of the applicant or other parties. The PAO ensures full and adequate public participation in the HECA project through a variety of activities, including:

- advising interested groups and the public about how to participate;
- requesting that organizations post public service announcements;
- distributing notices about the Energy Commission's receipt of the HECA Amended Application for Certification (AFC); and

- placing advertisements in local newspapers and distributing bilingual notices regarding the Public Site Visit and Informational Hearing/DOE Scoping Meeting held on July 12, 2012 at the Elk Hills School in Tupman (Kern County), California.

RESPONSE TO COMMENTS

Energy Commission staff endeavored to respond to all comments pertaining to the proposed project received to date. As this document was being finalized for publication, however, it could not be continually updated to respond to comments still coming in. Therefore, any comments already made but not addressed in this document will be addressed in the appropriate technical section in the FSA/FEIS. All comments received in response to DOE's Notice of Intent have been addressed as a standard part of the analyses or considered, called out and addressed within the PSA/DEIS. Please see the attached, Appendix 1 of the Executive Summary, for a list of all comments received and addressed within the PSA/DEIS. Responses can be found in the "Response to Comments" subsection of most technical sections. The FSA/FEIS will also contain staff responses to all comments filed on the PSA/DEIS up to the end of the noticed public comment period.

ENVIRONMENTAL JUSTICE

California law defines environmental justice as "the fair treatment of people of all races, cultures, and income with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies" (Government Code Section 65040.12 and Public Resources Code Section 72000).

All Departments, Boards, Commissions, Conservancies and Special Programs of the California Natural Resources Agency must consider environmental justice in their decision-making process if their actions have an impact on the environment, environmental laws, or policies. Such actions that require environmental justice consideration may include:

- adopting regulations;
- enforcing environmental laws or regulations;
- making discretionary decisions or taking actions that affect the environment;
- providing funding for activities affecting the environment; and
- interacting with the public on environmental issues.

In considering environmental justice in energy facility siting cases, staff uses a demographic screening analysis to determine whether a low-income and/or minority population exists with the potentially affected area of the proposed site. The demographic screening is based on information contained in two documents: Environmental Justice: Guidance Under the National Environmental Policy Act (Council on Environmental Quality, December, 1997) and Guidance for Incorporating

Environmental Justice Concerns in EPA's Compliance Analyses (U.S. Environmental Protection Agency, April, 1998). Due to the change in the sources and methods of collection used by the U.S. Census Bureau, the screening process relies on Year 2010 U.S. Census data to determine the number of minority populations and data from the 2007-2011 American Community Survey (ACS) to calculate the population below-poverty-level. Staff's demographic screening is designed to determine the existence of a minority or below-poverty-level population or both within the area of the proposed project.

Environmental Justice: Guidance Under the National Environmental Policy Act, defines minority individuals as members of the following groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic origin; or Hispanic. A minority population is identified when the minority population of the potentially affected area is:

1. greater than 50 percent;
2. or when the minority population percentage of the area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

In addition to the demographic screening analysis, staff and DOE follow the steps recommended by the U.S. EPA's guidance documents in regard to outreach and involvement; and if warranted, a detailed examination of the distribution of impacts on segments of the population.

Staff and DOE have followed each of the above steps for the following thirteen sections in the PSA: **Air Quality, Cultural Resources, Hazardous Materials Management, Land Use, Noise and Vibration, Public Health, Socioeconomics, Soil and Water Resources, Water Supply, Traffic and Transportation, Transmission Line Safety and Nuisance, Visual Resources, and Waste Management.** Over the course of the analysis for each of these technical disciplines, staff considered potential impacts and mitigation measures, and whether there would be a significant impact on an environmental justice population.

To assess the potential presence of an environmental justice population in the project area, staff first estimated two radii encompassing areas equal to 6-miles from the center points of the HECA power plant site and the CO₂ processing facility site, respectively. Staff then merged the two radii to create a combined buffer area. **Socioeconomics Table 2** presents data on the minority population within the buffer area, as well as for a variety of surrounding communities and for an assortment of comparison geographies.

According to the latest decennial census, the 2010 resident population of the census blocks located within the buffer area was 3,663 persons. The minority population was 1,850 persons, which equaled roughly 51 percent of the total population.

Notable population centers located within the buffer area include Buttonwillow, Dustin Acres, Tupman, and Valley Acres. Buttonwillow had a total population of 1,508 and a minority population of 1,254, equal to nearly 83 percent minority. Dustin Acres had a

total population of 652, with a minority population of 159, or around 24 percent. Tupman had a smaller population with 161 residents, and a minority population of 22 residents, equal to around 14 percent. Valley Acres had a total population of 527, with a minority population of 148, or around 28 percent.

Other notable communities located in the general project area include Bakersfield, Derby Acres, Fellows, Ford City, Maricopa, McKittrick, South Taft, Taft, Taft Heights, and Wasco. Of these, Bakersfield had a 62 percent minority population, while Ford City was 50 percent minority and Wasco was nearly 86 percent minority. Kern County as a whole showed a minority population equal to more than 61 percent of the total population. The HECA project site and the CO₂ processing site are located within two different Census County Divisions (CCDs). The Buttonwillow CCD had a minority population of nearly 67 percent, while the West Kern CCD had a minority population of only around 36 percent. **Socioeconomics Table 2** provides additional data for these geographies for comparison purposes.

Below-Poverty-Level-Populations as discussed in the **Socioeconomics** section - **Socioeconomics Table 3** shows estimates of the population living below-poverty-level from the 2007-2011 ACS Five-Year Estimates. According to this data, approximately 1,390 people in the combined census tracts intersecting the project buffer area, about 21 percent, lived below the federal poverty threshold between 2007 and 2011.

Because the minority population located within the buffer area was greater than 50 percent of the total population, staff and DOE conclude that the minority population located within the buffer area does constitute an environmental justice population, as defined above. Construction and operation of the proposed HECA project, including the associated EOR operation, could therefore have adverse or disproportionate impacts on an environmental justice population. Please refer to each technical section to identify whether the project has significant, unmitigated impacts on the above identified environmental justice population.

DEPARTMENT OF ENERGY'S SUMMARY STATEMENT

Preamble

The National Environmental Policy Act (NEPA)

PURPOSE AND NEED FOR DEPARTMENT OF ENERGY ACTION

This chapter introduces the Proposed Action of the Department of Energy (DOE), describes the purpose and need for DOE's action, and outlines the scope of the DOE's NEPA analysis contained in this Preliminary Staff Assessment and Draft Environmental Impact Statement (PSA/DEIS). This section also summarizes DOE's process, project objectives, and the public scoping process undertaken for this PSA/DEIS.

INTRODUCTION

DOE proposes to provide federal financial assistance to Hydrogen Energy California, LLC (HECA) for its proposed project (the "project"), which would demonstrate integrated gasification combined cycle (IGCC) technology with carbon capture in a new electricity generating plant in Kern County, California. DOE has prepared this PSA/DEIS in accordance with NEPA (42 United States Code [U.S.C.] §§ 4321 et seq.), regulations implementing NEPA promulgated by the Council on Environmental Quality (Title 40, Code of Federal Regulations [C.F.R.] Parts 1500–1508), and DOE's NEPA procedures (10 C.F.R. Part 1021). This PSA/DEIS describes the potential environmental impacts associated with DOE's proposed action (providing financial assistance), the project itself (including aspects of the project that DOE would not fund), and alternatives to and options for the project, including the No Action Alternative. DOE will use this PSA/DEIS to inform its decision on whether to provide financial assistance for construction and demonstration of the project and, if so, whether it should impose environmental mitigation measures as a condition of its financial assistance for these activities.

HECA would construct its electricity and fertilizer production facility on a site currently used for agriculture in Kern County. The 1,106 acre site (453 acres of which would be used for the project and 653 acres for a controlled buffer area) is in south-central California near the unincorporated community of Tupman, approximately 7 miles west of the western border of the city of Bakersfield. The site's topography is relatively flat, low-lying terrain that gently slopes from southeast to northwest. The site and surrounding areas are used for agricultural purposes, including cultivation of cotton, alfalfa, and onions. HECA's facility would capture about 90 percent of the carbon dioxide (CO₂) produced by the gasification process. Most of this captured CO₂ would be transported via a new pipeline to a nearby oil field owned by Occidental of Elk Hills, Inc. (OEHI), where it would be sequestered through its use for enhanced oil recovery (EOR). HECA would use a small portion of the captured CO₂ to produce urea fertilizer and other nitrogenous compounds.

CLEAN COAL POWER INITIATIVE

Since the early 1970s, DOE and its predecessor agencies have pursued research and development programs that include large, technically complex projects in order to spur innovation in a wide variety of coal technologies through the proof-of-concept stage. However, helping a technology reach the proof-of-concept stage does not ensure its continued development or commercialization. Before a technology can be considered seriously for commercialization, it must be demonstrated at a sufficient scale to prove its reliability and economic competitiveness. The financial risk associated with such large-scale demonstration projects is often too high for the private sector to assume in the absence of strong incentives.

The Clean Coal Power Initiative (CCPI) program was established in 2002 as a government and private sector partnership to implement the recommendation in President Bush's National Energy Policy to increase investment in clean coal technology. Through cooperative agreements with its private sector partners, the program advances clean coal technologies to commercialization. These technologies

involve combustion improvements, control systems advances, gasifier design, pollution reduction (including greenhouse gas reduction), efficiency increases, fuel processing, and others.

Congress established criteria for projects receiving financial assistance under this program in Title IV of the Energy Policy Act of 2005 (Pub. L. 109-58) (EPACT 2005). Under this statute, CCPI projects must "advance efficiency, environmental performance, and cost competitiveness well beyond the level of technologies that are in commercial service" (Pub. L. 109-58, § 402(a)). In February 2009, the American Recovery and Reinvestment Act of 2009 (Pub. L. 111-5, 123 Stat. 115 (Feb. 17, 2009)) (ARRA) appropriated \$3.4 billion to DOE for "Fossil Energy Research and Development;" the Department is using a significant portion of these funds to provide financial assistance to CCPI projects.

DOE's CCPI program selects projects for its government-private sector partnerships through an open and competitive process. Potential private sector partners may include developers of technologies, utilities and other energy producers, service corporations, research and development firms, software developers, academia and others. DOE issues funding opportunity announcements that specify the types of projects it is seeking, and invites submission of applications. Applications are reviewed according to the criteria specified in the funding opportunity announcement; these criteria include technical, financial, environmental, and other considerations. DOE selects the projects that demonstrate the most promise when evaluated against these criteria, and enters into a cooperative agreement with the applicant. These agreements set out the project's objectives, the obligations of the parties, and other features of the partnership. Applicants must agree to provide at least 50 percent of their project's cost; for most CCPI projects, the applicant's cost share will be much greater if the project proceeds to completion.

To date, the CCPI program has conducted three rounds of solicitations and project selections. The first round sought projects that would demonstrate advanced technologies for power generation, improvements in plant efficiency, economics, and environmental performance. Round 2 requested applications for projects that would demonstrate improved mercury controls and gasification technology. Round 3, which DOE conducted in two phases, sought projects that would demonstrate advanced coal-based electricity generating technologies which capture and sequester (or put to beneficial use) carbon dioxide emissions. DOE's overarching goal for Round 3 projects was to demonstrate technologies at commercial scale in a commercial setting that would: (1) operate at 90 percent capture efficiency for CO₂; (2) make progress towards capture and sequestration at less than a 10 percent increase in the cost of electricity for gasification systems and a less than 35 percent increase for combustion and oxycombustion systems; and (3) make progress toward capture and sequestration of 50 percent of the facility's CO₂ output at a scale sufficient to evaluate the full impacts of carbon capture technology on a generating plant's operations, economics and performance.

The HECA project was one of two selected in the first phase of Round 3. DOE entered into a cooperative agreement with HECA on September 30, 2009, and began the NEPA process. HECA had already begun to seek the regulatory authorizations needed for the project, including certification by the Energy Commission and environmental permits from other agencies before its project was selected to receive financial assistance from DOE. It continued to seek these approvals and permits until September 2, 2011, when SCS Energy California LLC (SCS Energy) acquired HECA from BP Alternative Energy North America Inc. (BP), and Rio Tinto Hydrogen Energy LLC (Rio Tinto). Because SCS Energy intended to make several modifications to the project – including the addition of fertilizer production capabilities – the NEPA and regulatory processes were suspended until HECA submitted an Amended Application for Certification (AFC) to the Energy Commission on May 2, 2012.

DOE'S NEPA STRATEGY

In compliance with NEPA, this PSA/DEIS will be used by DOE decision-makers to inform their decision on whether to provide financial assistance for detailed design, construction, and operation of the project. This PSA/DEIS evaluates the environmental impacts of alternatives and connected actions and provides a means for the public to participate in the decision-making process.

DOE developed an overall strategy for compliance with NEPA for its CCPI program consistent with CEQ regulations (40 CFR 1500 through 1508) and DOE regulations (10 CFR 1021). The strategy has two principal steps. The first step consists of an open solicitation and competitive selection process to obtain a set of projects that best meets program needs. Applications are screened for compliance with a number of basic eligibility requirements that are defined by the program. The set of applications that meet the mandatory eligibility requirements constitutes the range of reasonable alternatives available to DOE to meet the program's purpose and needs. Recognizing that the range of reasonable alternatives in the context of competitive financial assistance programs is in large part determined by the number and nature of the proposals submitted to DOE for consideration, section 216 of DOE's NEPA regulations requires the Department to prepare an "environmental critique" that assesses the environmental impacts and issues relating to each of the proposals that the DOE selecting official considers for an award. See 10 C.F.R. § 1021.216. This official considers these impacts and issues, along with other aspects of the proposals (such as technical merit and finance ability) and the program's objectives, in making awards. DOE prepared a critique of the proposals that were deemed suitable for selection in this round of awards for the CCPI program. Because the critique contains confidential business information, it is not made available to the public; a synopsis of the critique is included as **U.S. Department of Energy Documents, Appendix 1**, located in section 7-1 of the PSA/DEIS.

The second element of DOE's NEPA strategy consists of preparing a more detailed NEPA evaluation for each selected project. For this project, DOE determined that providing financial assistance for the proposed project would constitute a major federal action that may significantly affect the quality of the human environment. Therefore,

DOE has prepared this PSA/DEIS to assess the potential impacts on the human environment of the proposed action and reasonable alternatives. DOE has used information provided by HECA for the proposed project, as well as information provided by state and federal government agencies, subject-matter experts, and others. This PSA/DEIS has been prepared in accordance with Section 102(2)(C) of NEPA, as implemented under regulations promulgated by CEQ (40 CFR 1500 through 1508) and as provided in DOE regulations for compliance with NEPA (10 CFR 1021).

The original Notice of Intent (NOI) to prepare an EIS for this project was published by DOE in the Federal Register on April 6, 2010 (75 FR 17397). The Amended Notice of Intent (ANOI) was published by DOE in the Federal Register on June 19, 2012 (77 FR 36519). A public scoping meeting was conducted on July 12, 2012, at the Elk Hills Elementary School in Tupman, California, and comments were accepted through August 3, 2012 (one week after July 27, 2012, the date the comment period closed).

Scope of DOE's NEPA Analysis

The PSA/DEIS will inform DOE's decision on whether to provide financial assistance under its CCPI Program for the construction and demonstration of HECA's project, which has an estimated capital cost of over \$4 billion. DOE's financial assistance (or "cost share") would be limited to \$408 million, about 10 percent of the project's total cost. DOE's financial assistance is also limited to certain aspects of the power and manufacturing plants, carbon capture, and sequestration. The PSA/DEIS evaluates the potential impacts of DOE's proposed action, the project proposed by HECA and any connected actions, cumulative impacts, and reasonable alternatives to DOE's proposed action.

Connected and Cumulative Actions

Under the cooperative agreement between DOE and HECA, DOE would share the costs of the gasifier, syngas cleanup systems, combustion turbine, steam generator, steam turbine, fertilizer production facilities, supporting facilities and infrastructure, and a demonstration phase in which the project would use captured CO₂ for EOR. Under this agreement, DOE would not share in the cost of the air separation unit, CO₂ EOR and sequestration facilities, or certain other facilities. Accordingly, DOE's NEPA process considers these aspects of HECA's project as connected actions. The impacts of these connected actions are evaluated in the same manner as the impacts of the parts of the project funded by DOE.

In addition to the impacts of the project and its connected actions, DOE's analysis of cumulative impacts such as greenhouse gas emissions and global warming, other air emissions, and other incremental impacts that, when added to past, present, and reasonably foreseeable impacts, may have significant effects on the human environment are separately discussed in the Carbon Sequestration and Green House Gas section of this document.

PURPOSE AND NEED

The purpose and need for DOE action – providing limited financial assistance for the construction and operation of HECA's project – is to advance DOE's CCPI program by funding projects that have the best chance of achieving the program's objective as established by Congress. The objective of the CCPI program is the commercialization of clean coal technologies that improve efficiency, environmental performance, and cost competitiveness well beyond those of technologies that are currently in commercial service.

DOE selected HECA's proposed project under the CCPI program as one in a portfolio of projects. That portfolio represents the most appropriate mix of projects to achieve CCPI program objectives and meet legislative requirements. Specifically, DOE's purpose and need for selecting the HECA project is to promote the commercialization of IGCC technologies that improve efficiency, environmental performance, and cost competitiveness.

PROPOSED ACTIONS

DOE's proposed action is to provide financial assistance for the detailed design, construction and operation of HECA's project, which would produce and sell electricity, carbon dioxide and fertilizer.

OVERVIEW OF HECA'S PROPOSED PROJECT

HECA's project would use integrated gasification combined cycle (IGCC) and carbon capture technology to meet market demands for producing and selling electricity, carbon dioxide, and fertilizer. The basic components and attributes of the project include:

- The use of an IGCC power system to demonstrate pre-combustion carbon dioxide capture and sequestration technology on a commercial scale that provides dependable, low-carbon electricity from a plant whose output can be adjusted so as to back up intermittent renewable power sources, increasing the reliability of the grid;
- capture of 90 percent of the CO₂ generated by the facility;
- transportation of most of the CO₂ to the Elk Hills Oil Field for use in EOR, resulting in its sequestration;
- advanced air emissions controls;
- use of brackish water for process water needs;
- zero liquid discharge;
- an integrated manufacturing plant producing approximately 1 million tons per year of nitrogenous compounds such as urea, urea ammonium nitrate (UAN) and anhydrous ammonia to be used in agricultural, transportation and industrial applications;
- use of a single Mitsubishi Heavy Industries' (MHI) oxygen-blown dry feed gasifier and an MHI 501 GAC[®] combustion turbine;

- use of a blend of 75 percent coal and 25 percent petcoke as fuel throughout the life of the facility;
- use of natural gas for start-up, shut down and equipment outages only, not for routine operation of the turbine.

The project would capture approximately 3 million tons per year of CO₂; 2.6 million tons would be permanently sequestered as a result of its use for EOR. While most of the captured CO₂ (about 90 percent of the amount captured) would be used for EOR at the nearby Elk Hills Oil Field, about 0.4 million tons per year of the captured CO₂ would be used to manufacture fertilizer; DOE does not consider this CO₂ to be sequestered.

Proposed Generating Plant

The HECA project would demonstrate IGCC and carbon capture technology on a commercial scale in a new power plant consisting of a single gasifier with gas cleanup systems, a hydrogen-rich fired combustion turbine, a heat recovery steam generator, a steam turbine, and associated facilities.

The plant would gasify coal and petcoke to produce syngas, which would then be processed and purified to produce a hydrogen-rich fuel. The hydrogen would be used to drive the gas combustion turbine. Hot exhaust gas from the gas combustion turbine would generate steam from water in the heat recovery steam generator to drive the steam turbine; both turbines would generate electricity. At full capacity, the plant is expected to use about 4,580 tons of coal and about 1,140 tons of petcoke per day (about 162 million tons and 400,000 tons per year, respectively).

Combined, the gas combustion and steam turbines would have the capacity to generate between 405 and 431 MW (gross) of electricity, compared to the 390 MW gross and 288 MW net anticipated from the plant as originally proposed by British Petroleum (BP) and Rio Tinto. However, the net new capacity added to the electrical grid is lower due to the additional products generated by the current design. This combined-cycle approach (using gas and steam turbines in tandem) increases the amount of electricity that can be generated from the feedstock, but the additional products reduce the net generation.

The proposed facility would minimize emissions of sulfur dioxide, nitrogen oxides, mercury, and particulates compared to conventional coal-fired power plants. The local air pollution control district is requiring additional mitigation in the form of emissions reductions with the intent that the facility would emit no more nitrogen oxide pollution than a natural gas fired power plant.

The facility would incorporate state-of-the-art air emission controls that reflect or exceed Best Available Control Technology. It is expected that these controls would remove in excess of 99 percent of the sulfur dioxide produced by the plant and would also limit emissions of nitrogen oxides, carbon monoxide and volatile organic compounds. In addition, over 99 percent of the mercury in the feedstock would be removed and over 99 percent of the particulates in the syngas would be removed using liquid scrubbing. Solids generated by the gasifier would be accumulated onsite (up to 7 days worth) and

made available for appropriate recycling or beneficial use. If these options were not available, HECA would dispose of these solids in accordance with applicable laws. Unlike the gasifiers that BP and Rio Tinto originally planned to use, the MHI gasifier would not produce solids with fuel value, and therefore solids would not be returned to the gasification process as had been originally planned.

In addition to the gasifier and turbines, the power plant's equipment would include exhaust stacks, mechanical-draft cooling towers, syngas cleanup facilities, and particulate filtration systems. The height of the tallest proposed structure would be approximately 305 feet above ground (a flare stack). Flares are designed for combusting emissions resulting from startups or outages, or during emergencies. The plant would also require systems for feedstock handling and storage, as well as on-site roads, administration buildings, water and wastewater treatment systems, and facilities for handling gasification solids.

Proposed Fertilizer Production Facilities

A portion of the clean hydrogen-rich fuel would be used as a feedstock for the ammonia synthesis unit, which would have a capacity of 2,000 tons per day of ammonia. The ammonia would be used as an intermediate for the production of urea for sale. The project's fertilizer manufacturing complex would convert urea into urea ammonium nitrate and urea pastilles (small solid pellets). The pastilles unit would have a capacity of about 1,700 tons per day.

Proposed Linear Facilities

Linear facilities are the pipelines, electrical lines, and railways used to transport materials and power to and from the plant. The plant's process water would be brackish groundwater supplied by the Buena Vista Water Storage District; approximately 4,600 gallons per minute (average annual basis) would be required for cooling water makeup, steam cycle makeup, and other processes. The process water pipeline would be approximately 15 miles in length. Potable water for drinking and sanitation would be supplied by the West Kern Water District. The potable water line would be approximately 1 mile in length. The project would recycle water and would incorporate zero liquid discharge (ZLD) technology for process and other wastewater from plant operations. Therefore, there would be no industrial wastewater discharge. Sanitary wastewater would be disposed of in an onsite leach field (e.g., a septic system) in accordance with applicable law.

HECA would connect to the PG&E Midway Substation via a 230 kV Midway-Wheeler Ridge transmission line and a new PG&E switching station. A 230 kV, single pole, double circuit capacity transmission line would be built to transmit the plant's electricity. The line would be approximately 2 miles in length.

An approximately 13-mile natural gas pipeline would connect with an existing PG&E pipeline north of the project site, and an approximately 3-mile CO₂ pipeline would extend from the site to the Elk Hills Oil Field. HECA has proposed two alternatives for coal transportation to the site. Alternative 1 consists of an approximately 5-mile new

railroad spur that would connect the site to the San Joaquin Railroad's Buttonwillow line. Alternative 2 would use the 27-mile truck route proposed by BP and Rio Tinto to transport coal using 400 round trips each day from an existing coal transloading facility in Wasco, California.

Proposed Use of CO₂ for EOR and Sequestration

The project would result in the sequestration of about 2.6 million tons of CO₂ per year during the demonstration phase that DOE would fund rather than the two million tons originally proposed by BP and Rio Tinto. HECA anticipates this rate of sequestration would continue for the operational life of the power plant due to the requirements of California law and the value created by the use of the CO₂ for EOR. The captured CO₂ would be compressed and transported via pipeline to the Elk Hills Oil Field approximately 3 miles from the power plant. The CO₂ would enhance domestic oil production, contributing to the nation's energy security. An additional small amount of the CO₂ produced by the facility would be used to manufacture urea.

The EOR process involves the injection and reinjection of CO₂ to reduce the viscosity and enhance other properties of trapped oil in order to facilitate its flow through the reservoir, improving extraction. During EOR operations, the pore space left by the extracted oil is occupied by a portion of the injected CO₂, sequestering it in the geologic formation. The remainder of the CO₂ is produced with the oil, and it must be separated from the oil, recompressed, and then re-injected into the formation.

Proposed Project Schedule

The project proposed by HECA includes engineering and design, permitting of the plant and associated facilities, equipment procurement, construction, startup, operations, and demonstration of the IGCC technology and CO₂ sequestration. HECA anticipates that it would take about four years to construct, commission, and commence operation of the plant. The estimated project schedule would be start of construction activities in January 2014 and commencing commercial operation by February 2018. This schedule is contingent upon HECA receiving the necessary regulatory authorizations (which would be preceded by the hearings and other events mandated by the regulatory agencies' procedures) and upon DOE deciding to provide financial assistance for the construction and demonstration phases of the project (a decision that would occur after completion of DOE's NEPA and Energy Commission's certification processes).

PROPOSED PROJECT AND ALTERNATIVES

PROPOSED PROJECT

DOE's proposed action is to provide financial assistance for the construction and operation of HECA's project, which would produce and sell electricity, carbon dioxide and fertilizer. DOE selected this project for an award of financial assistance through a competitive process under the Clean Coal Power Initiative (CCPI) program.

HECA's project would demonstrate integrated gasification combined cycle (IGCC) technology with carbon capture in a new electricity generating plant in Kern County, California. The plant would use a blend of 75 percent coal and 25 percent petroleum coke (petcoke) and would capture, sell and sequester carbon dioxide on a commercial scale. It would also produce and sell fertilizer and other nitrogenous compounds.

The project would gasify the coal and petcoke to produce synthesis gas (syngas), which would then be purified to produce a hydrogen-rich fuel for a combustion turbine that would generate electricity while minimizing emissions of sulfur dioxide, nitrogen oxides, mercury, and particulates compared to conventional coal-fired power plants. In addition, the project would achieve a carbon dioxide (CO₂) capture efficiency of approximately 90 percent at steady-state operation. The captured CO₂ would be compressed and transported via pipeline to the adjacent Elk Hills Oil Field (owned and operated by Occidental of Elk Hills, Inc. (OEHI)) for injection into deep underground oil reservoirs for enhanced oil recovery (EOR), resulting in geologic sequestration.

Project Site Location and General Description

HECA would construct its electricity and fertilizer production facility on a site currently used for agriculture in Kern County, California. The 1,106 acre site (453 acres of which would be used for the project and 653 acres for a controlled buffer area) is in south-central California near the unincorporated community of Tupman, approximately 7 miles west of the western border of the city of Bakersfield. The site's topography is relatively flat, low-lying terrain that slopes very gently from southeast to northwest. The site and surrounding areas are used for agricultural purposes, including cultivation of cotton, alfalfa, and onions.

ALTERNATIVES

NEPA requires that a federal agency evaluate the range of reasonable alternatives to its proposed action. The range of reasonable alternatives encompasses those alternatives that would satisfy the underlying purpose and need for agency action. The purpose and need for DOE action – providing limited financial assistance to the HECA IGCC project – are to advance the CCPI program by selecting projects that have the best chance of achieving the program's objective as established by Congress: the commercialization of clean coal technologies that advance efficiency, environmental performance, and cost competitiveness well beyond the level of technologies that are currently in service.

DOE's NEPA regulations include a process for identifying and analyzing reasonable alternatives in the context of providing financial assistance through a competitive selection of projects proposed by entities outside the federal government. The range of reasonable alternatives in competitions for grants, loans and other financial support is defined in large part by the range of responsive proposals DOE receives. Unlike projects undertaken by DOE itself, the Department cannot mandate what outside entities propose, where they propose to do it, or how they propose to do it beyond establishing requirements in the funding opportunity announcement that further the program's objectives. DOE's decision is limited to selecting among the applications submitted by project sponsors that meet CCPI's goals.

Recognizing that the range of reasonable alternatives in the context of financial assistance and contracting is in large part determined by the number and nature of the proposals submitted, section 216 of DOE's NEPA regulations requires the Department to prepare an "environmental critique" that assesses the environmental impacts and issues relating to each of the proposals that the DOE selecting official considers prior to making a selection. See 10 C.F.R. § 1021.216. This official considers these impacts and issues, along with other aspects of the proposals (such as technical merit and financial ability) and the program's objectives, in making awards. DOE prepared a critique of the proposals that were deemed suitable for selection in this round of awards for the CCPI program.

Once DOE selects a project for an award, the range of reasonable alternatives becomes the project as proposed by the applicant, any alternatives still under consideration by the applicant or that are reasonable within the confines of the project as proposed (e.g., the particular location of the generating plant on the 1,106-acre site or the rights-of-way (ROWs) for linear facilities), and a no action alternative. Regarding the no action alternative, DOE assumes for purposes of the PSA&DEIS that, if it were to decide to withhold financial assistance for construction and operation of the project, it would not proceed. DOE currently plans to analyze the project as proposed by HECA (with and without any mitigating conditions that DOE or the Energy Commission may identify as reasonable and appropriate); alternatives to HECA's project that it is still considering (e.g., the rights of way for linear facilities or methods of transporting coal to site); and the no action alternative.

DOE'S No-Action Alternative

Under the no action alternative, DOE would not provide funding to HECA for construction and operation of its project. In the absence of financial assistance from DOE, HECA could reasonably pursue two options. It could build the project without DOE funding; the impacts of this option would be essentially the same as those of DOE's proposed action. Or, HECA could choose not to pursue its project, and there would be no impacts from the project. This option would not contribute to the goal of the CCPI program, which is to accelerate commercial deployment of advanced coal technologies that provide the United States with clean, reliable, and affordable energy. However, as required by NEPA, DOE analyzes this option as the no action alternative in order to have a meaningful comparison between the impacts of DOE providing financial assistance and withholding that assistance.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) ALTERNATIVES SUMMARY

Staff evaluated a number of potentially feasible alternatives, ruled out most in the initial screening process, carried others forward and continues to further develop those alternatives to reach conclusions under CEQA.

- Alternative sites evaluated in the subsection "Alternatives Eliminated from Detailed Consideration" focused on locations proximate to the EHOF.

- As described in the subsection "Alternatives Eliminated From Detailed Consideration," staff has eliminated the Natural Gas Project Alternative which consists of a conventional natural gas-fired electric generation facility that would generate electricity but would not meet the DOE goal of demonstrating an advanced coal-based electricity generating technology which would include CO₂ capture or storage, EOR at the Elk Hills Oil Field, or the applicant's goals of production of any fertilizer or other nitrogen-based products. A natural gas alternative with CO₂ capture and storage will be analyzed in the FSA/FEIS.
- A Dry Cooling or Wet-Dry Hybrid Cooling Alternative will be evaluated in the FSA/FEIS to determine if it can reduce HECA's water consumption.
- Staff is considering an alternative that would consist of a biomass-fired boiler that would provide the same net new electrical capacity and energy as HECA. This alternative may not provide carbon capture and storage, but would provide a new, local renewable energy facility with a low-carbon footprint, depending on how far the biomass would have to be transported to the facility site.
- Based upon staff's analysis, the No Project Alternative would eliminate potentially significant environmental impacts associated with the HECA project, while the No Fertilizer Manufacturing Complex Alternative (Reduced Project Alternative) would lessen impacts in a number of environmental issue areas.
- The HECA project includes both rail and truck options for coal delivery from the rail transfer point. These options are analyzed in the **Traffic and Transportation** and **Land Use** sections of this PSA/DEIS.
- The identification of a CEQA environmentally superior alternative and NEPA environmentally preferred alternative will be identified in the FSA/FEIS.

NOTEWORTHY PUBLIC BENEFITS

Noteworthy public benefits that would result from the HECA project are as follows:

SOCIOECONOMICS

Public benefits include the changes in local economic activity and tax revenue that would result from project construction and operation.

The applicant estimated that the total construction cost for the whole of the project would be around \$4 billion. The total direct labor costs for construction would equal roughly \$1.37 billion. The remaining \$1.78 billion includes other non-labor expenditures, such as project engineering and materials procurement. Note that these are gross figures, which do not account for economic leakage. Based on these direct expenditures, the applicant anticipates that the project would generate roughly \$843 million in indirect and induced economic output, as well as \$294 million in additional labor income.

For operations, the applicant estimated that the project as a whole would generate around \$30 million in direct labor income. The indirect and induced impacts of project

operations, including both HECA and the OEHI EOR projects, would reportedly include the annual maintenance of 430 jobs, \$21 million in labor income, and \$68 million in economic output.

Property Tax

Staff estimates that the capital cost attributable to the construction of the HECA power plant would equal roughly \$2.6 billion. At the applicable 1.09 percent property tax rate, this would generate nearly \$28.7 million in annual property tax revenue. The rail spur, likewise, would account for around \$26 million in capital costs, which would translate to between \$278,000 and \$285,900 in annual property tax revenue. Together, the HECA power plant and rail spur could generate upwards of \$28.9 million in annual property tax revenue.

According to the California Department of Conservation (CDC), the State of California does not levy severance taxes on oil and natural gas production (CDC 2012a). The state does levy an assessment on the value of oil and natural gas produced. The Oil and Gas Assessment rate for fiscal year 2012-2013 is 14.06207 cents per barrel of oil or 10 million cubic feet (Mcf) of natural gas produced (CDC 2012b). An increase in the amount of oil produced due to implementation of the EOR project would correlate to an increase in the assessed value of oil and natural gas production and in the revenues received by the CDC's Division of Oil, Gas, and Geothermal Resources.

PRELIMINARY CONCLUSIONS

Energy Commission staff briefly highlights those technical sections that have identified potential significant, unmitigated impacts or those sections requiring additional information below.

Air Quality

The Hydrogen Energy California Project should comply with all applicable air quality laws, ordinances, regulations, and standards and should not result in significant air quality impacts provided the recommended conditions of certification are adopted by the Commission and implemented by the project owner. The project has secured emission reduction credits in sufficient quantity to meet San Joaquin Valley Air Pollution Control District requirements. The applicant has also agreed to provide funding to the San Joaquin Valley Air Pollution Control District's Emission Reduction Incentive Program to create additional emissions reductions necessary for General Conformity.

These emission reduction credits and emissions reductions created from the mitigation agreement funding would fully offset all onsite project emissions of nonattainment pollutants and their precursors that occur within the San Joaquin Valley Air Basin at a minimum offset ratio of 1:1, and would fully offset the offsite NOx emissions as required for General Conformity. If built and operated as described in the Amended AFC, and if the permitting authority implements construction and operating conditions equivalent to those recommended by Energy Commission staff, the Occidental Petroleum Carbon Dioxide Enhanced Oil Recovery component would also comply with all applicable air

quality laws, ordinances, regulations, and standards. Energy Commission staff is requesting additional information from the applicant prior to publishing the FSA/FEIS.

Carbon Sequestration and Greenhouse Gas Emissions

HECA's likely operating profile is not known although the applicant has described the facility's expected operation using more than one potential operating profile. Different operating profiles may need to be evaluated to determine which set of operating conditions represent actual operations and worst case impacts. Some operating profiles may result in the facility not complying with certain regulatory requirements. For example, a profile provided by the applicant indicated reduced electricity production for eight hours each day, reducing the portion of the hydrogen-rich gas used to produce electricity and increasing that used to produce fertilizer. Under this operating profile, the project may not comply with California's Greenhouse Gases (GHG) Emission Performance Standard (EPS) during early operating years. Staff has asked for additional information in order to resolve this issue.

Assuming the above issue is resolved, the project could meet the EPS that applies to long-term utility purchases of base load power from power plants (Title 20, California Code of Regulations, section 2900 et seq.), if the majority of HECA's CO₂ emissions are permanently sequestered. Staff is in the process of designing conditions of certification that would enforce the carbon sequestration that is necessary for this project to comply with this regulation. Staff has provided preliminary conditions of certification that outline the type of requirements that will be recommended by staff; however, significant additional detail will be added to these conditions in the FSA and additional conditions may be required for the facility to comply with the EPS so they could sell electricity to a California electric utility under a long-term contract.

BIOLOGICAL RESOURCES

Blunt-nosed leopard lizard (BNLL) is a California fully protected species under California Fish and Game Code Section 5050 and therefore, incidental take of the species is not legally permitted as defined by Section 86 of the Fish and Game Code. This species is present at the Elk Hills Oil Field and has a high potential to occupy the proposed carbon dioxide pipeline route as well as disturbed allscale scrub areas along the natural gas pipeline. The construction of the project would impact approximately 192 acres of natural allscale scrub and disturbed lands which provide small mammal burrow habitat for BNLL; this poses a threat to BNLL in the form of mortality from vehicles and equipment on roadways, entrapment in construction-related trenches or pipes, burial in burrows by equipment, avoidance of certain habitats, modification to breeding and/or foraging behaviors, and reduced carrying capacity of natural scrub habitat and neighboring lands known to be occupied by BNLL. Staff has proposed a condition of certification to mitigate this impact to the extent feasible, but even with the implementation of staff's proposed take avoidance and minimization measures, incidental take of blunt-nosed leopard lizard would likely occur over the life of the project. Therefore, staff considers this impact significant and unavoidable under CEQA even with the incorporation of mitigation. It is also unclear whether the project would comply with Fish and Game Code Section 5050 relating to Fully Protected Reptile and

Amphibian Species and the California Endangered Species Act since avoiding take of this species cannot be guaranteed for the life of the project.

During protocol-level surveys performed for Swainson's hawk, 12 active raptor nests were found within the survey area, six of which were confirmed Swainson's hawk nests. All six Swainson's hawk nests appear to be within a 0.25 mile of either the project site or a proposed linear facility and therefore could be affected by construction noise or other construction disturbances during the nesting season. The majority of these nest trees occur along canal levees of the Kern River Flood Control Channel, West Side Canal and other smaller unnamed agricultural canals and ditches and are likely supplied to some extent by irrigation runoff that accumulates in irrigation canals as well as groundwater. In addition, valley sink scrub, a sensitive vegetation community identified by the California Natural Diversity Database, potentially occurs in these same areas in association with the Kern River Flood Control Channel. Staff believes that a more definitive analysis is needed on the water source of the nest trees that occur in the project area and pre- and post-project groundwater drawdown around the proposed well field.

Staff also believes the loss of approximately 571 acres of agricultural lands including alfalfa, wheat, onion fields, and other low-growing crop types that provide forage value is a significant loss of foraging habitat for Swainson's hawk. More definitive analysis is needed on the baseline groundwater levels and water source of the nest trees and sensitive vegetation communities that occur in the project area. Until additional data is provided regarding the project's impacts and overall mitigation strategy, staff cannot determine if the project's impacts to Swainson's hawk habitat would be reduced to below a level of significance. If groundwater drawdown from HECA's proposed well field and along the 15-mile processed water pipeline is consistent enough over the course of several years, staff believes the decrease in water supply to the root system of the trees could result in gradual decline and eventually nest tree failure which may constitute take under the California Endangered Species Act, the Migratory Bird Treaty Act, and California Fish and Game Code 3503; therefore, it is unknown if HECA complies with these LORS at this time.

The applicant has proposed to mitigate for permanent and temporary habitat impacts to federally and state listed species at a 0.1:1 and 2.1:1 ratio, respectively, which staff believes would not suffice as adequate habitat compensation for project impacts to special-status species (HECA 2012b, URS 2013b). The applicant has also proposed to purchase habitat credits from the Kern Water Bank as mitigation for the project, which the wildlife agencies have indicated is not a feasible option for mitigating HECA's impacts to special-status wildlife species. The CDFW and USFWS have indicated that while it may be possible to purchase some mitigation credits for a portion of the listed species that would be impacted, it is not feasible to mitigate HECA entirely at the Kern Water Bank, given the nature of the project's impacts to listed wildlife species from project traffic road mortality and habitat loss.

During May 2013, the applicant submitted a Section 2081 Incidental Take Permit application for project impacts to state-listed wildlife species for which the applicant

would be seeking incidental take coverage which staff has preliminarily reviewed (URS 2013d). Staff has inserted Condition of Certification BIO-20 (Compensatory Habitat Mitigation for Upland Species) as a placeholder. Staff will continue to work with the applicant, CDFW, and USFWS to develop an appropriate mitigation strategy for HECA that is consistent with the goals and objectives of the Recovery Plan for Upland Species of the San Joaquin Valley. Additional conditions of certification, and modifications to currently proposed conditions of certification including Condition of Certification BIO-20, are likely to be necessary based on further consultation with the wildlife agencies and information provided by the applicant. With the implementation of staff's proposed Conditions of Certification BIO-1 through BIO-20, impacts to special-status species would be reduced; however, without an adequate mitigation proposal, staff cannot make a determination whether the project would comply with all applicable LORS or that project impacts to sensitive biological resources would be reduced to less than significant levels in accordance with CEQA.

CULTURAL RESOURCES

Staff tentatively concludes that the proposed HECA project would have a significant direct impact on historical resources and historic properties, as defined by the California Environmental Quality Act and Section 106 of the National Historic Preservation Act. Significant impacts may be incurred upon as many as 21 known, significant archaeological resources and as many as four known, significant historic built environment resources. Additionally, the proposed project could result in significant adverse changes to an unknown number of as-yet-unidentified, buried archaeological resources. Field work and limited archeological excavations are ongoing at this time.

Staff believes HECA and related OEHI components would result in direct and indirect impacts to National Register of Historic Places/California Register of Historical Resources (NRHP/CRHR)-eligible cultural resources. However, staff requires additional information about cultural resources in order to complete its analysis.

LAND USE

While the project would be a conditionally permitted use pursuant to the county zoning ordinance, one finding that must be made by the Energy Commission's Committee is that "the proposed use will not be detrimental to the health, safety, and welfare of the public or to property and residents in the vicinity" (19.104.040(E)). Staff cannot recommend whether this finding should be made by the Committee, until the outstanding information identified in other technical areas is provided. Staff also needs additional information to determine project compliance with Sections 19.12.070 (setbacks) and 19.12.100 (parking) of the Kern County Zoning Ordinance.

POWER PLANT EFFICIENCY

There is a discrepancy in the applicant's documents concerning the gross output of the project. The AFC indicates it will be 405 MW while later filed documents appear to assume it will be 431 MW. Staff has requested additional information from the applicant to clarify.

POWER PLANT RELIABILITY

The applicant predicts an equivalent power block availability factor of at least 91.3 percent, which staff believes is possible upon the successful completion of the requisite one to two years of pilot to mature operations. The applicant has failed to: 1) demonstrate adequate reliability of the project's industrial water supply, and 2) assign availability to the gasification system and ancillary systems upon which the power block is dependent. Staff has requested additional information to address these issues.

TRAFFIC AND TRANSPORTATION

Although potentially significant impacts associated with implementation of the proposed HECA project can be reduced with recommended conditions of certification, staff has concerns that the project has the potential to substantially increase traffic levels on farming roads not currently intended for heavy truck traffic and heavy load capacities. This substantial increase in traffic also has the potential to impact traffic associated with existing farming activities (e.g., tractors traveling on public roadway) thereby potentially resulting in safety issues and increased accidents to the public. Based on a recent Board of Supervisor's meeting held on February 26, 2013, the Board instructed the Public Works Department to review the roadways intended for heavy truck and worker traffic and report back at their June 2013 Board meeting as to recommendations for improvements to the local roadway system. Staff will address the concerns and/or recommendations by Kern County in the FSA.

Staff has also requested additional information from the applicant concerning the capacity of the Wasco transloading facility to handle the amount of coal anticipated, the applicant's recent proposal to truck in limestone fluxant, and information necessary to analyze the proposed at-grade rail crossings.

TRANSMISSION SYSTEM ENGINEERING

The Transition Cluster Phase II Interconnection Study Report (Phase II Study) for HECA is scheduled to be issued by early July, 2013. Staff expects to analyze the Phase II Study to determine the downstream distribution impacts and any required mitigation. The Phase I study indicated that no additional new transmission facilities that would require a CEQA review other than those proposed by the applicant are needed for the interconnection of the HECA project.

VISUAL RESOURCES

The HECA project would cause a significant visual impact at Key Observation Point (KOP) 1 (HECA). KOP 1 is located on Station Road, approximately 2,600 feet east of the middle of the HECA project site. Viewers at or near KOP 1 include residents at two adjacent properties near the intersection of Station Road and Tule Park Road and motorists on Station Road. The applicant intends to prepare and submit an off-site conceptual landscape plan to mitigate the significant impact at KOP 1, but staff is uncertain whether an offsite plan would be sufficient to mitigate to less than significant.

WASTE MANAGEMENT

The HECA project would produce thousands of tons per year of waste during the operation of the facility. The majority of the waste would be gasification solids. HECA is expected to generate a maximum of 850 tons per day of gasification waste (vitrified slag). HECA is currently investigating three potential markets for beneficial reuse of this material: 1) roofing granules, 2) blasting grit, 3) pozzolanic admixtures in cement manufacture. The large quantity of waste would significantly impact Kern County landfills and possibly compromise the county's compliance with Public Resources Code section 40000 et seq. and Senate Bill (SB) 1016 (Stats. 2008, ch. 343.) and implementing regulations (requiring jurisdictions such as Kern County to divert 50 percent of their waste from landfill disposal).

The gasification waste could be excluded from hazardous waste regulations (i.e., 40 C.F.R. § 261.4 (b) (7) (ii) (F) and Cal. Code Regs, tit. 22, § 66261.4(b) (5) (A)). However, prior to acceptance of the gasification solids into a Kern County owned and operated landfill the solids must be analyzed and classified as non-hazardous or hazardous waste. The HECA project owner has not produced a comprehensive plan for the reuse and disposal of the gasifier solids. HECA tested the gasification solids and they are considered non-hazardous according to federal standards. California testing standards should be used to determine if the HECA gasification solids are non-hazardous.

If the solids are determined to be hazardous, the amount of hazardous waste would be burdensome to the State of California and disposal would be costly to the applicant. If they are determined to be non-hazardous according to Title 14 regulations, nonhazardous waste quantities generated and/or disposed of in Kern County would count against the county's waste diversion goals. The expected volume of waste would likely result in the Kern County exceeding their state mandated waste diversion goals. The applicant has proposed to export waste for disposal so the diversion goals can be met. However, CalRecycle has indicated Kern County would still be responsible for the waste generated in the county. To avoid significant waste management impacts the project owner would have to work with Energy Commission, Kern County and CalRecycle staff to establish an operational waste diversion program. This plan must be completed and approved by the coordinating agencies prior to staff's publication of the Final Staff Assessment.

The results of soil sampling and analytical testing at the HECA project site indicate there are elevated concentrations of petroleum hydrocarbons and other contaminants affected by previous site activities. Staff is recommending the site be appropriately characterized prior to the Final Staff Assessment.

Staff has reviewed the waste management aspects of the Occidental of Elk Hills, Inc. CO₂ Enhanced Oil Recovery (OEHI CO₂ EOR) component of the project for construction and operation, as described in the Supplemental Environmental Information (SEI) report (HECA 2012e, Volume II). Nonhazardous and hazardous waste would be generated during construction and operation of the OEHI CO₂ EOR. In order

to verify that Kern County has enough landfill capacity to accommodate the project's solid waste disposal needs, staff requires the project owner to provide information on the quantity of project waste that would be disposed of in local landfills.

WATER SUPPLY

Staff has preliminarily concluded the following regarding the project's proposed water use:

1. The project pumping could result in well interference and lower water levels in neighboring wells.
2. The proposed industrial supply wells may induce the inflow of relatively poor quality groundwater into a zone of relatively higher water quality within the water-supply aquifer beneath the Buttonwillow Service Area.
3. The project's pumping could exacerbate overdraft in the Kern County subbasin.
4. The project pumping could reverse local water level increases and increase the threat to the California Aqueduct from subsidence.
5. The project use of the proposed water supply may not be consistent with Energy Commission and other state water policies.
6. Staff cannot verify a persistent source of saline water flowing eastward towards the Buttonwillow Service Area.
7. Applicant dismisses potentially feasible water alternatives because proposed use is so high.

Therefore, staff proposes to investigate in more detail alternative cooling options in the FSA/FEIS.

The **Executive Summary Table 2** below illustrates Energy Commission staff's preliminary assessment of the proposed HECA project and also identifies the areas where staff has requested additional information. These preliminary conclusions are subject to change in the FSA/FEIS depending upon additional information received.

**Executive Summary - Table 2
Environmental and Engineering Assessment**

Technical Area	Complies with LORS	Impacts Mitigated	Additional Information Requested
Air Quality	Yes	Yes	Yes
Biological Resources	Undetermined	Undetermined	Yes
Carbon Sequestration and GHG Emission	Undetermined	Undetermined	Yes
Cultural Resources	Undetermined	Undetermined	Yes
Hazardous Materials	Yes	Yes	No
Land Use	Undetermined	Undetermined	Yes
Noise and Vibration	Yes	Yes	Yes

Technical Area	Complies with LORS	Impacts Mitigated	Additional Information Requested
Public Health	Yes	Yes	No
Socioeconomics	Yes	Yes	No
Soil and Surface Water Resources	Yes	Yes	Yes
Traffic & Transportation	Undetermined	Undetermined	Yes
Transmission Line Safety/Nuisance	Yes	Yes	No
Visual Resources	No	No	No
Waste Management	Undetermined	Undetermined	Yes
Water Supply	Undetermined	Undetermined	No
Worker Safety and Fire Protection	Yes	Yes	No
Facility Design	Yes	N/A	No
Geology & Paleontology	Yes	Yes	Yes
Power Plant Efficiency	N/A	N/A	Yes
Power Plant Reliability	N/A	N/A	Yes
Transmission System Engineering	Yes	Yes	Yes
Alternatives	N/A	N/A	No

ADDITIONAL INFORMATION THAT ENERGY COMMISSION STAFF REQUIRES FROM THE APPLICANT IN ORDER TO COMPLETE THE FINAL STAFF ASSESSMENT

Below is a list, arranged by technical area, of outstanding information staff requires prior to issuing an FSA/FEIS. Please refer specifically to each technical section for a detailed discussion and the context for which the information is required.

AIR QUALITY

A revised emissions estimate for HECA that matches the current project description, including but not necessarily limited to: the removal of the ammonia product shipping emissions; and the addition of the limestone fluxant. The revised emissions estimate should include the shipping, handling, and storage emissions from the fluxant and should address the shipping emissions for potential alternative shipping locations for the gasifier solids that have been provided to staff in other data responses.

Carbon Sequestration and Greenhouse Gas Emissions

A binding contract between SCS Energy LLC and Occidental of Elk Hills, Inc., provided to the Energy Commission, that:

1. Identifies the responsibilities of each party to demonstrate and document permanent sequestration of the supplied carbon dioxide.
2. Documents Hydrogen Energy California's rights to the entire carbon dioxide sequestration emissions reductions as necessary for SB 1368 EPS and other regulatory compliance.

3. Clearly states that the carbon dioxide sequestration emissions reductions shall not be used for any other purpose than providing for the compliance obligation needs for HECA.
4. Requires Occidental of Elk Hills, Inc. to provide a Carbon Dioxide Emissions Sequestration Plan to the Energy Commission for review and approval as detailed under the preliminary staff Condition of Certification **GHG-3**.
5. Clearly states the duration of the contract agreement.

Additionally, the applicant needs to provide:

1. A complete electrical energy balance estimate for HECA that includes the complete gross electrical production and complete parasitic load for the plant by major functional area, including the air separation unit, in MWh for both hydrogen rich fuel and natural gas operation. Staff cannot complete its determination of compliance with the SB 1368 EPS without this information.
2. A revised greenhouse gases emissions estimate for HECA that matches the current project description, including but not necessarily limited to: the removal of the ammonia product shipping emissions; the addition of the limestone fluxant shipping and use; and that addresses the shipping emissions for potential alternative shipping locations for the gasifier solids.
3. The District's FDOC that addresses staff's comments on the PDOC, specifically revising the combined-cycle power generating permit unit condition 86 to be based on the District's CO₂ BACT determination rather than the SB 1368 EPS.
4. Further information describing how OEHI would abate CO₂ if it leaks to the surface and escapes into the atmosphere.
5. Information detailing how the applicant would comply with the proposed allowable CO₂ venting hours without a back-up CO₂ injection zone.
6. Provide all of the following (some of the terms below such as "Power", Fertilizer" and "Common" refer to computations in the new material presented in spreadsheets provided by e-mail on May 10, 2013.):
 - a. A carbon balance for HECA demonstrating the complete flow of carbon from the introduction of feedstock to the coal dryer to the products (including carbon dioxide [CO₂]) and waste streams. Please provide this carbon balance for both the on- and off-Peak operating cases. This carbon balance should be more detailed than what was previously provided in the Amended AFC and data responses, clearly identifying the carbon in all the streams between major processes and process units where carbon flows changes.
 - b. Detailed background information supporting the latest applicant- sponsored SB 1368 calculations. Please provide the following:
 - A detailed list of the project equipment indicating each piece of equipment's power consumption value; and

- Project equipment allocation (Power, Fertilizer or Common) for each listed piece of project equipment.
- c. The gross and net megawatt (MW) assumptions for the three available ambient cases (39, 65 and 97 degrees F). Include the on-Peak, off-Peak and Daily Average categories.
 - d. Describe how the fertilizer power generation values, which appear to be different than the previously presented 5 MW value, were determined for the on-Peak and off-Peak cases.
 - e. Detailed calculations and rationale for the syngas allocation percentages allocated to power block and fertilizer in the HECA Power Generation for SB 1368 Emission Performance Standard Table for each project case (on-peak, off-peak, and Daily Average).
 - f. Detailed calculations and rationale for the calculations used to determine the syngas allocation to power and fertilizer that were used to determine the CO₂ emissions by emissions source. Please confirm this value is for the daily average case, and provide the values for the on-peak and off-peak cases.
 - g. Additional background information explaining the syngas allocation method used to determine CO₂ emissions from the fertilizer plant. This additional detail should explain the methodology sufficiently to ensure that CO₂ emissions from the fertilizer plant are not double counted when CO₂ emissions are sequestered in the urea produced.
 - h. The syngas allocation by section (see spreadsheet provided by applicant for May 10, 2013 meeting, attached to TN 70829) does not include a value for the common allocation. The CO₂ emissions from components identified elsewhere in the spreadsheet designated as "Common" are calculated using the power allocation percentage in the spreadsheet. Confirm or provide the correct common allocation percentage.
 - i. The air separation unit's power consumption value expected for the on-peak, off-peak on-peak, off-peak, and daily average cases. This can be presented with apportionment to the power block and fertilizer plant if detailed calculations and rationale for that apportionment basis (based on use of the produced oxygen and nitrogen and its later products, hydrogen and CO₂, used for power and fertilizer production) are provided.
 - j. The applicant stated that the power consumption for initial CO₂ compression that is completed at the HECA site was sufficient to provide CO₂ at a pressure necessary for geologic sequestration.
 - Confirm that means that the compression completed at the HECA site and the power consumed by the compressors on the HECA site is adequate to provide a level of compression that is sufficient to provide pressure necessary for geologic sequestration, or if the power consumption calculations include additional compression power consumption beyond

that which is actually done at the HECA site that would be needed to obtain the desired pressure.

- Indicate if the assumed pressure necessary for geologic sequestration is the same pressure that is required by Oxy Elk Hills (OEHL) to inject the CO₂ into the Stevens formation.
 - Indicate how much pressure is lost in terms of equivalent power consumption from the CO₂ custody transfer point to the point of receipt at the OEHL central EOR facility for initial injection into the oil reservoir.
- k. A review of the emissions tables indicates that there are changes to some of the emissions calculation assumptions provided in Appendix E, such as the fuel consumption in the gas turbine and duct burners.
- Update Appendix E as necessary to include all of these changes as well as the other recent changes to the project (addition of fluxant, removal of ammonia export).
 - Provide emissions calculations (AQ and GHG) for both the on-peak and off-peak cases clearly showing fuel flow to the combustion turbine and duct burners for each case.
 - Show how HECA off-peak operations would impact other emission sources and provide information on changes to the major component stream flows that may occur during these operating conditions (such as, does amount of CO₂ shipped to OEHL go up during off-peak operations, or does the CO₂ concentration in the hydrogen rich fuel go up to maintain a constant CO₂ emissions profile for the HRSG and coal dryer stacks for on- and off-peak operations?).
- l. Based on Table 2-10 provided in the Amended AFC, during maximum ammonia production, referred to as off-peak operation, production of the other fertilizer components do not increase.
- Provide data/calculations confirming the plant will have adequate ammonia storage facilities capable of handling the increased ammonia that would be produced during off-peak operations.
 - Indicate if the rate of ammonia consumed by the plant varies with respect to the fertilizer products during on-peak and off-peak operations, and if so please provide the on- and off-peak operation case production rates for nitric acid, urea, and UAN production.
 - Clearly indicate if HECA's ammonia use is higher than its production rate during on-peak operations, or if other components of fertilizer production, including the intermediate products like nitric acid, would increase with the increase in ammonia production during off-peak periods of operation.
- m. Provide a detailed list of the monitoring and recordkeeping methods and procedures that are proposed to be used to demonstrate ongoing compliance

with the SB 1368 emission performance standard (EPS) during facility operations. This should include:

- Monitoring methods and locations to establish CO₂ emissions from all onsite project sources, including fugitive emissions sources.
 - Monitoring methods and locations to establish net electricity generation values for all electricity consumed and generated.
 - Recordkeeping measures to ensure completeness and accuracy of data collected.
 - Coordination with OEHL to obtain necessary data on carbon sequestration to support the value of the sequestered CO₂ that can be used to account for the amount of CO₂ shipped to OEHL.
- n. As an adjunct to GHG, confirm the current planned and unplanned outage as the basis for reliability. Currently, our understanding is as follows:
- Planned: Two 1-week planned maintenance outages with 15-hour ramping allowance for 351 hours
 - Planned: Two cold-start cycles, each 4 days long for a total of 192 hours
 - Unplanned: 219 hours of outage based on 91.3% equivalent availability factor (EAF), calculated as follows: $(1 - 0.913) \times 8760 = 762$ hours of total outage. $762 \text{ (hours of total outage)} - 351 \text{ (maintenance outage hours)} - 192 \text{ (cold start-up hours)} = 219 \text{ hours (unplanned outage hours)}$.

BIOLOGICAL RESOURCES

1. Comprehensive mitigation strategy for project impacts to San Joaquin kit fox, giant kangaroo rat, Tipton kangaroo rat, San Joaquin antelope squirrel, blunt-nosed leopard lizard, Swainson's hawk, burrowing owl and HECA's incremental contribution to cumulative effects to these species that are covered in the *Recovery Plan of Upland Species of the San Joaquin Valley*. Specifically, identify which species and acreage the applicant is proposing to mitigate through purchase of mitigation credits from the Kern Water Bank and which species and acreages would be mitigated through offsite land acquisition. For offsite land acquisition, please identify the species-specific habitat criteria for offsite mitigation lands and cost estimates for determining security (eg. cost estimates for land acquisition, start-up activities and initial habitat improvements, funding during the three-year interim management period, and long-term management).
2. Additional focused protocol-level botanical surveys (CDFG 2009) along all linear routes and additional baseline botanical data, primarily the proposed carbon dioxide pipeline route;
3. Jurisdictional determination from CDFW regarding state waters (ephemeral drainages) in the project area, including all linear routes and ephemeral drainages that may occur along the proposed carbon dioxide pipeline route;

4. Jurisdictional determination from the U.S. Army Corps of Engineers Section 404 for the project area, including all linear routes and ephemeral drainages that may occur along the proposed carbon dioxide pipeline route;
5. Habitat mitigation strategy for habitat loss impacts from OEHI component of HECA at the Elk Hills Oil Field. Please identify whether species impacts including habitat loss for the OEHI component would be included under the Section 10 Habitat Conservation Plan currently under preparation or if habitat loss for the OEHI component of HECA would be mitigated under separate consultations with CDFW and USFWS;
6. Western spadefoot toad habitat assessment along project linear routes including upland refugia and aquatic habitats preferably during the wet season (defined as October 15 to April 15 of any given year) and following sufficient winter or spring rains in order to identify potential depression areas and upland refugia that may provide habitat for western spadefoot toad. All potential ponding areas should be identified and mapped with a GPS unit including the single pond where this species was identified previously. Information to be collected at each mapped potential breeding area includes, but is not limited to: the specific numbering system of each potential breeding area, presence of tadpoles and species (if any), habitat community, microhabitat features, observed plant species, observed wildlife species including invertebrates, water temperature, approximate depth and surface area, and level of disturbance;
7. Vehicle-fox strike and incidental take analysis considering the project's contribution to existing traffic volumes and intersections of the proposed construction and operation routes with other linear right-of-ways that occur within and outside of San Joaquin kit fox core recovery areas. The applicant should calculate vehicle mortality rates to kit fox and other mammals over the life of the project; and
8. Water supply analysis and the effects of groundwater pumping to the sensitive vegetation communities and raptor nest trees which occur in the project area. The applicant must provide an analysis of the baseline groundwater levels and water source of raptor nest trees and alkali sink scrub habitat along HECA's linear routes, primarily the natural gas pipeline, processed water pipeline, and well field.

CULTURAL RESOURCES

For the EOR components: all of the information required for cultural resources in the Energy Commission Siting Regulations, Appendix B (20 Cal. Code Regs., §1704(b)(2), App. B).

1. Complete pedestrian survey results for all of HECA's linear alignments.
2. Results of test excavations and evaluations of CRHR/NRHP eligibility for all archaeological sites that staff has identified as having the potential to be directly impacted by HECA or OEHI.
3. Results of geoarchaeological field sampling.

LAND USE

A site plan drawn to scale of all proposed structures demonstrating compliance with the sections of the zoning ordinance cited above.

NOISE

Due to potential noise impacts to receptors from project-related traffic, soundwalls may be necessary along the truck route. Prior to preparing the FSA/FEIS, the applicant needs to inform staff of the potential locations of the soundwalls.

SOILS AND SURFACE WATER

Additional Information for the draft DESCP:

- Show all potential locations of horizontal directional drilling (HDD) activities in the DESCP and update the disturbed soil estimates of entry/exit pits. If HDD sites are not yet finalized, please be conservative and include all potential sites.
- Staff notes that some of the lined retention basins at the HECA site are calculated to have drawdown times that exceed the Kern County maximum of seven days (Kern County Hydrology Manual – Section 408.08.01). Please adjust the basin design and/or operations to comply with the Kern County basin standard. Also revise the DESCP and hydrology report to reflect these changes.

Proposed Rail Spur Impacts to Offsite Flooding:

- Maps and drawings that show locations where construction would cross drainages, canals, and other water bodies. Identify what local and/or permits would be required for these crossings.
- Description of typical methods proposed for accommodating flows under or around the rail bed. Include maps that show locations of drainage features and indicate what flows they would be designed to handle.
- Identify whether the rail bed would be constructed in or near a FEMA 100-year floodplain Zone A. If so, discuss the measures that would be required to ensure no upstream or downstream impacts.

TRAFFIC AND TRANSPORTATION

The applicant recently proposed adding storage of limestone and ammonium nitrate at the project site. These revisions would change the number of truck trips to and from the project site. Staff needs additional information from the applicant regarding how this revision in the number of truck trips could also change the potential impacts related to traffic and transportation. Specifically, staff requests the applicant provide revised truck trip numbers for both with the rail spur and without the rail spur and identify changes to the level of service (LOS) at intersections and roadway segments that would occur with the revised truck trips. This issue will be addressed in the FSA/FEIS.

Along with the revision to the on-site storage of limestone and ammonia nitrate used for the HECA project, staff has raised a question regarding the need to expand the Wasco coal servicing facility to serve the project's demand. Potential components of the coal servicing facility initially considered by staff include the possible need for additional storage silos and/or receiving lane for trains and/or haul trucks. Staff requests the applicant identify specific components that would need to be expanded at the coal servicing facility in Wasco. The project's potential demand for expanding the Wasco coal servicing facility will be addressed in the FSA/FEIS.

Under a proposed alternative, HECA would construct and operate a rail spur for delivery of fuel and products to and from the project site. Because the CPUC traditionally has jurisdiction over such facilities, staff will continue to coordinate closely with the CPUC to ensure appropriate design of the rail line for safe operation. In order to ensure that CPUC staff has sufficient information in order to assist in analyzing the proposal, the applicant must submit all the information otherwise required for a formal application pursuant to Title 20, California Code of Regulations, section 3.1 for all public at-grade rail crossings needed for the proposed rail spur. This information is outlined in the CPUC Rules of Practice and Procedure 3.7 to 3.11 under Section 1001 of the Public Utilities Code and should be submitted, to both the CPUC and Energy Commission staff.

Additionally, the applicant must provide an analysis discussing the need for each of the private at-grade crossings proposed, the potential risks involved in proposing this many private crossings in such a small area, and whether, upon further examination, any crossings can be eliminated. This analysis should also discuss potential impacts to the movement of farm machinery and equipment due to reducing the crossings, and should identify to what extent lands on either side of the proposed spur are owned and maintained by the same person or entity, and, thus, could possibly be impacted by reduced connectivity.

Waste Management

- Staff was not provided a breakdown of types and quantities of nonhazardous and hazardous waste that will be generated from the OEHI component of HECA to confirm that the project will not have an impact on Kern County landfills. This data would be needed for staff to complete an assessment of potential impacts
- Staff needs the results of waste characterization tests in accordance with Title 22, California Code of Regulations, Division 4.5, section 66262.10 on coal and petcoke mixes using the Mitsubishi gasifier in Japan using processing methods representative of those to be used for project operation. The purpose of the testing is to determine whether the gasification solids would be hazardous or non-hazardous. This information is needed to further evaluate how the waste can be disposed of and whether it is feasible to market the solids for other uses. The information should include a description of the waste stream, an evaluation of where the residual material is suitable for disposal, identification of facilities that would accept the volume of waste generated, a letter from the facility demonstrating they would accept the waste, and evidence the disposal of the waste would be in compliance

with Kern County waste disposal requirements. If the project owner proposes to market the solids for use as supplementary cementitious materials or other purposes, then a detailed report indicating what uses can be marketed and letters of intent from prospective purchases should be included.

- The project owner should enter into an agreement with DTSC for the purpose of fully characterizing and if necessary remediating the site property so that it is in the appropriate condition to allow for future use. In addition based on the type of agreement with DTSC the applicant should conduct the necessary site characterization to determine if site remediation is needed and if so what the scope of remediation would be prior to the FSA.

Staff needs information on additional waste streams that would result from the addition of the limestone fluxant such as total tons and cubic yards. The applicant shall also provide information on the increased amount of gasification solids in tons and cubic yards.

GEOLOGY AND PALEONTOLOGY

Limestone would be mined and transported to the site to be used as a fluxant to reduce sulfur emissions. Currently it is unknown where the limestone is being mined, the entity that permitted the mine's operation, the capacity of the mine's resource and the estimated consumption of limestone during the project's design life. Staff requests that this information be provided as its evaluation is necessary to complete the analysis for the completion of the FSA/FEIS.

POWER PLANT EFFICIENCY

1. Reconciliation of the 405 MW gross power generation originally submitted in the AFC and the 431 MW power level currently under discussion elsewhere in this document;
2. Update of the mass and energy balance for the *entire* project boundary that uses *all* contemporaneous conditions, including the enhanced oil recovery (EOR) field, air separation (ASU), and the introduction of calcium carbonate to the feedstock blend, based on the various MW ratings.
3. Identification and description of the major power block components, including the gasifier, based on the various MW ratings.

POWER PLANT RELIABILITY

The applicant has failed to assign an AF (availability factor) to the gasification system and ancillary systems upon which the power block is dependent. The applicant needs to assign this AF, demonstrate how it was derived, and explain how it affects the 91.3 percent AF assigned to the power block.

TRANSMISSION SYSTEM ENGINEERING

The Transition Cluster Phase II Interconnection Study Report (Phase II Study) for HECA.

August 8, 2013 Letter to CEC

- Summary of July 23, 2013 Board Hearing -

and

- Additional changes to PSA requested by Kern County -

Lorelei H. Oviatt, AICP, Director
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Planning and Community Development
Engineering, Surveying and Permit Services
Roads Department

August 8, 2013

File: Hydrogen Energy, California (HECA)
Zone Map No. 120

California Energy Commission
Attn: John Heiser, Project Manager
1516 9th Street, MS-15
Sacramento, CA 95814-5512

RE: Hydrogen Energy California – Amended Application for Certification (08-AFC-8A)
Post PSA Release: Specific Kern County Comments and recommended Mitigation Measures to address potential impacts of the proposed HECA Project located within Kern County.

California Energy Commission Representatives:

Kern County is in receipt of the May 15, 2012, notice from the California Energy Commission (CEC), requesting Agency participation in the review of the amended application submitted to the CEC on May 2, 2012 for the Hydrogen Energy California (HECA) Project. The County appreciates this opportunity to participate in this review and has submitted several comment letters to the CEC regarding this project.

As noted in our previous correspondence, the Kern County Planning and Community Development Department (PCDD) has acted as the clearinghouse for all County communications with the CEC; and has coordinated internally to compile the County's comments and recommended mitigation measures related to this project. The comments received from County Departments and stakeholders were presented to the Kern County Board of Supervisors on February 26, 2013. At that hearing, the Board authorized the PCDD to prepare formal written comments to the CEC which listed the specific mitigation measures for inclusion in the CEC Preliminary Staff Assessment (PSA) to address the impacts of the HECA Project on County services and risks to residents. Those comments were distributed on March 6, 2013 (CEC Docket Number 08-AFC-08A, TN #69831). Also at the February 26, 2013 hearing, the Board directed the PCDD to bring the matter back before them for review of the PSA once it was released.

On July 23, 2012, the PCDD and other County Departments presented comments and a review of the PSA to the Board of Supervisors, as listed in the July 23, 2013 Board Letter previously provided to the CEC (CEC Docket Number 08-AFC-08A, TN #200008). County Staff noted that the PSA deferred findings on several of the project impacts until issuance of the Final Staff Assessment (FSA); and that while the PSA included several of the previously requested County mitigation measures, several important measures were not included in the PSA. The Board of Supervisors took action to direct County Staff to prepare additional comments to the CEC requesting inclusion of mitigation measures, reiterated that Kern County is not supportive of the use of eminent domain to facilitate this project, and listed several specific requests in addition to the previously requested mitigation measures. **The full video transcript of the Board hearing is incorporated into this letter by reference and can be found at the following web-link: <http://www.co.kern.ca.us/bos/AgendaMinutesVideo.aspx>.**

Therefore, at the direction of the Kern County Board of Supervisors, this letter includes 3 parts: (1) a listing of mitigation measures previously requested by the Kern County that were not included in the PSA and the County's subsequent recommended revisions to the Conditions of Certification; (2) a listing of other additional requests specified by the Board; and, (3) closing comments and a reiteration that Kern County does not support the use of eminent domain for any action related to the HECA Project.

PART 1. RECOMMENDED REVISIONS TO THE CONDITIONS OF CERTIFICATION

As demonstrated in the July 23, 2013 Board of Supervisors Board Letter (CEC Docket Number 08-AFC-08A, TN #200008), there are a number of issues that have not yet been addressed by the PSA, or that are pending further information. As such, several of the Kern-County requested mitigation measures were not included in the PSA. Therefore, Kern County requests that the CEC make revisions to the Conditions of Certification included in the PSA as listed in Table 1 below.

Table 1. Kern County Requested Changes/ Additions to Mitigation Measures included in CEC's June 2013 PSA

Kern County Mitigation Request #	Kern County Requested Mitigation Measure (Topic Summary)	Kern County Requested Change to CEC Mitigation Measure/Condition of Certification as currently listed in the PSA (Requested changes in strike-out and underline)	Kern County Justification for Revision
Planning-3	Mitigate impacts to public services by ensuring sales tax during construction are paid to Kern	<p>Revise SOCIO-1 to read as follows:</p> <p><i>The project owner shall use best efforts to ensure as much sales and use tax revenue resulting from project construction and operation is attributed to Kern County. <u>To ensure this, the project owner shall adhere to the following:</u></i></p> <ol style="list-style-type: none"> <u>1. Prior to the issuance of the first grading or building permit for the project, the Project Proponent shall obtain a local street address within the unincorporated portion of Kern County and shall register this address with the State Board of Equalization. The address shall be used for all activities related to the acquisition of construction materials and for all construction-related purchase and billing purposes associated with the project. The Project Operator shall allow the County to use this sales tax information publicly for reporting purposes.</u> <u>2. The project proponent shall continuously comply with the following during construction and operation:</u> <ol style="list-style-type: none"> <u>a. Make a good-faith effort to have all transactions that will generate sales and use taxes, including transactions of project owner's contractors, occur in the unincorporated area of the county;</u> <p>(No further changes to remainder of Mitigation Measure)</p>	<p>This revision will facilitate accurate and efficient implementation of the rest of the mitigation measure as listed by the CEC.</p> <p>See above</p>
Fire-1	HECA to purchase an Industrial Foam Pumper Truck and Tender	Revise WORKER SAFETY-8 one-time payment to KCFD of \$ 2,501,100	Amount insufficient per Table 2 of this Letter
Fire-2	HECA to provide funding for Fire Protection Specialist	Revise WORKER SAFETY-8 one-time payment to KCFD of \$2,501,100	Amount insufficient per Table 2 of this Letter
Fire-3	HECA to provide funding for purchase of 3.5-5 acre plot to relocate fire station	Revise WORKER SAFETY-8 one-time payment to KCFD of \$2,501,100	Amount insufficient per Table 2 of this Letter
Fire-4	HECA to provide annual funding for 50% cost of County Fire Prev Inspector	Revise WORKER SAFETY-8 one-time payment to KCFD of \$2,501,100	Amount insufficient per Table 2 of this Letter

Table 1. Kern County Requested Changes/ Additions to Mitigation Measures included in CEC's June 2013 PSA

Kern County Mitigation Request #	Kern County Requested Mitigation Measure (Topic Summary)	Kern County Requested Change to CEC Mitigation Measure/Condition of Certification as currently listed in the PSA (Requested changes in strike-out and underline)	Kern County Justification for Revision
Fire-5	HECA to provide annual training to KC Fire Staff	Revise WORKER SAFETY-8 annual payment of to KCFD of \$1,128,400	Amount insufficient per Table 2 of this Letter
Fire-6	HECA to provide funding for a new Fire Rescue Truck	Revise WORKER SAFETY-8 one-time payment to KCFD of \$2,501,100	Amount insufficient per Table 2 of this Letter
Fire-7	HECA to provide Air Monitoring Equipment	Revise WORKER SAFETY-8 one-time payment to KCFD of \$2,501,100	Amount insufficient per Table 2 of this Letter
Fire-8	HECA to contribute annual funds for salaries for 6 Fire Engineers	Revise WORKER SAFETY-8 annual payment of to KCFD of \$1,128,400	Amount insufficient per Table 2 of this Letter
Fire-8	HECA shall contribute to reverse 911 system and shelter-in-place program	Revise WORKER SAFETY-8 annual payment of to KCFD of \$1,128,400	Amount insufficient per Table 2 of this Letter
EHS-1	Crash Protection around Secondary Containment	Revise HAZ-4 to read as follows: <i>The two anhydrous ammonia storage tanks shall be double-walled tanks designed to API 620 Appendix R. The storage tanks shall be protected by a secondary containment basin capable of holding 125% of the storage volume and that drains to an underground vault. The final design drawings and specifications for the ammonia storage tanks and secondary containment basin and vault shall be submitted to the CPM for review and approval.</i> <i><u>Additionally, the applicant shall provide crash protection around the proposed secondary containment areas as appropriate to accommodate stacking/moving equipment. The applicant shall provide physical barriers and site security for the proposed project site as approved by the Environmental Health Division to reduce the potential of a chemical release.</u></i>	Though the PSA analysis discusses barriers that could assist with crash protection, Kern requests that specific language be added to the measure to ensure proper implementation and clear explanation to the public.
EHS-3	Comply with CUPA (Certified Unified Program Agency)	Revise HAZ-2 to read as follows: <i>The project owner shall concurrently provide the following to the Kern County Environmental Health Service Department (KCEHSD) and the CPM for review:</i> <i>a. a Hazardous Materials Business Plan (HMBP);</i> <i>b. a Spill Prevention, Control, and Countermeasure Plan (SPCC Plan); and</i> <i>c. a Risk Management Plan (RMP) specifically for the use and storage of anhydrous ammonia, methanol, and liquid</i>	Revision Necessary for clarification

Table 1. Kern County Requested Changes/ Additions to Mitigation Measures included in CEC's June 2013 PSA

Kern County Mitigation Request #	Kern County Requested Mitigation Measure (Topic Summary)	Kern County Requested Change to CEC Mitigation Measure/Condition of Certification as currently listed in the PSA (Requested changes in strike-out and underline)	Kern County Justification for Revision
		<p>oxygen/nitrogen and prepared pursuant to the California Accidental Release Program (CalARP).</p> <p>d. <u>Any other documents deemed necessary by KCEHSD for compliance with Certified Unified Program Agency (CUPA).</u></p> <p>After receiving comments from the KCEHSD and the CPM, the project owner shall reflect all recommendations in the final documents. Copies of the final plans shall then be provided to the KCEHSD for information and to the CPM for approval.</p>	
EHS-4	Provide Knox Box (locked document storage box) at main entrance for 1 st responders.	<p>Include additional HAZ mitigation measure to read as follows:</p> <p><u>The applicant shall provide a locked storage box (Knox box) outside the main entrance that can be accessed by first responders. It shall provide first responders with the ability to access the site immediately. It shall contain the following information:</u></p> <ul style="list-style-type: none"> • <u>Hazardous materials business plan</u> • <u>MSDS sheets for all chemicals stored at the site</u> • <u>Emergency contact numbers</u> 	Though a Knox Box may be needed as part of the HMBP, this revision is necessary for clarification
EHS-7	Prepare Training brochure for residents for "off-site consequences"	<p>Include additional HAZ mitigation measure to read as follows:</p> <p><u>The applicant shall develop a letter/pamphlet/brochure to be reviewed and approved by the Planning Department and Environmental Health Division that provides information to the residences/businesses within the impact area of the off-site consequence analysis (OCA). The information must describe the OCA findings and actions to follow in the event of a release from any covered Cal ARP process.</u></p>	This revision helps ensure that the applicant prepares appropriate public information for an OCA that is reviewed by the County prior to distribution.
EHS-8	Complete a Process Hazard Analysis (PHA) approved by EHS	Revise HAZ-9 to include Kern County EHS as a reviewing/approving agency for PHA.	Revision necessary for clarification
EHS-9	Prepare an Emergency Response Plan for accidental hazardous Release	Revise HAZ-2 to include provision for preparation of an Emergency Response Plan for accidental hazardous Release.	Revision necessary for clarification
EHS-10	Permanent weather station with wind direction in case of accidental release	<p>Include additional HAZ mitigation measure to read as follows:</p> <p><u>The applicant shall provide a permanent weather station with remote internet access for monitoring of wind direction in case of an accidental release at the facility. The data shall be kept on site or made available electronically for review by the Environmental Health Division on a 24/7 basis.</u></p>	Will provide County a method to direct first responders and evacuations in the event of an accidental release.

Table 1. Kern County Requested Changes/ Additions to Mitigation Measures included in CEC's June 2013 PSA

Kern County Mitigation Request #	Kern County Requested Mitigation Measure (Topic Summary)	Kern County Requested Change to CEC Mitigation Measure/Condition of Certification as currently listed in the PSA (Requested changes in strike out and underline)	Kern County Justification for Revision
Engineering-1	Applicant to pay for all County costs to review, inspect and issue permits and plans	Revise GEN-3 to ensure that payments made to County are based on adopted County fee code; not a negotiated fee schedule.	Required by County Code
Engineering-2	Applicant to provide a qualified person, approved by County, to prepare hazards reports.	Include additional GEN Mitigation Measure to read as follows: <u>The applicant shall provide a qualified person, approved by the Department, to prepare a report identifying all hazardous materials, classified in accordance with the California Building Code, to be used or stored. The report shall be submitted with their plan review documents and include recommendations for fire protection, as well as storage and handling of materials.</u>	Necessary per CBC
Engineering-4	Applicant to provide an on-site office for County inspector.	Include additional GEN Mitigation Measure to read as follows: <u>The applicant shall provide an on-site office, plan rack, desk and adequate accommodations for the County's building inspector(s) for the duration of the project.</u>	No sufficient County facilities at this time
Roads-1	- Place-holder -	- Place-holder - Mitigation Measures Forthcoming from Kern County Roads Department	Pending
Waste-1	Provide Waste characterization to County for compliance with Kern landfill operations/fees	Revise WASTE-7 to include review and approval from Kern County Waste Management Department	Revision necessary for clarification
Waste-3	Payment of specific tipping fees (per ton) to compensate Kern County for impacts to Jurisdictional Reporting and to fund alternative diversion programs to help Kern meeting State requirements	Include additional WASTE Mitigation Measure to read as follows: <u>If residual gasification solids, or other waste products, are subject to Jurisdictional Reporting and credited to the Kern County unincorporated area as disposal, HECA shall compensate Kern County via payment based on the following schedule: \$30 a ton (0-100 tons per day); \$50 a ton (101 – 200 tons per day); \$75 a ton (greater than 200 tons per day); or other amount as approved by the Board of Supervisors, to mitigate impacts to diversion programs. The County shall deposit the money in a Diversion Mitigation Reserve Account that will be used to fund diversion programs in Kern County. This is in addition to any gate/tipping fees for disposal.</u>	Revision needed to ensure that County is adequately compensated for impacts to County facilities and State Diversion Program Requirements
Waste-4	Divide waste streams among multiple facilities to reduce impacts to any one facility	Include additional WASTE Mitigation Measure to Read as follows: <u>HECA waste stream shall be subdivided between several facilities to reduce the potential impacts to any one facility. Facilities to be considered include the Bakersfield Metropolitan (Bena) RSLF, the Shafter-Wasco RSLF and the Taft RSLF.</u>	Revision needed to ensure that impacts to County facilities are appropriately distributed.

¹ See Appendix A of this Report for a complete "verbatim" listing of all Kern County Requested Mitigation Measures.

As noted above in Table 1, Kern County is requesting revisions to the dollar amounts listed to mitigate for HECA's impacts to Fire and Safety services within Kern County. Table 2 provides detail and support for this request and additional back-up documentation is provided in Appendix A of this letter.

Table 2. Detail of Estimated Fire Mitigation Costs		
County MM Number	Mitigation Measure Request	Anticipated Cost
One-Time Costs (Paid prior to initiation of construction)		
Fire-1	HECA to purchase an Industrial Foam Pumper Truck and Tender	\$912,795
Fire-2	HECA to provide funding for Fire Protection Specialist (Estimated at \$125,000/year for duration of Construction through Commencement of Operations: 4 years [2014-2018])	\$192,000
Fire-3	HECA to provide funding for purchase of 3.5-5 acre plot to relocate fire station	\$77,900
Fire-4	HECA to provide annual funding for 50% of cost of a County Fire Prevention Inspector (Estimated at \$88,600/year for duration of Construction through Commencement of Operations: 4 years [2014-2018])	\$368,764
Fire-6	HECA to provide funding for a new Fire Rescue Truck	\$910,299
Fire-7	HECA to provide Air Monitoring Equipment	\$39,314
Total One Time Payment Required		\$2,501,072
Amount Proposed by CEC		\$2,000,000
Shortage/ Adjustment Amount Needed		\$501,072
Annual Costs (Recurring)		
Fire-5	HECA to provide annual training to KC Fire Staff	23,045
Fire-8	HECA to contribute annual funds for salaries for 6 Fire Engineers	1,104,900
Fire-9	HECA shall contribute to reverse 9-1-1 system and shelter-in-place program (\$2.50 per address, per year. Estimated at 150 addresses)	375
Total Annual Payment Required		\$1,128,320
Amount Proposed by CEC		\$850,000
Shortage/ Adjustment Amount Needed		\$278,320
+ Remove language regarding "off-set" for Property Tax Allocation		
+ Remove language regarding waiver of County-related inspection fees		

PART 2. OTHER ADDITIONAL REQUESTS SPECIFIED BY THE BOARD

At the July 23, 2013 Board of Supervisors hearing (incorporated by reference as noted in the opening paragraphs to this letter), the Board made several specific requests for inclusion in the Final Staff Assessment (FSA), to be issued by the CEC. Those requests are as follows:

Table 3. Additional Requests Per Kern County Board of Supervisors on July 23, 2013

Topic	Request	Suggested Category for inclusion in FSA
Agriculture-1	Bonding. Analyze the potential for HECA to enter into a bonding agreement to set aside funds to mitigate any potential damages to local farm crops that are directly related to the HECA Project.	Land Use
Land Use-1	Eminent Domain. The Kern County Board of Supervisors reiterates that Kern County is NOT supportive of the use of eminent domain in association with any component of the HECA Project.	Land Use Traffic/Transport Facility Design
Hazards-1	Air Monitor: Consider installation of an Air Monitor at local schools within a 5-mile radius of HECA project.	Hazards Public Health
Hazards-2	Reverse 9-1-1. Insure that mitigation for reverse 9-1-1 system is included.	Hazards Public Health
Hazards-3	Explosion Potential. Include a more in-depth analysis of the explosion potential of the HECA Project; particularly the fertilizer component.	Hazards Public Health
Hazards-4	Anhydrous Ammonia for Fertilizer Only. Include mitigation measure to ensure and verify that the anhydrous ammonia will only be used for production of fertilizer and will not be sold off site.	Hazards Land Use Public Health
Traffic-1	Tupman Road: Repair and replace Tupman Road after completion of project construction.	Traffic and Transportation
Traffic-2	Hwy 119 and Tupman Road Intersection: Make improvements to intersection; including but not limited to: (1) Install a right-hand turn lane at west-bound Hwy 119 and Tupman Road; (2) Install a traffic signal or warning beacon Intersection at Hwy. 119 and Tupman Road	Traffic and Transportation
Traffic-3	Stockdale Highway: Mitigate potential hazards related to fog on Stockdale Highway by adding passing lanes and/or a passing corridor. Ensure Traffic Study reviews this topic and other similar hazards.	Traffic and Transportation
Traffic-4	Highway 43 (Enos Lane): Work with Caltrans to add additional lanes and/or a passing corridor. Ensure Traffic Study reviews this topic and other similar hazards	Traffic and Transportation
Traffic-5	Interstate 5 and Stockdale Highway: Work with Caltrans to improve this overpass and increase safety for vehicles on the County road which are competing with vehicles that are ingressing/egressing from the Interstate.	Traffic and Transportation
Traffic-6	Construction and Operation Route. Include mitigation which specifies the specific route that project vehicles must use during project construction and operations.	Traffic and Transportation
Traffic-7	Road Improvement Costs: Ensure mitigation measure is worded to ensure that HECA will pay the "cost" of all listed improvements; do not tie mitigation measure to a specific amount because commodity prices fluctuate and may increase prior to completion of the necessary improvements.	Traffic and Transportation
Traffic-8	Bus Stops: Every home along HECA's transportation route (Stockdale Highway, Highway 43/Enos Lane, etc.) is an established bus stop for the local primary schools. School buses stop to pick up students at their homes in this rural area and these bus stops should be protected.	Traffic and Transportation
Waste-1	Waste Diversion Rates. CEC to work with CalRecycle regarding the impact of HECA's waste disposal on Kern County state-mandated diversion rates.	Waste Management

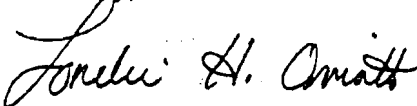
PART 3. CLOSING COMMENTS

On behalf of the Kern County Board of Supervisors and Kern County Agencies and Departments, the Kern County Planning and Community Development Department would like to thank the CEC for your consideration of the comments listed in this letter and requests the following:

1. Please include the comments, mitigation measures, and requests for additional information, as listed in this letter and attachments, in the Final "Staff Assessment/Draft Environmental Impacts Statement" that is being prepared by CEC Staff;
2. Please ensure that this letter and all attachments are provided to the Commissioners for consideration in preparation of the "Presiding Member's Proposed Decision" and also to the full California Energy Commission for consideration in issuing the "Final Decision" on the project;
3. Please note that additional comments are forthcoming from the Kern County Roads Department;
4. Please note that the Kern County Board of Supervisors has directed PCDD Staff to bring this project back before the Board for review and preparation of additional Kern County comments on the CEC's "Final Staff Assessment/ Draft Environmental Impacts Statement." Please be advised that additional comments will be forthcoming after the Board's review of the FSA.

Should you have any questions, please contact me at the contact information listed above. You may also contact the Supervising Planner coordinating Kern County's review of the HECA Project, Ms. Jacquelyn R. Kitchen, at (661) 862-8619 or via email at kitchenj@co.kern.ca.us.

Sincerely,



LORELEI H. OVIATT, AICP, Director
Kern County Planning & Community Development Department

cc: SCS Energy California, LLC.
Attn: Marisa Mascaro
30 Monument Square, Suite 235
Concord, MA 01742

Hydrogen Energy California
Attn: Tom Daniels, Managing Director, Commercial Business
PO Box 100, PMB 271
Mammoth Lakes, CA 93546

Occidental of Elk Hills, Inc.
Attn: William H. Barrett, EOR Business Manager
10800 Stockdale Highway
Bakersfield, CA 93311

cc: (cont.)

Kern County Administrative Office

Kern County Clerk of the Board

Kern County Fire Department

Kern County Environmental Health Services

Kern County Engineering Services

Kern County Roads

Kern County Waste Management

Kern County Sheriff's Department

Kern County Farm Bureau, Inc.

Attn: Benjamin McFarland

801 South Mt. Vernon Avenue

Bakersfield, CA 93307-2048

Kern-Kaweah Chapter of the Sierra Club

Andrea Issod; Matthew Vespa

85 Second Street, 2nd Floor

San Francisco, CA 94105

HECA Neighbors

c/o Chris Romanini

P.O. Box 786

Buttonwillow, CA 93206

Association of Irrigated Residents

Tom Frantz

30100 Orange Street

Shafter, CA 93263

Appendix A

Support Documentation for Fire/Worker Safety Mitigation Measures

From: Don Brady
To: Jacquelyn Kitchen
CC: Benny Wofford; Brian Marshall
Date: 07/22/2013 10:49 AM
Subject: Fwd: Fire Apparatus
Attachments: 0419_001.pdf; 0420_001.pdf

Hi Jaqui,

I placed the updated spreadsheet and the supporting documentation for the HECA project fire mitigation on your desk. I didn't have the signed quotes from Pierce when I was down there but they are attached to this email. Let us know if you need anything further. Chief Marshall was hoping to have a conference call this afternoon to make sure we have everything we need, but I was told you are out of the office today (Monday). Feel free to contact us tomorrow if you have questions or concerns.

Thanks

Table 1. Fire Mitigation Cost Justification			
Mitigation Measure # in Fire's letter to HECA	Description of Item	Cost Justification Amount	Type of Documentation Needed from Fire Department
Material Items			
Fire-1	Industrial Foam Pumper Truck and Tender	\$912,795	See attached quote.
Fire-6	HECA to provide funding for a new Fire Rescue Truck	\$910,299	See attached quote.
Fire-7	HECA to provide Air Monitoring Equipment for 10 stations.	\$39,314	See attached quote.
Fire-3	HECA to provide funding for purchase of 3.5-5 acre plot to relocate fire station. Cost shown is for unimproved property cost of providing water and utilities would be additional.	\$77,900	Average of 19 properties in the area. See attached.
Fire-9	HECA shall contribute to reverse 9-1-1 system and shelter-in-place program. (\$2.50 per address, per year. Estimated at 150 addresses) Search showed 44 homes, one school, and the balance are business improvements.	\$375	Search of assessor's info within 5 miles of plant site.
Additional County Staff			
Fire-2	Fire Protection Specialist \$25,000 initial plan check. \$200.00 per hour fee for consultation as needed thereafter. At 20 hours per month = \$48,000/ year (\$48,000/ yr for duration of Construction through Commencement of Operations: 4 years [2014-2018])	\$192,000	Refer to attached quote from FPS Consultant.
Fire-4	HECA to provide annual funding for 50% of cost of a County Fire Prevention Inspector, \$92,191/ year (\$92,191/year for duration of Construction through Commencement of Operations: 4 years [2014-2018])	\$368,764	See attached scale for Engineer- CA
Fire-5	HECA to provide annual training to KC Fire Staff (Need info of what it would cost to train crew shifts during work-time and maybe during over-time)	\$23,045	See attached charts.
Fire-8	HECA to contribute annual funds for salaries and benefits for 6 Fire Engineers	\$1,104,900	See attached scale for Engineer -C

PROPOSAL FOR FURNISHING FIRE APPARATUS

July 18, 2013

Kern County Fire Department
5642 Victor St.
Bakersfield, CA 93308



PERFORM LIKE NO OTHER

The undersigned is prepared to manufacture for you, upon an order being placed by you, for final acceptance by Pierce Manufacturing, Inc., at its corporate office in Appleton, Wisconsin, the apparatus and equipment herein named and for the following prices:

	Each	Extension
One (1) Industrial Foam Pumper/Tanker		
	\$ 849,095.18	\$ 849,095.18
Sales Tax @ 7.500%	\$ 63,682.14	\$ 63,682.14
APPARATUS COST WITH TAX	\$ 912,777.32	\$ 912,777.32
Performance Bond Not Required	0.00	\$ -
California Tire Fee	\$ 17.50	\$ 17.50
TOTAL PURCHASE PRICE	\$ 912,794.82	\$ 912,794.82

PLEASE NOTE THE FOLLOWING ABOUT THIS QUOTATION:

Payment options are available and are included under separate cover. One of these options may save your department a significant amount of money!

Said apparatus and equipment are to be built and shipped in accordance with the specifications hereto attached; delays due to strikes, war or international conflict, failures to obtain chassis, materials, or other causes beyond our control not preventing, within about **300-330**

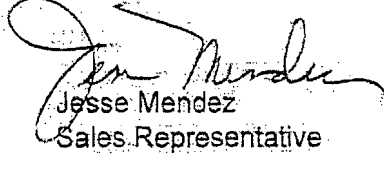
CALENDAR DAYS after receipt of this order and the acceptance thereof at our office in Appleton, Wisconsin, and to be delivered to you at **Ontario, CA**

The specifications herein contained shall form a part of the final contract and are subject to changes desired by the purchaser, provided such alterations are interlined prior to the acceptance by the company of the order to purchase, and provided such alterations do not materially affect the cost of the construction of the apparatus.

The proposal for fire apparatus conforms with all Federal Department of Transportation (DOT) rules and regulations in effect at the time of bid, and with all National Fire Protection Association (NFPA) guidelines for Automotive Fire Apparatus as published at time of bid, except as modified by customer specifications. Any increased costs incurred by the first party because of future changes in or additions to said DOT or NFPA standards will be passed along to the customer as an addition to the price set forth above. Unless accepted within 30 days from date, the right is reserved to withdraw this proposition.

Respectfully Submitted,

Pierce Manufacturing Inc.


Jesse Mendez
Sales Representative

PROPOSAL FOR FURNISHING Quantum/Jerr-Dan Rotator

July 18, 2013

Kern County Fire Department
5642 Victor St.
Bakersfield, CA 93308



PERFORM LIKE NO OTHER

The undersigned is prepared to manufacture for you, upon an order being placed by you, for final acceptance by Pierce Manufacturing, Inc., at its corporate office in Appleton, Wisconsin, the apparatus and equipment herein named and for the following prices:

	Each	Extension
One (1) Pierce Quantum chassis with a Jerr-Dan 50 ton Rotator with 565 underlift	\$ 846,773.44	\$ 846,773.44
Sales Tax @ 7.500%	\$ 63,508.01	\$ 63,508.01
APPARATUS COST WITH TAX	\$ 910,281.45	\$ 910,281.45
Performance Bond Not Required	0.00	\$ -
California Tire Fee	\$ 17.50	\$ 17.50
TOTAL PURCHASE PRICE	\$ 910,298.95	\$ 910,298.95

PLEASE NOTE THE FOLLOWING ABOUT THIS QUOTATION:

Payment options are available and are included under separate cover. One of these options may save your department a significant amount of money!

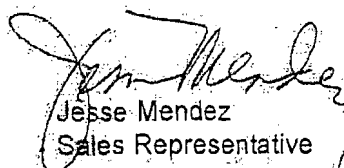
Said apparatus and equipment are to be built and shipped in accordance with the specifications hereto attached, delays due to strikes, war or international conflict, failures to obtain chassis, materials, or other causes beyond our control not preventing, within about 300-330 **CALENDAR DAYS** after receipt of this order and the acceptance thereof at our office in Appleton, Wisconsin, and to be delivered to you at Bakersfield, CA 93308

The specifications herein contained shall form a part of the final contract and are subject to changes desired by the purchaser, provided such alterations are interlined prior to the acceptance by the company of the order to purchase, and provided such alterations do not materially affect the cost of the construction of the apparatus.

The proposal for fire apparatus conforms with all Federal Department of Transportation (DOT) rules and regulations in effect at the time of bid, and with all National Fire Protection Association (NFPA) guidelines for Automotive Fire Apparatus as published at time of bid, except as modified by customer specifications. Any increased costs incurred by the first party because of future changes in or additions to said DOT or NFPA standards will be passed along to the customer as an addition to the price set forth above. Unless accepted within 30 days from date, the right is reserved to withdraw this proposition.

Respectfully Submitted,

Pierce Manufacturing Inc.


Jesse Mendez
Sales Representative



267 East Airway Blvd
Livermore, CA 94551
Phone: 925-449-7210
Fax: 925-449-7201

To:
Aaron Duncan
Kern County Fire Dept
661-322-7243
aduncan@co.kern.ca.us

Date: 7/18/2013

Quotation Valid for 60 Days.

RE: MSA Gas Monitoring Equipment

ITEM	QTY	DESCRIPTION	PRICE	AMOUNT
1	10	MSA Altair 5X Gas Monitor LEL,O2,CO,H2S, Ammonia Li-Ion Rechargeable Battery Pack 1ft Probe, Data Logging, Standard Packaging. P/N A-ALT5X-A-L-K-D-1-0-0-C-0-2-0	\$2,333.00	\$23,330.00
2	10	34 Liter Ammonia Calibration Gas 711078	\$341.10	\$3,411.00
3	10	Demand Flow Regulator For Ammonia Gas 10034391	\$374.40	\$3,744.00
4	10	34 Liter Quad Blend Calibration Gas 10048280	\$228.60	\$2,286.00
5	10	Demand Flow Regulator 710288	\$374.40	\$3,744.00
Subtotal				\$36,515.00
Sales Tax 7.50%				\$2,738.63
Shipping & Handling				\$60.00
Total				\$39,313.63

Prices do not include shipping/handling charges or sales tax unless specified.

Quotation prices are valid for 60 days. Call if past expiration date.

Thank you for the opportunity to submit this quotation. If you have any questions please give us a call.

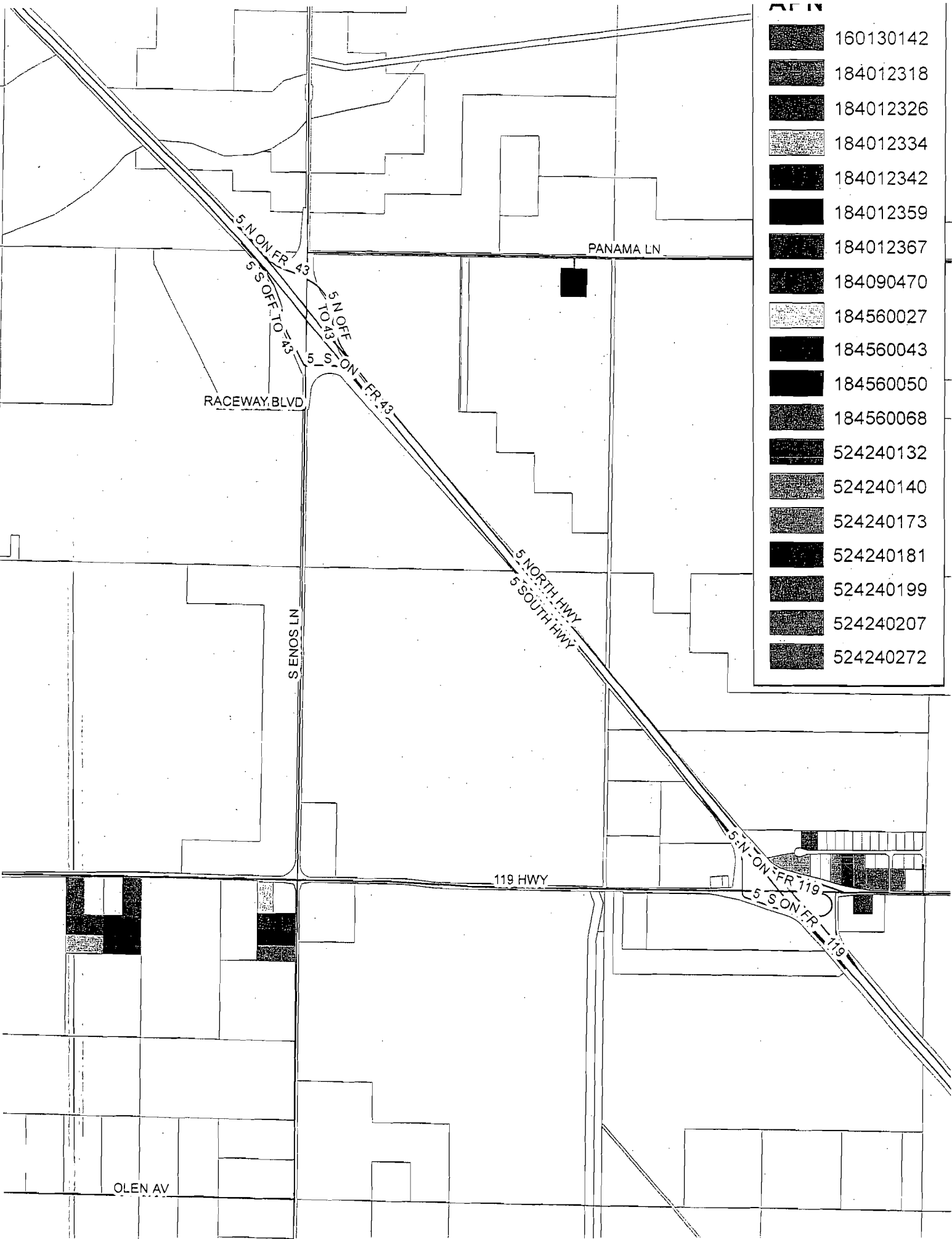
Sincerely,
Keith Hodak
17451 Bastanchury Road Suite 201 44B

APN9	APN LABEL	ROLL TYPE	USE CODE	TRA NO	OWNER	ACRES	CARE OF	LAND VAL	STNUM BILL	STNAM BILL	STSUF BILL	CITY BILL	STATE BILL	ZIPCD BILL	STNAM SITE	STSUF SIT	CITY SITE
160130142	160-130-14	1	4300	061005	SAN JOAQUIN FACILITIES MGMT INC	5.12000	SAN JOAQUIN FACILITIES MGMT	\$45,648.00	4520	CALIFORNIA	AV	BAKERSFIELD	CA	933091190			
184012318	184-012-31	1	3000	135018	SAN JON LAND & CATTLE CO	5.18000		\$178,500.00		P O BOX 80593		BAKERSFIELD	CA	93380	BV LAKE	CT	KERN COUNTY
184012326	184-012-32	1	4000	135018	KERR KENNETH E & LAURA J	4.57000		\$5,271.00	23261	HIGHWAY 119		BAKERSFIELD	CA	93311	BV LAKE	CT	KERN COUNTY
184012334	184-012-33	1	4000	135018	KERR KENNETH E & LAURA J	4.71000		\$5,432.00	23261	HIGHWAY 119		BAKERSFIELD	CA	93311	BV LAKE	CT	KERN COUNTY
184012342	184-012-34	1	4000	135018	KERR KENNETH E & LAURA J	4.71000		\$5,432.00	23261	HIGHWAY 119		BAKERSFIELD	CA	93311	BV LAKE	CT	KERN COUNTY
184012359	184-012-35	1	4000	135018	KERR KENNETH E & LAURA J	4.57000		\$5,271.00	23261	HIGHWAY 119		BAKERSFIELD	CA	93311	BV LAKE	CT	KERN COUNTY
184012367	184-012-36	1	4000	135018	KERR KENNETH E & LAURA J	5.19000		\$5,982.00	23261	HIGHWAY 119		BAKERSFIELD	CA	93311	BV LAKE	CT	KERN COUNTY
184090470	184-090-47	1	1020	135006	S & H TAFT PROP LLC	2.50000	CHAO HENG K	\$545,000.00	20917	SOUTH	ST	TEHACHAPI	CA	93561			
184560027	184-560-02	1	0070	135018	JHAJ RUPINDER S & GURMIT K	3.34000		\$22,540.00	22643	RONNIE	CT	BAKERSFIELD	CA	933149731	TAFT	HW	BAKERSFIELD
184560043	184-560-04	1	0070	135018	JHAJ RUPINDER S	3.84000		\$25,922.00	22643	RONNIE	CT	BAKERSFIELD	CA	933149731	ENOS	LN	BAKERSFIELD
184560050	184-560-05	1	0070	135018	JHAJ RUPINDER S & GURMIT K	3.84000		\$25,922.00	22643	RONNIE	CT	BAKERSFIELD	CA	933149731	TAFT	HW	BAKERSFIELD
184560068	184-560-06	1	0070	135018	JHAJ RUPINDER S & GURMIT K	3.94000		\$26,594.00	22643	RONNIE	CT	BAKERSFIELD	CA	933149731	TAFT	HW	BAKERSFIELD
524240132	524-240-13	1	1020	061031	ERRO FAMILY TR	1.89000	ERRO EDWARD R & ROSEMARIE TRS	\$1,979.00	15811	ARABELLA	AV	BAKERSFIELD	CA	933147809			
524240140	524-240-14	1	1020	061031	ERRO FAMILY TR	3.80000	ERRO EDWARD R & ROSEMARIE TRS	\$3,982.00	15811	ARABELLA	AV	BAKERSFIELD	CA	933147809			
524240173	524-240-17	1	1020	061031	ERRO FAMILY TR	2.02000	ERRO EDWARD R & ROSEMARIE TRS	\$2,116.00	15811	ARABELLA	AV	BAKERSFIELD	CA	933147809			
524240181	524-240-18	1	1020	061031	ERRO FAMILY TR	2.40000	ERRO EDWARD R & ROSEMARIE TRS	\$2,515.00	15811	ARABELLA	AV	BAKERSFIELD	CA	933147809			
524240199	524-240-19	1	1020	061031	ERRO FAMILY TR	2.70000	ERRO EDWARD R & ROSEMARIE TRS	\$2,829.00	15811	ARABELLA	AV	BAKERSFIELD	CA	933147809			
524240207	524-240-20	1	1020	061031	ERRO FAMILY TR	3.13000	ERRO EDWARD R & ROSEMARIE TRS	\$3,281.00	15811	ARABELLA	AV	BAKERSFIELD	CA	933147809			
524240272	524-240-27	1	1010	061031	S & H TAFT PROP LLC	2.05000	CHAO HENG K	\$565,974.00	20917	SOUTH	ST	TEHACHAPI	CA	93561	119	HW	BAKERSFIELD

Average 77.705

18E-4

- 160130142
- 184012318
- 184012326
- 184012334
- 184012342
- 184012359
- 184012367
- 184090470
- 184560027
- 184560043
- 184560050
- 184560068
- 524240132
- 524240140
- 524240173
- 524240181
- 524240199
- 524240207
- 524240272



Hunt Research Corporation

7-19-13 Founded 1979

JAMES W. HUNT, President

Benny Wofford, Battalion Chief

Fire Marshal

Kern County Fire Department

Quote: Fire Protection Consulting; Hydrogen plant

Dear Chief Wofford:

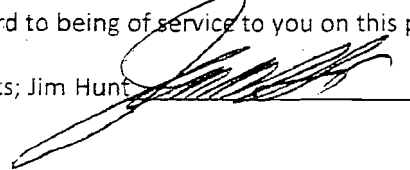
Per your request, here is my quote to provide Fire Protection Consulting and Plan Review Services to the Kern County Fire Department regarding the proposed Hydrogen Plant.

I have fifty years' experience in Fire Protection. Sixteen of these were as a Firefighter, Engineer, Captain and Battalion Chief. My last Fire Agency was Santa Barbara County Fire Department. My last assignment was that of being the officer responsible to review all new proposed development, establish Fire Department requirements, and review plans. I have Thirty four years' experience as a Fire Protection Consultant. My experience includes Fire Protection planning and Fire Code consulting for Hydrogen facilities, refineries, gas plants, pipelines. Oil tank farms, oil processing plants and petrochemical facilities. I also have extensive experience in Fire Protection Planning in the Wildland Urban Interface. My resumes are on my website at www.huntresearch.com. Click Resume button and then the general resume button.

I am presently the Fire Protection Consultant to the San Diego Rural Fire Protection District in San Diego County and have been for 12 years. The Fire Chief is Dave Nissen. Phone number 619-669-1188. E mail Dave.Nissen at Fire.Ca.Gov. I am also the Fire Protection Consultant to the Santa Barbara County Fire Department for an Asphalt refinery project. The contact is Chief Steve Oaks; 805-681-5525. Steve.Oaks@sbcfire.gov.

I propose to assist you in the Fire Protection planning and plan review of the Hydrogen facility. This would include a kick off meeting, site visit, plan and document reviews, Code research, telecons, e mails, reports, and various meetings as needed. The estimated hours, per your request, would be 20 hours per month over a four year period. The initial cost estimate would be \$25,000. This equates to 125 hours @ \$200.00/hour. I also charge 0.50/mile for travel. The round trip travel from my location to your offices is 274 miles. I would estimate the need for two initial meetings and then probably one every three months or more often if you request. So, the meeting and travel time would be included in the initial \$25,000. I will reduce my travel time charge to \$100. /hour. As you estimated about 20 hours per month, when the 125 hours are used up (in about 6 months' time) then additional time and funds may need to be allocated depending on progress of the project. Please let me know if you need more information. I look forward to being of service to you on this project.

Thanks; Jim Hunt



KERN COUNTY FIRE DEPARTMENT 2013 FIRE SEASON BILLING RATES

(Effective 7-01-13)

1. Personnel Rates -

Safety Personnel:	Hourly
(Billings based on Portal-to-Portal)	
Extra Help F/F	\$ 33.07
F/F Apprentice	\$ 21.80
Fire Fighter	\$ 35.58
Engineer	\$ 47.83
Captain	\$ 56.28
Captain Helitack	\$ 79.74
FHES	\$ 51.29
Battalion Chief	\$ 69.58
Supervising FHES	\$ 92.76
Fire Aircraft Pilot	\$ 79.74

Safety Management Personnel

(Billings based on Portal-to-Portal-S/T Rate)	
Deputy Chief - C	\$ 75.77
Fire Chief - C	\$ 92.34

40 Hr. General Personnel:

(Billings based on Hours Worked)	Hourly	OT
Accountant III	\$ 68.85	\$ 57.96
Administrative Coordinator	\$ 56.68	\$ 47.72
Administrative Services Officer	\$ 81.88	\$ 43.68
Aircraft Mechanic	\$ 55.17	\$ 46.44
Auto Parts Storekeeper I/II	\$ 34.05	\$ 28.67
Building Svc Wkr I/II/III	\$ 30.21	\$ 25.43
Building Plans Tech	\$ 50.60	\$ 42.60
ECC Manager	\$ 82.66	\$ 44.09
Equip. Maint. Sup't	\$ 76.81	\$ 64.66
Fire Dispatcher I	\$ 41.77	\$ 35.16
Fire Dispatcher II	\$ 52.66	\$ 44.33
Fire Equip. Mechanic	\$ 53.43	\$ 43.84
Fire Equip. Service Worker	\$ 34.75	\$ 29.25
Fire Equipment Tech.	\$ 32.99	\$ 27.77
Fiscal Support Specialist	\$ 44.73	\$ 37.65
Fiscal Support Supervisor	\$ 53.12	\$ 44.72
Fiscal Support Technician	\$ 37.32	\$ 31.42
GIS Specialist	\$ 56.56	\$ 47.61
GIS Tech I/II	\$ 45.47	\$ 38.28
Groundskeeper III	\$ 35.75	\$ 30.09
Info. Sys. Specialist II	\$ 62.47	\$ 51.26
Lt Vehicle Driver	\$ 25.76	\$ 21.69
Maintenance Worker III	\$ 31.12	\$ 26.19
Media Services Coord.	\$ 56.83	\$ 47.84
Office Services Assistant	\$ 29.57	\$ 24.90
Office Services Coordinator	\$ 47.26	\$ 39.78
Office Services Specialist	\$ 39.38	\$ 33.15
Office Services Technician	\$ 33.66	\$ 28.34
Special Projects Manager	\$ 84.37	\$ 45.00
Sr. Office Services Specialist	\$ 41.92	\$ 35.29
Sr. Info. Sys. Specialist	\$ 75.54	\$ 61.98
Storekeeper I	\$ 28.11	\$ 23.67
Structural Maint Superintendent	\$ 49.31	\$ 41.51
Supv. Aircraft Mechanic	\$ 74.41	\$ 62.64
Supv. Fire Dispatcher	\$ 65.53	\$ 55.17
Supv. Heavy Equip. Mechanic	\$ 68.99	\$ 56.60
Sys. Analyst I/II	\$ 79.02	\$ 64.83
Technology Services Manager	\$ 97.99	\$ 52.27
Video Services Tech. I	\$ 27.89	\$ 23.48

2. Equipment Rates - billed HOURLY, or DAILY PLUS MILEAGE.

APPARATUS (CFAA Rates)	Hourly	Daily (FOR)	Per Mile
Engine - Type 1	\$ 90.00		
Engine - Type 2	\$ 90.00		
Engine - Type 3	\$ 70.00		
Engine - Type 6	\$ 70.00		
VEHICLES			
Sedan		\$ 47.00	
SUV		\$ 96.00	
Pickup 1/2 ton 4X4, Ext. Cab		\$ 86.00	
Pickup 3/4 ton 2X4		\$ 96.00	
Pickup, 1 Ton 4x4		\$ 96.00	
Crew Superintendent Vehicle		\$ 86.00	
Pickup, 6 Passenger (FEPP)		\$ -	\$ 0.81
Van, 6 Passenger		\$ 109.00	
Van, 12 Passenger		\$ 109.00	
Box Van		\$ 16.04	\$ 0.81
MCI (FEPP) Bus		\$ -	\$ 0.81
GIS Unit		\$ -	\$ 0.81
PIO Unit (FEPP)		\$ -	\$ 0.81
MCV (RV-FEPP)		\$ -	\$ 0.81
Refer (FEPP)		\$ -	\$ 0.81
Crew Carrying Vehicle		\$ 46.97	\$ 1.35
Small CCV		\$ 43.05	\$ 0.73
Helitack Truck		\$ 26.48	\$ 1.35
Helitack Truck (FEPP)		\$ -	\$ 1.35
Stakeside Truck		\$ 14.27	\$ 0.81
Private Owned Vehicle (POV)			
HEAVY EQUIPMENT			
Tractor, 2 axle		\$ 9.59	\$ 1.35
Tractor, 3 axle		\$ 18.22	\$ 1.35
Transport, 3S2 Combo		\$ 24.66	\$ 1.35
Dozer Tender		\$ 23.48	\$ 0.81
Fuel Tender, 3500 gal., Jet A		\$ -	\$ 3.72
Fuel Tender, Diesel & Gas		\$ 54.21	\$ 1.35
Fuel Tender, 100 gal. Diesel (FEPP)		\$ -	\$ 1.35
Water Tender	\$ 31.00	\$ -	\$ -
Mechanic Service Truck		\$ 21.92	\$ 1.35
Dump Truck (FEPP)		\$ -	\$ 1.35
Hazmat Van	\$ 83.57	\$ -	\$ 1.35
Dozer, D5G	\$ 80.00		
Dozer D6D	\$ 80.00		
Dozer D7G (FEPP)	\$ 40.00		
Motor Grader, 130G (FEPP)	\$ 40.00		
Backhoe	\$ 23.50		
Generator Trailer	\$ 40.50		
Forklift, Large	\$ 17.00		
Forklift, Medium	\$ 11.75		
Terra Torch (FEPP)	\$ 24.00		
Terra/Heli-Torch Mixing Unit (FEPP)	\$ 24.00		
Brush Mulcher	\$ 57.02		

Current Govt Rate

HECA Mitigation- Annual training.

Training costs for 8 hours annual training for three shifts of the first alarm stations, the hazardous materials team, heavy rescue, and the battalion chiefs.

Engine 21- (1) Capt, (1) Eng, (1) FF
 Truck 21- (1) Capt, (1) Eng, (1) FF
 Engine 25- (1) Capt, (1) Eng, (1) FF
 Engine 53- (1) Capt, (3) Eng, (1) FF
 Rescue 52- (1) Capt, (1) Eng, (1) FF
 Haz Mat 66- (1) Capt, (2) Eng, (1) FF
 Battalion 2
 Battalion 4

#	Position	Hourly Rate	Hourly Total	8 Hours
16	Captain	56.28	900.48	7203.84
21	Engineer	47.83	1004.43	8035.44
16	Firefighter	35.58	558.28	4466.24
6	Battalion Chief	69.58	417.48	3339.84
TOTAL				23,045.36

updated 2011-2012

Fire Engineer-C

F Step

OT

Base

3138.6600

28.0238

Holiday

154.6790

fitness

125.5464

Flsa

87.18

Uniform

34.4973

3540.5615

28.0238

OASDI

270.8530

2.1438

Retirement

2476.2687

Unemploy.

6.2208

Wkrs Comp

284.4877

Medical

450.0000

Retiree Med.

25.0000

Benefits

3512.8301

2.1438

Total Benefits

3789.1851

Benefits & Salary

7053.3915

30.1676 @1.5

45.25135031

Hourly with Benefits

62.9767

Hourly without Benefits

31.6122

28.0238

Benefits Per Hour

31.3646

2.1438

% benefit

99.21675121

ANNUAL WITH BENEFITS

\$184,015.93

\$184,015.93

Annual without Benefits

\$92,369.71

updated 2011-2012

Fire Engineer-CA

F Step

OT

Base

3299.1700 41.2396

AV Pay

82.4793

Fitness

131.9668

Flsa

0.00

Uniform

34.4973

3548.1133	41.2396
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OASDI

271.4307 3.1548

Retirement

2481.5505

Unemploy.

6.2340

Wkrs Comp

285.0945

Medical

450.0000

Retiree Med.

25.0000

Benefits

3519.3096	3.1548
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Total Benefits

3636.2862

Benefits & Salary

7067.4230	44.3945
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Hourly with Benefits

88.3428	44.3945 @1.5	66.59168447
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Hourly without Benefits

41.2396 41.2396

Benefits Per Hour

47.1032 3.1548

99.18819644

ANNUAL WITH BENEFITS

\$184,382.00

\$184,382.00

**California Energy
Commission
Staff Status Report
April 30, 2013**

Memorandum

Date: April 30, 2013
Telephone: (916) 651-8853
File: 08-AFC-8A

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

From: California Energy Commission - Robert Worl,
1516 Ninth Street Project Manager
Sacramento, CA 95814-5512

California Energy Commission

**DOCKETED
08-AFC-8A**

TN # 70544

APR. 30 2013

Subject: **HYDROGEN ENERGY CALIFORNIA, AMENDED (08-AFC-8A)
STAFF STATUS REPORT NUMBER 7**

Staff hereby files Status Report number 7 for the Hydrogen Energy California, Amended AFC (HECA). Energy Commission staff and the U.S. Department of Energy (DOE) are jointly conducting the review of the proposed HECA project and intend to issue joint documents. Staff is evaluating the project subject to both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

Staff is filing this status report to note that a revised time frame will be necessary for staff to complete its work to publish the Preliminary Staff Assessment/Draft Environmental Impact Statement (PSA/DEIS). As indicated in Status Report Number 6, it is critical for DOE's purposes that this Preliminary Staff Assessment and Draft Environmental Impact Statement be as complete and comprehensive as possible. Staff continues to work to meet these standards, but late receipt of important information and the need for thorough review necessitates a later delivery date for the PSA/DEIS joint document than originally planned. Additionally, the requirements for production of a complex document are being coordinated between the Energy Commission staff and the Department of Energy. Staff and DOE now expect to be able to publish the joint PSA/DEIS by May 17, 2013.

**PROOF OF SERVICE (REVISED 3/04/2013) FILED WITH
ORIGINAL IN SACRAMENTO ON 4/30/2013
DLS**



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

**AMENDED APPLICATION FOR CERTIFICATION
FOR THE HYDROGEN ENERGY
CALIFORNIA PROJECT**

Docket No. 08-AFC-08A
PROOF OF SERVICE
(Revised 3/4/13)

SERVICE LIST:

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Kern-Kaweah Chapter
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Staff Counsel
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*Indicates Change

**ENERGY COMMISSION –
PUBLIC ADVISER**

Blake Roberts
Assistant Public Adviser
publicadviser@energy.ca.gov

COMMISSION DOCKET UNIT
CALIFORNIA ENERGY
COMMISSION – DOCKET UNIT
Attn: Docket No. 08-AFC-08A
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.ca.gov

**OTHER ENERGY COMMISSION
PARTICIPANTS (LISTED FOR
CONVENIENCE ONLY):**

***After docketing, the Docket Unit
will provide a copy to the persons
listed below. Do not send copies of
documents to these persons
unless specifically directed to do
so.***

KAREN DOUGLAS
Commissioner and Presiding Member

ANDREW McALLISTER
Commissioner and Associate Member

Raoul Renaud
Hearing Adviser

Galen Lemei
Adviser to Presiding Member

Jennifer Nelson
Adviser to Presiding Member

*Hazel Miranda
Adviser to Associate Member

David Hungerford
Adviser to Associate Member

Patrick Saxton
Adviser to Associate Member

Eileen Allen
Commissioners' Technical
Adviser for Facility Siting

DECLARATION OF SERVICE

I, Diane L. Scott, declare that on April 30, 2013, I served and filed copies of the attached **HYDROGEN ENERGY CALIFORNIA, AMENDED (08-AFC-8A) STAFF STATUS REPORT NUMBER 7**, dated April 30, 2013. This document is accompanied by the most recent Proof of Service, which I copied from the web page for this project at: http://www.energy.ca.gov/sitingcases/hydrogen_energy/.

The document has been sent to the other persons on the Service List above in the following manner:

(Check one)

For service to all other parties and filing with the Docket Unit at the Energy Commission:

 X I e-mailed the document to all e-mail addresses on the Service List above and personally delivered it or deposited it in the US mail with first class postage to those persons noted above as "hard copy required";
OR

 Instead of e-mailing the document, I personally delivered it or deposited it in the US mail with first class postage to all of the persons on the Service List for whom a mailing address is given.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I am over the age of 18 years.

Dated: April 30, 2013

Diane L. Scott
Diane L. Scott, Project Assistant
Siting, Transmission and Environmental Protection Division

**California Energy
Commission
Staff Status Report
June 17, 2013**

Memorandum

Date: June 17, 2013
Telephone: (916) 651-8853
File: 08-AFC-8A

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

From: California Energy Commission - John Heiser, AICP, *JH*
1516 Ninth Street Project Manager
Sacramento, CA 95814-5512

California Energy Commission DOCKETED 08-AFC-8A
TN # 71286 JUN 17 2013

Subject: **HYDROGEN ENERGY CALIFORNIA, AMENDED (08-AFC-8A)**
STAFF STATUS REPORT NUMBER 8

Staff hereby files Status Report number 8 for the Hydrogen Energy California, Amended AFC (HECA). Energy Commission staff and the U.S. Department of Energy (DOE) are jointly conducting the review of the proposed HECA project and intend to issue joint documents. Staff is evaluating the project subject to both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

Staff is filing this status report to note that a revised time frame will be necessary for staff to complete its work to publish the Preliminary Staff Assessment/Draft Environmental Impact Statement (PSA/DEIS). As indicated in Status Report Number 7, it is critical for DOE's purposes that this Preliminary Staff Assessment and Draft Environmental Impact Statement be as complete and comprehensive as possible. Staff continues to work to meet these standards. Additionally, the requirements for production of a complex document are being coordinated between the Energy Commission staff and the Department of Energy.

DOE has completed its review of all draft PSA/DEIS technical areas and staff has addressed DOE's comments. DOE is now conducting a final review of the document and has completed its final review of 17 of the 22 sections. Energy Commission staff is hopeful to receive the final sections from DOE the week of June 17, 2013. Both DOE and Energy Commission staff plan to do a final page – turn review of the completed PSA/DEIS the week of June 24, 2013 with the goal of publishing by June 28, 2013.

**PROOF OF SERVICE [REVISED 5/10/2013] FILED WITH
ORIGINAL IN SACRAMENTO ON 6/17/2013
DLS**



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

**AMENDED APPLICATION FOR CERTIFICATION
FOR THE HYDROGEN ENERGY
CALIFORNIA PROJECT**

**Docket No. 08-AFC-08A
PROOF OF SERVICE
(Revised 05/10/2013)**

SERVICE LIST:

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Tiffany Rau
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Hydrogen Energy California, LLC
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Major Environmental Programs
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Office of Governmental and
Environmental Relations
(Department of Oil, Gas &
Geothermal Resources)
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mami.weber@conservation.ca.gov

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Cardozo
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HECA Neighbors
c/o Chris Romanini
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*Indicates Change

ENERGY COMMISSION STAFF

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John Heiser
Associate Project Manager
john.heiser@energy.ca.gov

Lisa DeCarlo
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lisa.decarlo@energy.ca.gov

**ENERGY COMMISSION –
PUBLIC ADVISER**

Blake Roberts
Assistant Public Adviser
publicadviser@energy.ca.gov

COMMISSION DOCKET UNIT

CALIFORNIA ENERGY
COMMISSION – DOCKET UNIT
Attn: Docket No. 08-AFC-08A
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Jennifer Nelson
Adviser to Presiding Member

Hazel Miranda
Adviser to Associate Member

David Hungerford
Adviser to Associate Member

Patrick Saxton
Adviser to Associate Member

Eileen Allen
Commissioners' Technical
Adviser for Facility Siting

DECLARATION OF SERVICE

I, Diane L. Scott, declare that on June 17, 2013, I served and filed copies of the attached **HYDROGEN ENERGY CALIFORNIA, AMENDED (08-AFC-8A), STAFF STATUS REPORT NUMBER 8**, dated June 17, 2013. This document is accompanied by the most recent Proof of Service, which I copied from the web page for this project at: http://www.energy.ca.gov/sitingcases/hydrogen_energy/.

The document has been sent to the other persons on the Service List above in the following manner:

(Check one)

For service to all other parties and filing with the Docket Unit at the Energy Commission:

 X I e-mailed the document to all e-mail addresses on the Service List above and personally delivered it or deposited it in the U.S. mail with first class postage to those persons noted above as "hard copy required";
OR

 Instead of e-mailing the document, I personally delivered it or deposited it in the U.S. mail with first class postage to all of the persons on the Service List for whom a mailing address is given.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I am over the age of 18 years.

Dated: June 17, 2013



Diane L. Scott, Project Assistant
California Energy Commission
Siting, Transmission and Environmental Protection Division

Application and Support Documents

**PETITION FOR CANCELLATION
OF A LAND USE CONTRACT
OR LAND USE AGREEMENT**

CALIFORNIA LAND CONSERVATION ACT

Date: December 20, 2012

I, See attached Exhibit "A"

owner of the property described below, petition the Kern County Board of Supervisors for cancellation of all or a portion of an Agricultural Preserve Land Use Contract or Land Use Agreement, pursuant to Chapter 7, Article 5, Sections 51280 through 51286 of the Government Code, State of California, and pursuant to Kern County Board of Supervisors Resolution No. 72-69, dated January 25, 1972.

Signature (please have notarized)

Mailing Address

Name of Previous Property Owner (if known)

DESCRIPTION OF PROPERTY INCLUDED IN THE CANCELLATION REQUEST:

Assessor's Parcel Number(s):

159-040-02

LEGAL DESCRIPTION (include plot plan or map of the area):

See attached Exhibit "B"

REASONS FOR WHICH THE CANCELLATION IS REQUESTED (refer to Section 51282, Government Code, State of California, as set forth on Page 2):

See attached Exhibit "C"

NOTE: Return this Petition and a filing fee of \$990 (which is nonrefundable) to:

**KERN COUNTY PLANNING DEPARTMENT
2700 "M" STREET, SUITE 100
BAKERSFIELD, CA 93301**

***** FOR OFFICE USE ONLY *****

Name _____ APN _____ Map # _____ S.D. # _____
Last First Middle

Contract Executed by _____

Recordation Date _____ Book _____ Pages _____

Fee _____ Receipt # _____ Date _____ Rec'd by _____

Section 51282, Government Code, State of California

Petition for Cancellation of Contract: Grounds

- (a) The landowner may petition the Board of Supervisors for cancellation of any Contract as to all or any part of the subject land. The Board may grant tentative approval for cancellation of a Contract only if it makes one of the following findings:
- (1) That the cancellation is consistent with the purposes of Chapter 7; or
 - (2) That cancellation is in the public interest.
- (b) For the purposes of paragraph (1) of subdivision (a), cancellation of a Contract shall be consistent with the purposes of Chapter 7 only if the Board makes all of the following findings:
- (1) That the cancellation is for land on which a notice of nonrenewal has been served pursuant to Section 51245.
 - (2) That cancellation is not likely to result in the removal of adjacent lands from agricultural use.
 - (3) That cancellation is for an alternative use which is consistent with the applicable provisions of the County General Plan.
 - (4) That cancellation will not result in discontinuous patterns of urban development.
 - (5) That there is no proximate non-Contracted land which is both available and suitable for the use to which it is proposed the Contracted land be put, or, that development of the Contracted land would provide more contiguous patterns of urban development than development of proximate non-Contracted land.
- (c) For purposes of paragraph (2) of subdivision (a), cancellation of a Contract shall be in the public interest only if the Board makes the following findings:
- (1) That other public concerns substantially outweigh the objectives of Chapter 7; and
 - (2) That there is no proximate non-Contracted land which is both available and suitable for the use to which it is proposed the Contracted land be put, or, that development of the Contracted land would provide more contiguous patterns of urban development than development of proximate non-Contracted land.
- (d) For purposes of subdivision (a), the uneconomic character of the existing agricultural use shall not by itself be sufficient reason for cancellation of the Contract. The uneconomic character of the existing use may be considered only if there is no other reasonable or comparable agricultural use to which the land may be put.
- (e) The landowner's petition shall be accompanied by a proposal for a specified alternative use of the land. The proposal for the alternative use shall list those governmental agencies known by the landowner to have permit authority related to the proposed alternative use, and the provisions and requirements of Section 51283.4 shall be fully applicable thereto. The level of specificity required in a proposal for a specified alternative use shall be determined by the Board as that necessary to permit them to make the findings required.
- (f) In approving a cancellation pursuant to this section, the Board shall not be required to make any findings other than or in addition to those expressly set forth in this section and, where applicable, in Section 21081 of the Public Resources Code.

PROVIDE A STATEMENT INDICATING WHY THE PROPOSED CANCELLATION COMPLIES WITH
THE ABOVE SECTION OF THE GOVERNMENT CODE.

See attached Exhibit "D"

ACKNOWLEDEMENT

STATE OF CALIFORNIA)
COUNTY OF KERN) ss.

On this _____ day of _____, 2008, before me,
_____, Notary Public, personally appeared

_____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Exhibit "A"

I, Dane Peacock, Assistant Secretary of Hydrogen Energy International LLC, the owner of APN Nos. 159-040-02, 159-040-16 and 159-040-18, on behalf of Hydrogen Energy International LLC, petition the Kern County Board of Supervisors for cancellation of all or a portion of an Agricultural Preserve Land Use Contract or Land Use Agreement, pursuant to Chapter 7, Article 5, Sections 51280 through 51286 of the Government Code, State of California, and pursuant to Kern County Board of Supervisors Resolution No. 72-69, dated January 15, 1972.

Dane Peacock

Signature

12.19.2012

Date

700 Louisiana Street, 32nd Floor
Houston, TX 77002

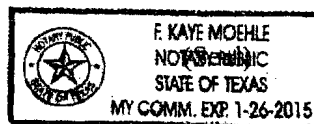
STATE OF TEXAS §
 §
COUNTY OF HARRIS §

On December 19, 2012 before me, Kaye Moehle, Notary Public, personally appeared Dane Peacock, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Kaye Moehle
Notary Public



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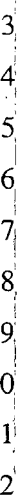
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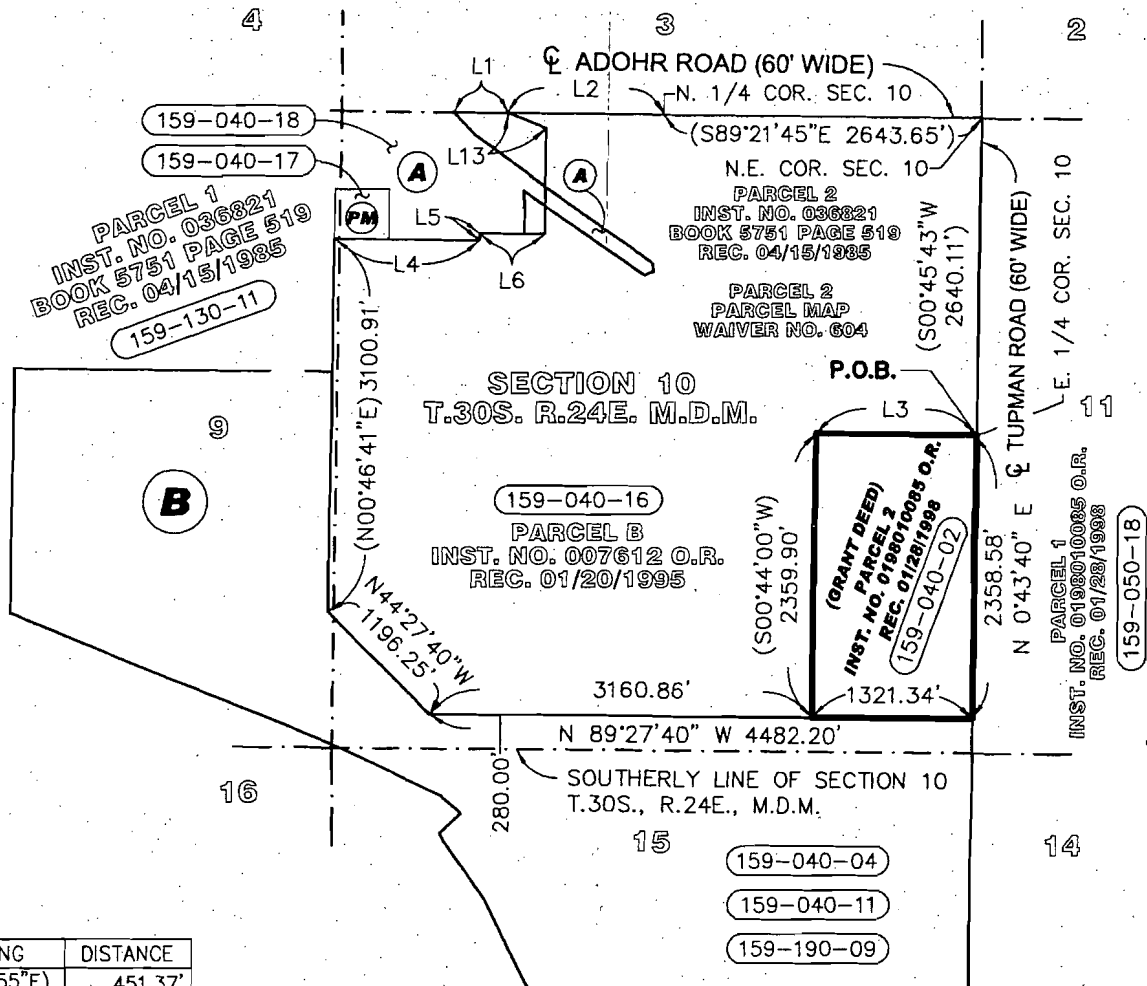
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LAND AREA

71.558 ACRES

LINE TABLE

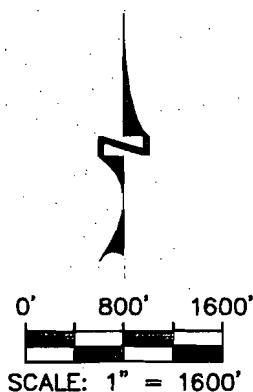
LINE	BEARING	DISTANCE
L1	(S89°21'55"E)	451.37'
L2	(S89°21'55"E)	1263.39'
L3	(N89°24'15"W)	(1321.11')
L4	(S89°14'01"E)	(1205.04')
L5	(N00°23'43"W)	(56.24')
L6	(S89°51'55"E)	539.75'

LEGEND

- (A) PARCEL A OF INST. NO. 007612 O.R., REC. 01/20/1995
- (B) PARCEL B OF INST. NO. 007612 O.R., REC. 01/20/1995
- (PM) PARCEL MAP NO. 10341, P.M.B. 49/7-8
- ⑩ SECTIONAL NUMBER OF T30S, R24E, M.D.M.
- (159-040-02) ASSESSORS PARCEL NUMBER
- LAND USE BOUNDARY LINE
- PROPERTY LINE
- - - - - SECTION LINE

RECORD REFERENCE

() INDICATES RECORD DATA PER CERTIFICATE OF COMPLIANCE, REC. 01/20/1995 AS INST. NO. 007612 O.R.



Section 10, T30S, R24E, Mount Diablo Meridian
County of Kern, State of California

D. Woolley & Associates
2832 Walnut Avenue, Suite A
Tustin, California 92780
(714) 734-8462 www.dwoolley.com

HECA PROJECT

**EXHIBIT "B",
ATTACHMENT "A"**
FOR CANCELLATION OF
A LAND USE CONTRACT

Scale: 1' = 1600'
Date: 11/28/12
Drafted: GFL
Reviewed: DEW
Task No. DWA-9256
Sheet: 1 of 1

Exhibit "C"

REASONS FOR WHICH THE PROPOSED CANCELLATION IS BEING REQUESTED (GOV. CODE, § 51282)

Hydrogen Energy California, LLC (HECA LLC) is requesting cancellation of the Williamson Act contract restrictions over a 71.558-acre parcel (APN No. 159-040-02) in order to facilitate construction of Hydrogen Energy California, an Integrated Gasification Combined-Cycle (IGCC) electrical power generating facility (referred to herein as HECA or the Project) on a 453-acre site (Project Site). The Project Site is currently owned by Hydrogen Energy International, LLC, a Delaware limited liability company (Owner). HECA LLC has an option to purchase the Project Site from the Owner along with 653 additional acres adjacent to the Project Site (Controlled Area).

I. Project Description

The Project will be a state-of-the-art facility that will produce electricity and other useful products. The Project will gasify a coal and petroleum coke (petcoke) fuel blend to produce synthesis gas (syngas). Syngas produced via gasification will be purified to hydrogen-rich fuel, which will be used to generate low-carbon baseload electricity in a Combined Cycle Power Block, low-carbon nitrogen-based fertilizer in an integrated Manufacturing Complex, and carbon dioxide (CO₂) for use in enhanced oil recovery (EOR).

The power and fertilizer produced by the Project have a lower carbon footprint than power and similar products traditionally produced from fossil fuels. This low-carbon footprint is accomplished by capturing approximately 90 percent of the CO₂ in the syngas and transporting the CO₂ off-site for use in EOR, which will result in sequestration (storage) of the CO₂ in a secure geologic formation. CO₂ will be transported for use in EOR in the adjacent Elk Hills Oil Field (EHOF), which is owned and operated by Occidental of Elk Hills, Inc. (OEHI). The OEHI EOR Project will be separately permitted by OEHI through the Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR).

Major components located on the Project Site will include:

◆ Solids handling, gasification, and gas treatment:

- Feedstock delivery, handling, and storage
- Gasification Unit
- Sour Shift/LTGC/Mercury Removal units
- AGR Unit
- SRU/Tail Gas Compression
- CO₂ compression

◆ Power generation:

- Combined Cycle Power Block equipment
- Electrical equipment and systems

◆ **Manufacturing Complex:**

- PSA Unit
- Ammonia Synthesis Unit
- CO₂ compression and purification (for urea production)
- Urea Unit
- Urea Pastillation Unit
- UAN Complex (includes Nitric Acid Unit, Ammonium Nitrate Unit, and Urea Ammonium Nitrate Unit)

◆ **Supporting process systems:**

- Natural gas fuel systems
- ASU
- Sour water treatment
- Wastewater treatment for process and plant wastewater streams
- Raw water treatment plant for process water
- Other plant systems (i.e., heat rejection systems, auxiliary boiler, flares, emergency engines, fire protection, plant instrumentation, and air emission monitoring systems)

Highlights of the Project are as follows:

- ◆ The feedstocks will be gasified to produce syngas that will be further processed and cleaned in the Gasification Block to produce hydrogen-rich fuel.
- ◆ Approximately 90 percent of the carbon in the raw syngas will be captured in a high-purity CO₂ stream during steady-state operation.
- ◆ High purity CO₂ will be compressed and transported by pipeline to the EHOFF for injection into deep underground hydrocarbon reservoirs for CO₂ EOR.
- ◆ The Combined Cycle Power Block will generate approximately 405 megawatts (MW) of gross power and will provide a nominal 300 MW of low-carbon baseload electricity to the grid during operations, feeding major load sources.
- ◆ An integrated Manufacturing Complex will produce approximately 1 million tons per year of low-carbon fertilizer to be used in agricultural applications.
- ◆ The power and fertilizer produced by the Project will have a significantly lower carbon emission profile relative to similar power and products traditionally generated from fossil fuels, such as natural gas or coal. Natural gas is the fuel source predominantly used for power generation in California.
- ◆ The process water source for the Project will be brackish groundwater from the Buena Vista Water Storage District (BVWSD) Brackish Groundwater Remediation Project. The water will be supplied via an approximately 15-mile pipeline from northwest of the Project Site by BVWSD and will be treated on site to meet Project specifications. Potable water will be supplied by West Kern Water District (WKWD) for drinking and sanitary purposes.
- ◆ There will be no direct surface water discharge of industrial wastewater or storm water. Process wastewater will be treated on site and recycled for reuse within the Project. Other wastewaters (e.g., from cooling tower blowdown and the wastewater treatment unit) will be

collected and directed to on-site zero liquid discharge (ZLD) unit. Water recovered by the ZLD unit is recycled for reuse within the facility.

- ◆ The Project is designed with state-of-the-art emission control technology to achieve minimal air emissions through the use of Best Available Control Technology (BACT). The Project is designed to avoid flaring during steady-state operation, and to minimize flaring during startup and shut-down operations.
- ◆ Project greenhouse gas (GHG) emissions (e.g., CO₂) will be reduced through carbon capture and CO₂ EOR, which will result in sequestration.
- ◆ Promoting energy security by converting abundant and inexpensive solid fuels – coal and petcoke – to clean hydrogen fuel to produce electricity and other useful products.

III. Project History and Background

The California Energy Commission (CEC) is responsible for reviewing and approving the Project under the Warren-Alquist Act (Pub. Resources Code, §§ 25500 *et seq.*). HECA LLC submitted its initial Application for Certification (AFC) on July 31, 2008, which proposed the Project on a different site. HECA LLC subsequently decided to relocate the Project when it discovered the existence of sensitive biological resources at the original site. A Revised AFC was submitted on May 28, 2009 for a new project site, and deemed data adequate on August 26, 2009.

On June 29, 2010, the Kern County Board of Supervisors adopted Resolution 2010-168, approving the tentative cancellation of the Williamson Act contracts on approximately 491 acres, which included the 473 acres comprising the former project site boundaries, and 18 acres of perimeter land outside of the project footprint. In approving the tentative cancellation, the Board of Supervisors determined that the cancellation was in the public interest, pursuant to section 51282(a)(2) of the Government Code. The tentative cancellation was found statutorily exempt from CEQA pursuant to Public Resources Code section 21080(b)(6) and section 15271 of the CEQA Guidelines (14 Cal. Code Regs., § 15271), which exempt early actions related to thermal power plants if an environmental document covering the actions will subsequently be prepared by a regulatory agency.

A Certificate of Tentative Cancellation was recorded on July 14, 2010. Additionally, a letter from the California Department of Conservation (DOC) dated May 27, 2010 states that DOC has no objection to the approval of the cancellation application by the Kern County Board of Supervisors. The Williamson Act restrictions over the tentatively cancelled acreage continue to remain in place until the conditions set forth in the Certificate of Tentative Cancellation are satisfied, including payment of the assessed cancellation fee, and recording of the final Certificate of Cancellation.

In September 2011, SCS Energy California LLC acquired 100 percent ownership of HECA LLC and modified the Project design to ensure its economic viability and to better serve market needs, while continuing to adhere to the strictest environmental standards. One of the modifications was a change to the Project Site boundaries to include some areas previously within the Controlled Area and to exclude other areas that were previously part of the Project Site. As depicted on Exhibit "E" to this application, the current Project Site and Controlled Area are now 453 acres and 653 acres, respectively, rather than the 473 and 628 acres that were presented in the 2009 Revised AFC. On May 3, 2012 HECA LLC filed an AFC Amendment with

the CEC which describes and analyzes the changes to the Project design, and supersedes previous AFC materials.

As a portion of the new Project Site remains encumbered by Williamson Act contract restrictions, to accommodate the Project HECA LLC is submitting this petition to cancel the Williamson Act contract restrictions over an additional 71.558-acre parcel (APN No. 159-040-02) as described and depicted in Exhibit "B".

Exhibit "D"

STATEMENT INDICATING WHY THE PROPOSED CANCELLATION COMPLIES WITH GOVERNMENT CODE SECTION 51282

The proposed cancellation complies with the requirements of Government Code section 51282, which governs County approvals of cancellation requests. Specifically, the proposed cancellation is in the public interest, in accordance with Government Code section 51282(a)(2), because other public concerns substantially outweigh the objectives of the Williamson Act (Gov. Code, § 51282(c)(1)), and because there is no proximate noncontracted land which is both available and suitable for the use to which it is proposed the contracted land be put, or that development of the contracted land would provide more contiguous patterns of urban development than development of proximate noncontracted land (Gov. Code, § 51282(c)(2).)

I. The Proposed Cancellation Is In The Public Interest (Gov. Code, § 51282(a)(2))

A. Other public concerns substantially outweigh the objectives of the Williamson Act (Gov. Code, § 51282(c)(1))

The public concerns of energy supply, energy security, global climate change, water supply, hydrogen infrastructure, fertilizer supply and the economy substantially outweigh the objectives of the Williamson Act. The Project will demonstrate a first of its kind combination of proven technologies at commercial scale that can provide baseload low-carbon power that will make an essential contribution to addressing each of these public concerns and provide numerous public benefits at the local, state, regional, national, and global levels. Furthermore, the Project's production of low-carbon energy and its associated benefits may serve as a model to be implemented elsewhere in the world. As such, the finding set forth in Government Code section 51282(c)(1) is satisfied.

As described by the Department of Energy (DOE):

"The Project will be among the cleanest of any commercial solid fuel power plant built or under construction and will significantly exceed the emission reduction targets for 2020 established under the Energy Policy Act of 2005. In addition, emissions from the Project plant will be well below the California regulation requiring baseload plants to emit less greenhouse gases than comparably-sized natural gas combined cycle power plants. The CO₂ captured by the Project will enable geologic storage at a rate of approximately 3 million tons of CO₂ per year and will increase domestic oil production (DOE, 2011)."

Further, according to the DOE:

"A need exists to further develop carbon management technologies that capture and store or beneficially reuse CO₂ that would otherwise be emitted into the atmosphere from coal-based electric power generating facilities. Carbon capture and storage (CCS) technologies offer great potential for reducing CO₂ emissions and mitigating global climate change, while minimizing the economic impacts of

the solution. Once demonstrated, the technologies can be readily considered in the commercial marketplace by the electric power industry.” (DOE, 2011)

Among the many public interests the Project will advance at the local, statewide, regional, national, and global levels, are the following:

- ◆ **Supplying Low-Carbon Electricity.** The California Energy Commission (CEC) estimates that the State will need to add over 9,000 MW of capacity between 2008 and 2018 to meet demand (CEC, 2007). The Project will meet California’s increasing power demands by using hydrogen as a fuel source for electricity, thus providing a new low-carbon alternative source of energy. It will support a reliable power grid by providing baseload, dispatchable power to help back up intermittent renewable power sources, an essential component to meeting California’s greenhouse gas-reduction goals for 2020 and beyond. Specifically, the Project will provide approximately 300 MW of new, low-carbon baseload electric-generating capacity, supplying power for over 160,000 homes. The Project has been awarded federal funds by the Department of Energy.
- ◆ **Capturing Green House Gas Emissions.** The Project will achieve approximately 90 percent CO₂ capture efficiency and prevent the release of approximately 3 million tons (roughly equivalent to the carbon dioxide output of 500,000 automobiles) per year of greenhouse gases to the atmosphere by sequestering them underground. Existing conventional power plants release carbon dioxide into the atmosphere, rather than capturing and using them for enhanced oil recovery (EOR). The Project will employ state-of-the-art emission control technology to achieve near-zero sulfur emissions and avoid flaring during steady-state operations. This will help California meet its important greenhouse gas reduction targets as set forth and exemplified by AB 32¹, AB 1925², and SB 1368³. The Project is also designed to support Executive Order S-3-05, which sets a State target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050.
- ◆ **Water Supply and Quality.** The Project will help restore a local aquifer by using brackish water that currently threatens local agricultural uses. The Project’s use of brackish water is expected to improve local lands for agricultural use by physically lowering the brackish water table and allowing fresh water to penetrate agricultural lands. In doing so, the Project will also conserve fresh water sources by using brackish groundwater for Project water needs. The Project will also eliminate direct surface water discharge of industrial waste water and storm water run off through use of Zero Liquid Discharge (ZLD) technology.

¹ Assembly Bill 32 (AB 32) was passed to reduce greenhouse gas emissions to 1990 levels by 2020. AB 32 requires the California Air Resources Board (“CARB”) to assign emissions targets to each sector in the California economy, and to develop regulatory and market methods to ensure compliance. The California Public Utilities Commission (“CPUC”) and CEC have developed specific proposals to CARB for implementing AB 32 in the electricity sector, including a cap-and-trade program.

² Assembly Bill 1925 (AB 1925), a law passed in 2006, required the CEC to provide a report to the California legislature by November 2007 “with recommendations for how the State can develop parameters to accelerate the adoption of cost-effective geologic carbon sequestration strategies.” This type of legislation clearly demonstrates California’s commitment to supporting and encouraging in-state carbon capture and sequestration technology.

³ Senate Bill 1368 (SB 1368), passed in 2006, establishes an Emission Performance Standard for greenhouse gas emissions from power plants used to serve baseload power in California, which was set by the CPUC at 1,100 pounds of carbon dioxide per megawatt hour of electricity. The intended effect of SB 1368 is to encourage low-carbon power production. The Project’s greenhouse gas emissions will be below this threshold requirement.

- ◆ **Protecting Energy Security and Domestic Energy Supplies.** The Project will conserve and reduce stress on domestic energy supplies by using petcoke, an energy source that is currently exported overseas for fuel. Petcoke is a by-product from the oil refining process and is abundantly available. The Project will use petcoke in a new and clean manner by converting it to hydrogen, thus increasing energy diversity at a time when California and the nation are largely dependent on natural gas for power generation. In addition, the Project will produce additional energy from existing California oil fields by injecting CO₂ for EOR, helping California extract millions of barrels of oil each year. Conservation of the domestic energy supply will enhance energy security while at the same time reducing the carbon footprint of California's energy supply that would otherwise be increased by oil imports produced in foreign countries and transported across the ocean.
- ◆ **Promoting Hydrogen Infrastructure.** The Project will increase the supply of hydrogen available to support the State's goal of energy independence as expressed in California Executive Order S-7-04, which mandates the development of a hydrogen infrastructure and hydrogen transportation in California. The Project is poised to supplement the quantities of hydrogen necessary for these future energy technologies, and support California's role as a world leader in clean energy.
- ◆ **Producing Local Low-Cost, Low Carbon Footprint Fertilizer.** The Project will help reduce the carbon footprint of California's agricultural market by supplying an in-state source of low-carbon fertilizer thereby substantially lowering foreign imports of fertilizer to the United States. Currently, the vast majority of all California nitrogen-based fertilizer feedstocks are imported into the State. Due to these transportation costs, California nitrogen-based fertilizers are priced 20 to 30 percent higher than in other United States regions. Therefore, the presence of a nitrogen-based fertilizer producer is likely to benefit California consumers through increased competition and the lowering of transportation costs.
- ◆ **Stimulating the Local and California Economy.** The Project will boost the local and California economy with an estimated 2,500 jobs associated with construction and approximately 200 full-time permanent positions associated with Project operations. In addition, estimated indirect and induced effects of construction that will occur within Kern County could result in more than 4,000 jobs. This will represent a long-term economic benefit to Kern County.

Given these significant public concerns that will be advanced by the Project through its numerous public benefits, substantial evidence supports the finding set forth in Government Code section 51282(c)(1) that "other public concerns substantially outweigh the objects of the Williamson Act."

B. There is no proximate noncontracted land which is both available and suitable for the use to which it is proposed the contracted land be put (Gov. Code, § 51282(c)(2))

The Project Site is located in a sparsely populated agricultural area near the Elk Hills Oil Field. The Project Site is contiguous land bounded by Adohr Road to the north, Tupman Road to the east, an irrigation canal to the south, and the Dairy Road right-of-way to the west. There are only a few homes within a mile of the Project Site and the unincorporated community of Tupman is 1.5 miles from the site. Primary access will be from Interstate 5, to Stockdale Highway west, to Dairy Road then south to Adohr Road. The topography of the Project Site is flat. The geology at the Project Site has been determined suitable for power plant construction.

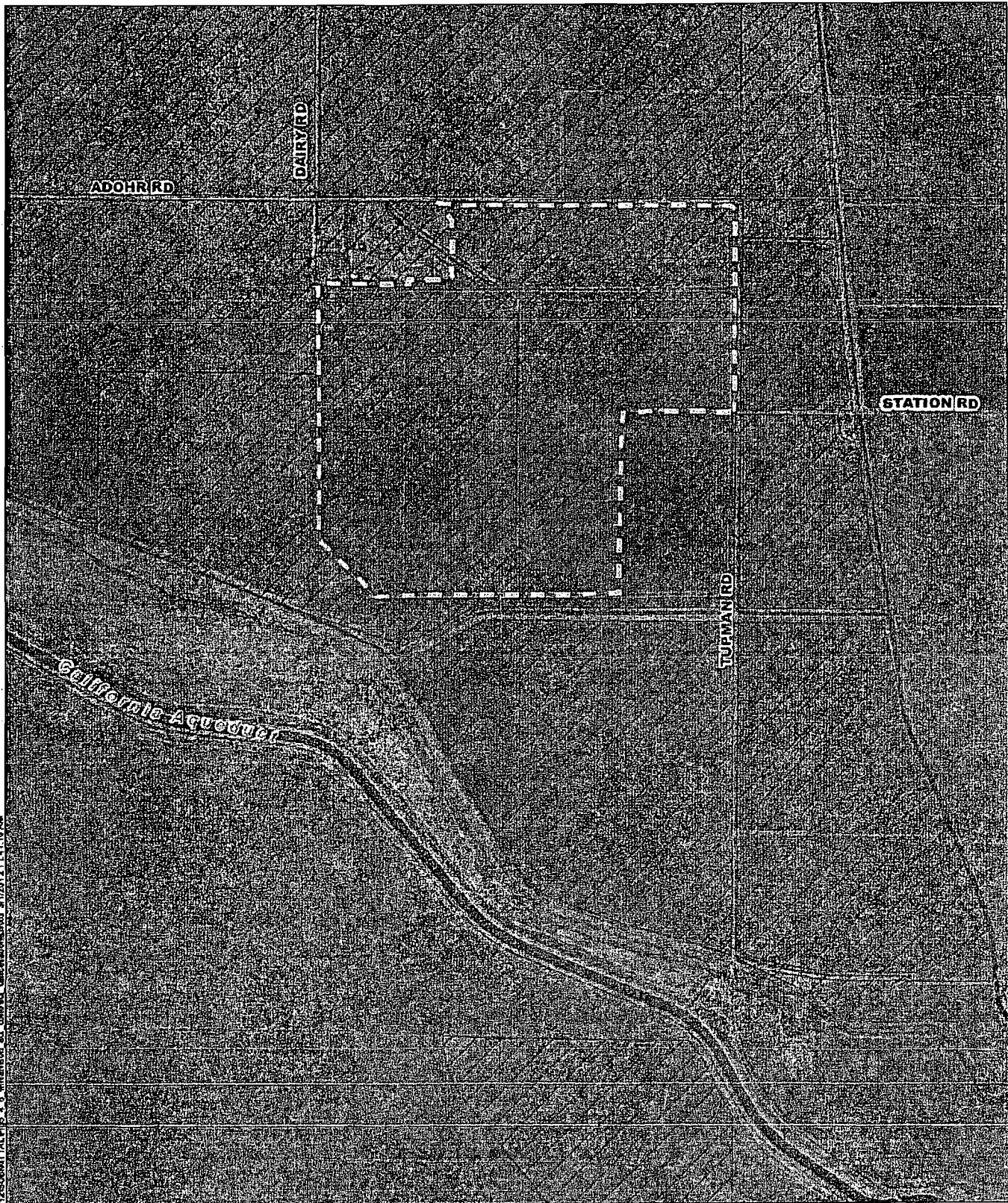
The Project Site was selected based upon, among other things, the available land, proximity to a carbon dioxide storage reservoir, and the existing natural gas transportation, electric transmission, and brackish groundwater supply infrastructure that could support the proposed 300 MW of baseload low-carbon power generation. The Project Site was also chosen for its reasonable proximity to Interstate 5, State Routes (SR) 58 and 119, and Stockdale Highway. The geology in the vicinity of the Project Site makes it one of the premier locations in the United States for CO₂ EOR and sequestration.

There is no noncontracted land proximate to the Project Site which is both available and suitable for the Project. With regard to availability, according to County Planning Department records (including the current Kern County Williamson Act Map), virtually all land in the proximity of the Project Site is either under Williamson Act contract or in the Tule Elk Reserve State Park.

With regard to suitability, as concluded in the 2012 and 2009 Revised Applications for Certification (AFC) for the Project filed with the CEC, there are no alternative sites that meet the highly specific site selection requirements of the Project discussed above. Prior to selecting the Project Site, HECA LLC submitted its initial AFC (08-AFC-8) to the CEC on July 30, 2008, which proposed the Project on a different site. HECA LLC subsequently decided to move the Project when it discovered the existence of previously undisclosed sensitive biological resources at the prior site. As a result, HECA LLC was required to conduct an alternative site analysis to identify an alternative site for the Project, which ultimately identified the general area of the Project Site. In the process, several possible alternative sites in the vicinity of the unincorporated communities of Buttonwillow and Tupman were considered. However, the alternative sites were rejected for various reasons, including (1) topography, (2) distance from the proposed carbon dioxide custody transfer point, (3) lengths of linear facilities, (4) sensitive environmental receptors and/or (5) land availability. In addition, each of these sites (with one exception), like the Project Site, were contracted under the Williamson Act.

In summary, no alternative sites were identified on either contracted or noncontracted land that were both available and suitable for the Project. As such, the finding set forth Government Code section 51282(c)(2) that "[t]here is no proximate noncontracted land which is both available and suitable for the use to which it is proposed the contracted land be put" is satisfied.

EXHIBIT "E"



- Project Site
- Tentatively Cancelled Williamson Act Contracted Land
- Williamson Act Contracted Land

Note:
1. The Kern County Board of Supervisors adopted Resolution 2010-158 on June 29, 2010, approving the tentative cancellation of 491 acres of Williamson Act contracted lands.

0 750 1,500
FEET

HECA WILLIAMSON ACT CONTRACT CANCELLATIONS

April 2012 Hydrogen Energy California (HECA)
28068052 Kern County, California

URS

FIGURE 5.4-6

K:\GIS\HECA\PROJECTS\HECA_2012\SUMMIT\TALEP\4.6 Williamson Act Contract Cancellations.mxd 5/1/2012 11:41:10 AM

Legal Description

LEGAL DESCRIPTION

EXHIBIT "B"

FOR CANCELLATION OF A LAND USE CONTRACT

That portion of the East Half of the Southeast Quarter of Section 10, Township 30 South, Range 24 East, Mount Diablo Meridian, described as follows:

Commencing at the Point of Beginning (P.O.B.) being the east quarter corner of said Section 10; Thence North 89°24'15" West 1321.11 feet (L3); Thence South 00°44'00" West 2359.90 feet to a point on a line parallel with and 280.00 feet northerly of the southerly line of said Section 10; Thence along said parallel line South 89°27'40" East, 1321.34 feet to a point on the east line of said Section 10; Thence along said east line North 00°43'40" East, 2358.58 feet to said Point of Beginning (P.O.B.)

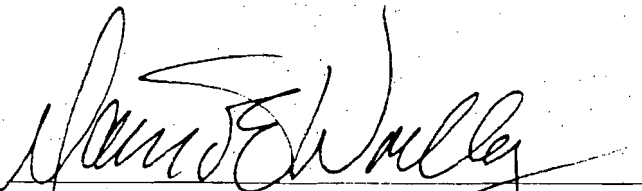
Contains 71.558 acres.

Subject to all matters of record, if any.

See Exhibit "B", Attachment "A" attached hereto and made a part hereof.

This legal description is not intended for use in the division and /or conveyance of land in violation of the Subdivision Map Act of the State of California.

This legal description has been prepared by me or under my direction:

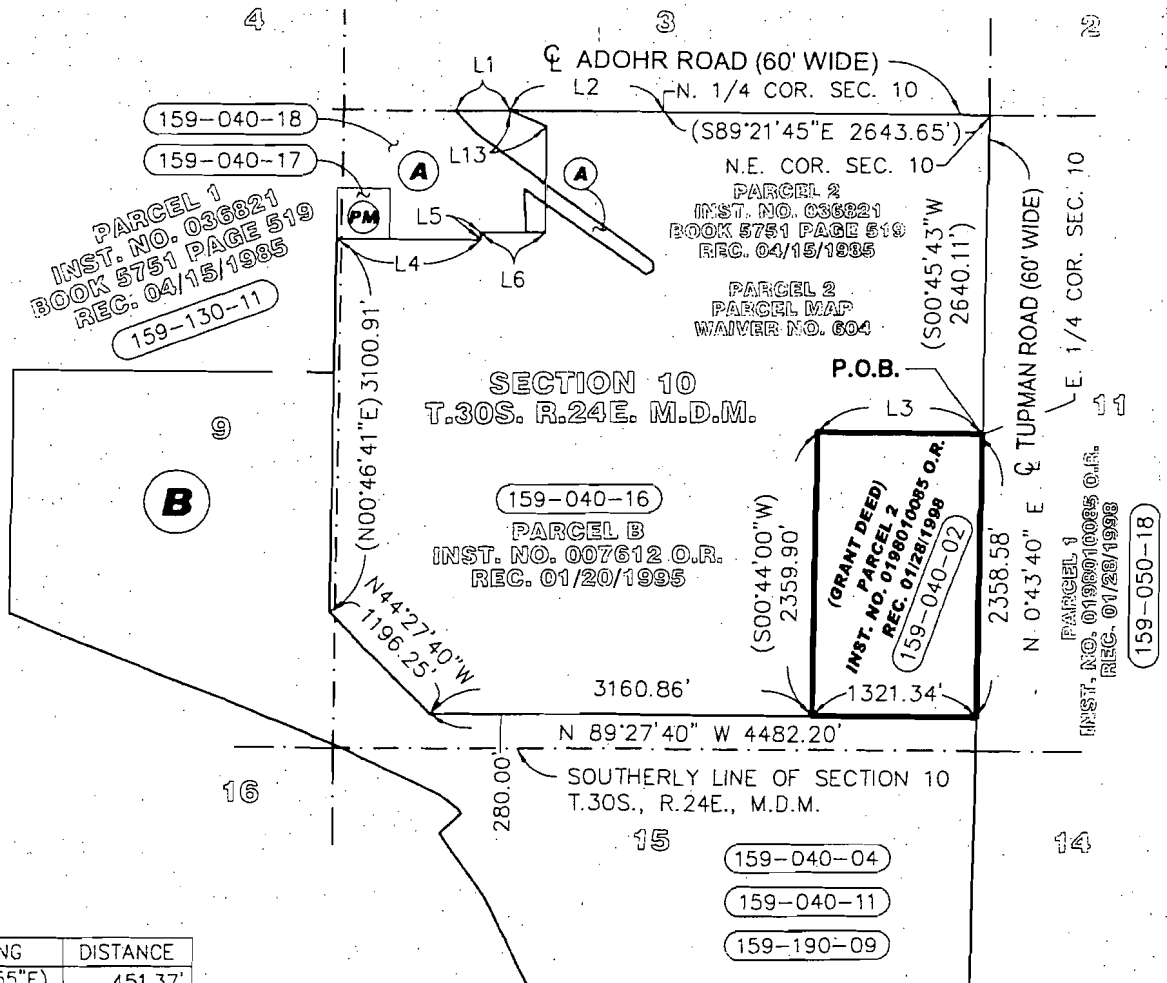


David E. Woolley, P.L.S. 7304 Dated: 12/19/12



This document is preliminary unless signed.

Pursuant to California Business and Professions Code § 8761 the recorded document shall bear the signature and seal hereon.



LAND AREA

71.558 ACRES

LINE TABLE

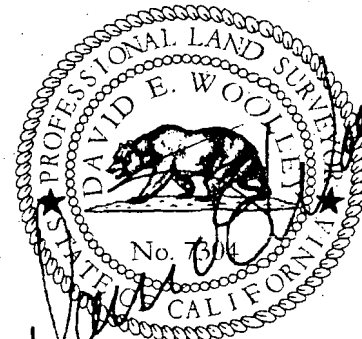
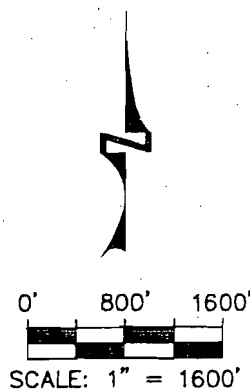
LINE	BEARING	DISTANCE
L1	(S89°21'55"E)	451.37'
L2	(S89°21'55"E)	1263.39'
L3	(N89°24'15"W)	(1321.11')
L4	(S89°14'01"E)	(1205.04')
L5	(N00°23'43"W)	(56.24')
L6	(S89°51'55"E)	539.75'

LEGEND

- (A) PARCEL A OF INST. NO. 007612 O.R., REC. 01/20/1995
- (B) PARCEL B OF INST. NO. 007612 O.R., REC. 01/20/1995
- (PM) PARCEL MAP NO. 10341, P.M.B. 49/7-8
- ⑩ SECTIONAL NUMBER OF T30S, R24E, M.D.M.
- (159-040-02) ASSESSORS PARCEL NUMBER
- LAND USE BOUNDARY LINE
- PROPERTY LINE
- SECTION LINE

RECORD REFERENCE

() INDICATES RECORD DATA PER CERTIFICATE OF COMPLIANCE, REC. 01/20/1995 AS INST. NO. 007612 O.R.



Section 10, T30S, R24E, Mount Diablo Meridian
County of Kern, State of California

D. Woolley & Associates
2832 Walnut Avenue, Suite A
Tustin, California 92780
(714) 734-8462 www.dwoolley.com

HECA PROJECT

EXHIBIT "B"
ATTACHMENT "A"
FOR CANCELLATION OF
A LAND USE CONTRACT

Scale: 1" = 1600'
Date: 11/28/12
Drafted: GFL
Reviewed: DEW
Task No.: DWA-9256
Sheet: 1 of 1

Land Use Contract

BOOK 4250 PAGE 496

RECORDED AT REQUEST OF
AND RETURN TO:
CLERK OF THE BOARD
CIVIC CENTER - ROOM 600
BAKERSFIELD, CALIF. - 93301

FEB-28-69 12609 • 4203 • D 16 FBK 2 6.80

Recorded By RAY A. VERCAMMEN, Kern Co. Recorder
LAND USE CONTRACT

(Pursuant to California Land Conservation Act of)
(1965 and Open-Space Land Valuation Law of 1967)

THIS CONTRACT, made and entered into this 27TH day of FEBRUARY,
1969, by and between the COUNTY OF KERN, a political subdivision of
the State of California, hereinafter referred to as "COUNTY", and 630
MARTIN SNOW, JR.
_____, hereinafter referred to as "OWNER",

W I T N E S S E T H :

WHEREAS, Owner is the owner of certain real property situate in
the County of Kern, State of California, which is presently devoted to
agricultural use, which property is particularly identified and described
in Exhibit "A" attached hereto and by this reference incorporated herein
and made a part of this Contract; and

WHEREAS, said property is classified as "prime agricultural land"
as defined in Section 51201(c) of the Government Code and is located
in Agricultural Preserve number 3 heretofore established
by Resolution of the Board of Supervisors of the County of Kern, which
Preserve contains not less than 100 acres; and

WHEREAS, both Owner and County desire to limit the use of said
property to agricultural uses in order to continue in existence a maxi-
mum of prime agricultural lands for the production of food and fiber
and to discourage premature and unnecessary conversion of such land from
agricultural uses, recognizing that such land has definite public value
as open space, and that the preservation of such land in agricultural
production constitutes an important physical, social, esthetic and
economic asset to County and is necessary for the maintenance of the
agricultural economy of County and the State of California, and Owner
desires to take advantage of the provisions of Chapter 1711, Statutes
of 1967; and

WHEREAS, the placement of said property in an Agricultural Preserve

and the execution and approval of this Contract is deemed to be a determination by all parties concerned that the highest and best use of the property during the term of this Contract and all renewals thereof is for the production of agricultural commodities for commercial purposes;

NOW, THEREFORE, the parties, in consideration of the mutual covenants and conditions set forth herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

1. This Contract is made and entered into pursuant to the California Land Conservation Act of 1965 (Chapter 7 of Part 1 of Division 1 of Title 5 of the California Government Code commencing with Section 51200) and is subject to all the provisions thereof and by this reference the provisions of said Act are incorporated herein and made a part hereof.

2. During the term of this Contract or any renewals thereof the above-described land shall not be used for any purpose other than the production of agricultural commodities for commercial purposes and compatible uses in accordance with the land use restrictions included in the Resolution prescribing uniform rules for the administration of the Agricultural Preserve within which the land is located, which uniform rules and land use restrictions are by this reference incorporated in and made a part of this Contract. No structures shall be erected upon said land except such structures as may be directly related to authorized uses of the land. Pursuant to the provisions of Section 423 of the Revenue and Taxation Code (Chapter 1711, Statutes of 1967) it is understood by the parties that the uses of the lands which are the subject of this Contract contemplated by County and legally available to Owner are those uses herein specified to which uses Owner agrees to devote the said land during the period of this Contract.

3. During the term of this Contract, and extensions thereof, the Board of Supervisors of County may add to those agricultural and compatible uses specified in the Resolution prescribing uniform rules for the administration of the Preserve within which the land is located

or otherwise modify said uniform rules and land use restrictions after calling a hearing thereon and publishing notice pursuant to Section 6061 or the Government Code; provided, however, said Board shall not eliminate a permitted compatible use during the term of this Contract without the written consent of Owner. It is understood that neither the provisions of this Contract nor of any Resolution defining the land uses permitted hereunder can limit or supersede the planning and zoning powers of County.

4. Upon the filing of any action in eminent domain for the condemnation of the fee title of any land described herein, or of less than a fee interest which will prevent said land being used for any authorized agricultural or compatible use, or upon the acquisition in lieu of condemnation of the fee title of any land described herein or such acquisition of less than a fee interest which will prevent the land being used for any authorized use, this Contract is null and void upon such filing or acquisition as to the portion of the land described herein so taken or acquired, and also as to such portion of the herein-described land as is severed by such taking or acquisition in such a manner as to prevent continued use of the severed portion for authorized agricultural or compatible uses, and the condemning agency shall proceed as if this Contract never existed.

5. This Contract shall be effective as of the 28th day of February next succeeding the date which is first mentioned herein, and shall remain in effect for an initial term of ten (10) years therefrom and during renewals of this Contract. Each 28th day of February of each year during which this contract shall be in effect shall be deemed to be the annual renewal date of this Contract, as mentioned in Sections 51244 and 51245 of the Government Code. On said annual renewal date a year shall be added automatically to the initial term aforementioned unless notice of nonrenewal is given as provided in Section 51245 of the Government Code.

6. Owner hereby waives any obligation of County to make any payments to Owner under this Contract and Owner shall not receive any payment from County in consideration of the obligations imposed hereunder, it being recognized and agreed that the consideration for the execution of the within Contract is the substantial public benefit to be derived therefrom and the advantage which will accrue to Owner as a result of the effect on the method of determining the assessed value of land described herein and any reduction therein due to the imposition of the limitations on its use contained herein.

7. The within Contract shall "run with the land" described herein, and shall be binding upon and inure to the benefit of the heirs, executors, administrators, trustees, successors and assigns of the parties hereto.

8. This Contract may not be cancelled by either Owner or County acting unilaterally and may only be cancelled on the mutual agreement of all parties to the Contract, and the State, proceeding in accordance with the provisions of Section 51280 through Section 51286 of the Government Code.

9. It is agreed that removal of any land under this Contract from an Agricultural Preserve, either by change of boundaries of the preserve or disestablishment of the preserve, shall be deemed the equivalent of a notice of nonrenewal by County for purposes of Section 422 of the Revenue and Taxation Code.

10. Notices to be given to Owner pursuant to this Contract may be sent by U. S. Mail addressed to Owner at the address shown below Owner's signature hereinbelow. Notices to County may be sent by U. S. Mail addressed to Board of Supervisors, County of Kern, Kern County Civic Center, 1415 Truxtun Avenue, Bakersfield, California.

By the means mentioned in this paragraph a party may give notice of a new address, after which notices to be given to such party shall be sent by U. S. Mail addressed to such party at such new address.

BOOK 1250 PAGE 500

IN WITNESS WHEREOF, the parties hereto have executed the within
Contract the day and year first above written.

COUNTY OF KERN

By John Haet
Chairman, Board of Supervisors

ATTEST:
Vera K. Gibson, County
Clerk and ex-Officio Clerk
of the Board of Supervisors

By E. J. [Signature]
Deputy

OWNER

[Signature]

Address: RTE 1, Box 41

BUFFAWILLOW

ACKNOWLEDGMENTS

County of Kern

STATE OF CALIFORNIA }
COUNTY OF KERN } ss

On this _____ day of FEB 28 1969, in the year 19____,
before me, E. F. Kimball, Deputy Clerk, Board of
Supervisors of the County of Kern, personally appeared
JOHN WOLT, known to me to be the Chairman of the Board
of Supervisors of the County of Kern, and known to me to be the person
who executed the within instrument on behalf of said County, and ac-
knowledgeed to me that such County executed the same.

WITNESS my hand and Official Seal of the Kern County Board of
Supervisors.

VERA K. GIBSON
Clerk, Board of Supervisors

By E. F. Kimball
Deputy Clerk

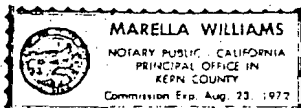
Owner(s)

STATE OF CALIFORNIA }
COUNTY OF KERN } ss

On this 27th day of February, in the year 1969,
before me, the undersigned, a Notary Public in and for the State of
California, with principal office in the County of Kern, duly com-
missioned and sworn, personally appeared Martin Shaw, Jr.
known to me
to be the person described in, whose name is, subscribed to and
who executed the within instrument, and acknowledged that he
executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my
official seal the day and year in this Certificate first above written.

Marella Williams
Notary Public in and for the
State of California.



126
7.28.69

BOOK 4250 PAGE 502

EXHIBIT "A"

Identification and Description of Real Property

PARCEL 159-050-04-01 95 ACRES
S $\frac{1}{2}$ LYING WLY OF C/L OF EASTSIDE CANAL, SECS 10/11 T30 R24

PARCEL 159-040-02 73 ACRES
E $\frac{1}{2}$ OF SE $\frac{1}{4}$ SECS 10/11 T30 R24

FILED

FEB 21 11 45 AM '73

FILED

FILED

126

2.28.69

Kern County Assessor Memo

ANTHONY ANSOLABEHRE
Assistant Assessor

JAMES W. FITCH
ASSESSOR-RECORDER

JEANI SMITH
Assistant Recorder

ASSESSOR'S OFFICE
Telephone (661) 868-3485
1115 Truxtun Avenue
Bakersfield, CA 93301-4639



RECORDER'S OFFICE
Telephone (661) 868-6400
1655 Chester Avenue
Bakersfield, CA 93301-5232

February 5, 2013

Board of Supervisors
Administration Building
1115 Truxtun Avenue
Bakersfield, California 93301

Re: Cancellation of Land Use Contract
Applicant: Hydrogen Energy International LLC
Assessor's Parcel Number: 159-040-02 (71.56 Acres)
Williamson Act Cancellation: 13-01 PP12328

Honorable Board:

In accordance with provisions of Section 51283 of the Government Code, the Assessor certifies the fair market value and cancellation fee for the above property or a portion thereof.

CANCELLATION VALUE

\$644,040

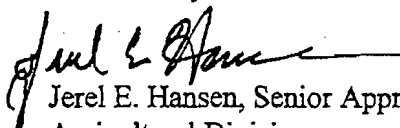
CANCELLATION FEE

\$80,505

The Department of Conservation and or owner may request a formal review from the Assessor of the certified value as specified in Section 51203 of the Government Code. Any request must be made within 45 days of the date of this notice.

Sincerely,

JAMES W. FITCH
Kern County Assessor-Recorder


Jerel E. Hansen, Senior Appraiser
Agricultural Division

cc: Department of Conservation
cc: Hydrogen Energy California LLC
cc: Manatt Phelps & Phillips, LLP
cc: County Planning Department

Previously Approved Cancellation

**BEFORE THE BOARD OF SUPERVISORS
COUNTY OF KERN, STATE OF CALIFORNIA**

In the matter of:

Resolution No. 2010-168

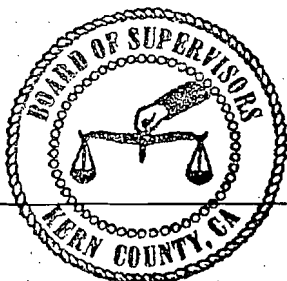
**TENTATIVE CANCELLATION OF LAND USE
RESTRICTIONS, LAND CONSERVATION ACT
(WILLIAMSON ACT) (GOV. CODE § 51282);
(HYDROGEN ENERGY CALIFORNIA, LLC by
MANATT, PHELPS, AND PHILLIPS, LLP)**

I, **KATHLEEN KRAUSE**, Clerk of the Board of Supervisors of the County of Kern, State of California, do hereby certify that the following resolution, on motion of Supervisor Maben, seconded by Supervisor Rubio, was duly passed and adopted by said Board of Supervisors at an official meeting hereof this 29th day of June, 2010, by the following vote, to wit:

AYES: McQuiston, Maben, Maggard, Watson, Rubio

NOES: None

ABSENT: None



KATHLEEN KRAUSE
Clerk of the Board of Supervisors
County of Kern, State of California

Judy A. Denny
Deputy Clerk

RESOLUTION

Section 1. WHEREAS:

(a) Hydrogen Energy California, LLC, by Manatt, Phelps, and Phillips, LLP, has filed with this Board a petition for cancellation of contractual land use restrictions contained in a contract recorded on February 26, 1971, in Book 4495, Page 523, which restrictions were entered into under the Land Conservation Act of 1965 (Williamson Act)

#2010-168

on the land herein described, located in Agricultural Preserve No. 3 under authority of Government Code section 51282; and

(b) The parcel of land as to which such cancellation is asked consists of approximately 491 acres, located at the south side of Adohr Road, west of Tupman Road, northwest of Tupman, California; and

(c) The Planning and Community Development Department has investigated possible environmental impacts of the cancellation and found the cancellation to be Statutorily Exempt from the requirements for preparation of environmental documents pursuant to Section 15271 of the State CEQA Guidelines; and

(d) The petitioner asks such cancellation on the grounds or for the purposes following: The proposed cancellation is being sought in order to facilitate approval and construction of an integrated gasification combined cycle power generating facility by the applicant; and

(e) Notice of hearing on said matter has been duly given in accordance with law and section 51284 of the Government Code, including sending a copy of the hearing notice and landowner's petition for cancellation to the Director of Conservation for the State of California, and said hearing has been duly conducted and evidence having been received, and all persons desiring to be heard in said matter having been given an opportunity to be heard; and

(f) No owner of any property located in the County of Kern has protested the proposed cancellation; and

(g) Pursuant to the provisions of section 51283 of the Government Code, the County Assessor has determined the full cash value of the parcel of land with respect to which cancellation is requested, as though it were free of the contractual restriction, and has certified to this Board that the amount thereof is \$2,455,750 and that the most recently announced County assessment ratio is 100%, and that the cancellation fee is 12.5% of this value, or \$306,969, and has certified that there are no additional deferred taxes under Government Code section 51283; and

(j) Staff has recommended that the cancellation shall not become effective until the California Energy Commission issues a permit following its environmental review for Project Docket No. O8-AFC-8.

Section 2. NOW, THEREFORE, IT IS HEREBY RESOLVED by the Board of Supervisors of the County of Kern, State of California, as follows:

1. This Board finds the facts recited herein are true, further finds that this Board has jurisdiction to consider, approve, and adopt the subject of this Resolution, and hereby incorporates and makes all the findings recommended by Staff, whether verbally or in their written reports pertaining hereto.

2. This Board finds and determines that the applicable provisions of the California Environmental Quality Act of 1970, the State CEQA Guidelines and the Kern County Guidelines have been duly observed in conjunction with said hearing and the considerations of this project and all of the previous proceedings related hereto.

3. This Board finds and determines that this project is Statutorily Exempt under Section 15271 of the State CEQA Guidelines.

4. In accordance with subdivision (e) of Government Code section 51282, the petition for cancellation was accompanied by a proposal for a specified alternative use of the land, as mentioned in recital (d) above.

5. Pursuant to the provisions of subdivision (a) (2) of Government Code section 51282, this Board finds and determines that the proposed cancellation is consistent with the purposes of sections 51280 et seq. and further finds and determines:

- (a) Other public concerns, which include public concerns of energy supply, energy security, global climate change, water supply, hydrogen infrastructure, substantially outweigh the objectives of the Williamson Act Land Use Contract;
- (b) There is no available and suitable proximate noncontracted land for the use proposed on the contracted land and the site was selected based upon the proximity to a carbon dioxide storage reservoir, existing natural gas transportation, electric transmission, and brackish groundwater supply infrastructure that could support the proposed power generation.

As used in this section, "proximate, noncontracted land" means land not restricted by contract pursuant to the Williamson Act, which is sufficiently close to the contracted land that it can serve as a practical alternative for the use which is proposed for the contracted land; "suitable for the proposed use" means that the salient features of the proposed use can be served by land not restricted by contract pursuant to the Williamson Act, whether a single parcel or a combination of contiguous or discontinuous parcels; and "contracted land" means the land subject to the proposed cancellation.

6. This Board does hereby determine that the amount of the cancellation fee which the owner shall pay to the County Treasurer as deferred taxes upon such cancellation, in accordance with paragraph (b) of section 51283 of the Government Code,

is the sum of \$306,969.00 and does hereby certify said sum to the County Auditor; and finds and determines there are no additional deferred taxes due under section 51283.1 of the Government Code.

7. Pursuant to the provisions of Government Code section 51283.4, this Board does hereby establish the following conditions and contingencies, and declares that a certificate of cancellation of contract with respect to said parcel of land will be issued and recorded within thirty (30) days after being notified by the landowner that each and all of said conditions and contingencies is satisfied:

- (a) Payment in full of the cancellation fee hereinabove mentioned;
- (b) Unless said cancellation fee is fully paid, or a certificate of cancellation is issued, within one year from the date of recordation of the certificate of tentative cancellation, such fee shall be recomputed as of the date the landowner notifies this Board that he has satisfied the conditions and contingencies, as provided in subdivision (b) of Government Code section 51283.4, and the landowner shall pay any additional fee arising from such re-computation as a further condition to issuance of a certificate of cancellation; provided, however, that the landowner shall not be entitled to refund of any cancellation fee previously paid even if the recomputed fee is less;
- (c) Landowner shall obtain all permits necessary to commence the project of the proposed alternative use, including a permit issued by the California Energy Commission following its environmental review for Project Docket No. O8-AFC-8.

8. Pursuant to subdivision (c) of Government Code section 51283.4, if the landowner has been unable to satisfy the foregoing conditions and contingencies, he shall notify this Board of the particular conditions or contingencies he is unable to satisfy; and within thirty (30) days after receipt of such notice, and upon a determination by this Board that the landowner is unable to satisfy the foregoing conditions and contingencies, this Board shall execute a certificate of withdrawal of said tentative approval of the cancellation fee previously paid.

9. Pursuant to subdivision (a) of Government Code section 51283.4, this Board may, at the request of the landowner, amend the tentatively approved specified alternative use mentioned in paragraph 3 above, if it finds that such amendment is consistent with all findings made pursuant to subdivision (2) of Government Code subsection 51282(a).

10. The real property to which the foregoing tentative cancellation proceedings applies is situated in the County of Kern, State of California, and is described in Exhibit "A" attached hereto and made a part hereof by this reference.

11. The Clerk of this Board shall execute the form of the Certificate of Tentative Cancellation prepared by County Counsel, and cause it to be filed for record, all in accordance with subdivision (a) of Government Code section 51283.4.

12. The Clerk of this Board shall cause a Notice of Exemption as required by CEQA, prepared by County Counsel, to be filed with the County Clerk upon request.

13. The Clerk of this Board shall publish a Notice of Decision as required by Government Code section 51284, and send a copy of the published Notice of Decision to the California State Director of Conservation at 801 "K" Street, Sacramento, California 95814.

14. The Clerk of this Board shall also transmit copies of this Resolution to the following:

- (a) Assessor
- (b) Auditor-Controller
- (c) Treasurer
- (d) Director of Planning Department
- (e) County Counsel
- (f) Hydrogen Energy California, LLC
- (g) Manatt, Phelps, and Phillips, LLP

BD/kjw
#194711v2
10.2750

COPIES FURNISHED:
<i>See Above</i>
<i>7-13-10 JAL</i>

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LEGAL DESCRIPTION

EXHIBIT "A"

FOR CANCELLATION OF A LAND USE CONTRACT

Parcel 1:

That portion of Parcel B of Certificate of Compliance, in the County of Kern, State of California, recorded January 20, 1995 as Instrument No. 007612, Official Records of said county, being described as those portions of Sections 9 and 10, Township 30 South, Range 24 East, Mount Diablo Meridian, described as follows:

Commencing at the Point of Beginning (P.O.B.) of said Parcel B, as depicted on Exhibit "B", Attachment "A"; thence along the northerly line of said Parcel B South 89°21'55" East 451.37 feet (L1) to the **True Point of Beginning (T.P.O.B.)**; thence along the northerly and easterly lines of said Parcel B the following five courses:

- 1) South 89°21'55" East 1263.39 feet (L2) to the north quarter corner of said Section 10;
- 2) Thence South 89°21'45" East 2643.65 feet to the northeast corner of said Section 10;
- 3) Thence South 00°45'43" West 2640.11 feet to the east quarter corner of said Section 10;
- 4) Thence North 89°24'15" West 1321.11 feet (L3);
- 5) Thence South 00°44'00" West 2359.90 feet to a point on a line parallel with and 280.00 feet northerly of the southerly line of said Section 10;

thence leaving said easterly line of Parcel B North 89°27'40" West 3160.86 feet; thence North 44°27'40" West 1196.25 feet to a point on the southerly prolongation of that certain course described as "North 00°46'41" East 1108.72 feet" in Parcel B of said Certificate of Compliance; thence along said course and its southerly prolongation North 00°46'41" East 3100.91 feet; thence along the southerly line of said Parcel A the following two courses:

- 6) South 89°14'01" East 1205.04 feet (L4);
 - 7) Thence North 00°23'43" West 56.24 feet (L5);
- thence along said southerly line of Parcel A and its easterly prolongation South 89°51'55" East 539.75 feet (L6); thence North 00°00'00" East 233.53 feet (L7) to its intersection with a point on the Southwesterly line of Parcel A described in said Instrument No. 007612 as "North 54°20'18" West, 1215.43 feet" said point of intersection being referred to hereafter as Point "A" for this description;

1 thence along the southwesterly, southeasterly and northeasterly lines of said Parcel A the following three
2 courses:

3 8) South 54°20'18" East 998.71 feet (L8);

4 9) Thence North 64°12'24" East 75.09 feet (L9);

5 10) Thence North 02°38'35" West 70.34 feet (L10);

6 thence North 53°45'12" West 1085.95 feet (L11) to its intersection with the northerly prolongation of the
7 aforementioned line described as "North 00°00'00" East 233.53 feet (L7)"; thence along said

8 prolongation North 00°00'00" East 482.28 feet (L12); thence North 67°30'00" West 333.64 feet (L13) to
9 the **True Point of Beginning**.

10
11 Contains 488.067 acres.

12
13 See Exhibit "B", Attachment "A" attached hereto and made a part hereof.

14
15 **Parcel 2:**

16
17 That portion of Parcel A of Certificate of Compliance, in the County of Kern, State of California,
18 recorded January 20, 1995 as Instrument No. 007612, Official Records of said county, being described as
19 those portions of Sections 9 and 10, Township 30 South, Range 24 East, Mount Diablo Meridian,
20 describes as follows:

21
22 **Beginning** at the aforementioned Point "A" as described hereinabove and depicted on Exhibit "B",
23 Attachment "B"; thence along the southwesterly, southeasterly and northeasterly lines of said Parcel A
24 the following three courses:

25 1) South 54°20'18" East 998.71 feet (L8);

26 2) Thence North 64°12'24" East 75.09 feet (L9);

27 3) Thence North 02°38'35" West 70.34 feet (L10);

28 thence North 53°45'12" West 1085.95 feet (L11) to its intersection with the northerly prolongation of the
29 aforementioned line described as "North 00°00'00" East 233.53 feet (L7)" of Parcel 1 hereinabove
30 described; thence along said prolongation South 00°00'00" West 162.77 (L14) feet to the **Point of**

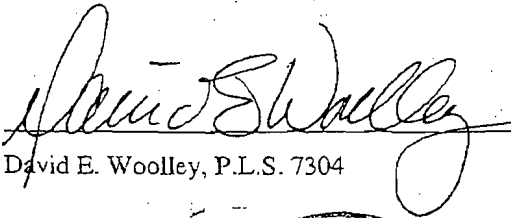
31 **Beginning**.

32
33 Contains 3.081 acres.

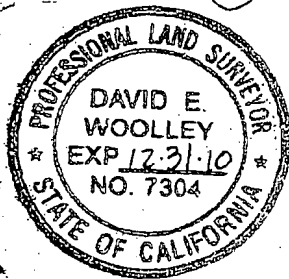
1 See Exhibit "B", Attachment "B" attached hereto and made a part hereof.
2
3

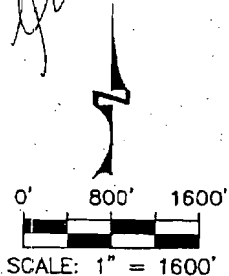
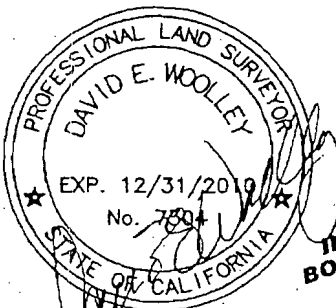
4 This legal description is not intended for use in the division and /or conveyance of land in violation of the
5 Subdivision Map Act of the State of California.
6

7 This legal description has been prepared by me or under my direction:
8
9

10 
11
12 David E. Woolley, P.L.S. 7304

07/12/2010
Date





LINE TABLE

LINE	BEARING	DISTANCE
L1	(S89°21'55"E)	451.37'
L2	(S89°21'55"E)	1263.39'
L3	(N89°24'15"W)	(1321.11')
L4	(S89°14'01"E)	(1205.04')
L5	(N00°23'43"W)	(56.24')
L6	(S89°51'55"E)	539.75'

RECORD REFERENCE

() INDICATES RECORD DATA PER CERTIFICATE OF COMPLIANCE, REC. 01/20/199 AS INST. NO. 007612 O.R.

LEGEND

- (A) PARCEL A OF INST. NO. 007612 O.R., REC. 01/20/1995
- (B) PARCEL B OF INST. NO. 007612 O.R., REC. 01/20/1995
- (PM) PARCEL MAP NO. 10341, P.M.B. 49/7-B
- 10** SECTIONAL NUMBER OF T30S, R24E, M.D.M.
(159-040-16) ASSESSORS PARCEL NUMBER
- LAND USE BOUNDARY LINE
- PROPERTY LINE
- SECTION LINE
- AFFECTING EASEMENT LINES, SEE EASEMENT NOTES.

EASEMENT NOTES

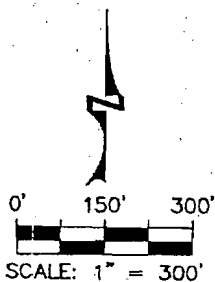
BY: FIRST AMERICAN TITLE COMPANY
9201 CAMINI MEDIA, SUITE 100
BAKERSFIELD, CA 93311
(661) 617-1468
COMMITMENT NO. 1003-3112060
TITLE OFFICER - TONY DAMO
DATED: JULY 22, 2008

THE FOLLOWING ITEMS WERE FOUND IN SAID COMMITMENT AND ARE REFERENCED ON THIS MAP. PLOTTABLE ITEMS ARE INDICATED HEREON.

- (8) PROPERTY AND PROPERTY RIGHTS IN FAVOR OF MILLER & LUX, INC., A CORPORATION, DATED JULY 30, 1936, RECORDED OCTOBER 10, 1936 IN BOOK 666, PAGE 250, OFFICIAL RECORDS. THIS ITEM AFFECTS THE SUBJECT PROPERTY AND IS PLOTTED HEREON.
- (9) EASEMENT FOR PUBLIC ROADS AND INCIDENTAL PURPOSES, RECORDED MAY 16, 1939 IN BOOK 871, PAGE 98 OF OFFICIAL RECORDS. THIS ITEM AFFECTS THE SUBJECT PROPERTY AND IS PLOTTED HEREON.

ITEM #'S SHOWN HEREON ARE STATED AS EXCEPTIONS ON ABOVE REFERENCED COMMITMENT. NO RESPONSIBILITY FOR THE COMPLETENESS, ACCURACY, OR CONTENT OF SAID REPORT IS ASSUMED BY THIS MAP. ALL EASEMENTS NOT AFFECTED, NON PLOTTABLE AND BLANKET, CONTAINED IN THE ABOVE REFERENCED REPORT ARE NOT SHOWN OR INDICATED HEREON.

Sections 9 and 10, T30S, R24E, Mount Diablo Meridian County of Kern, State of California		HECA PROJECT		Scale: 1" = 1600'
D. Woolley & Associates 2832 Walnut Avenue, Suite A Tustin, California 92780 (714) 734-8462 www.dwoolley.com		EXHIBIT "B", ATTACHMENT "A" FOR CANCELLATION OF A LAND USE CONTRACT		Date: 02/17/10
				Drafted: BJM
				Reviewed: DEW
				Task No. DWA-B255
				Sheet: 1 of 2



LINE TABLE

LINE	BEARING	DISTANCE
L1	(S89°21'55"E)	451.37'
L2	(S89°21'55"E)	1263.39'
L3	(N89°24'15"W)	(1321.11')
L4	(S89°14'01"E)	(1205.04')
L5	(N00°23'43"W)	(56.24')
L6	(S89°51'55"E)	539.75'
L7	N00°00'00"E	233.53'
L8	S54°20'18"E	998.71'
L9	N64°12'24"E	(75.09')
L10	N02°38'35"W	(70.34')
L11	N53°45'12"W	1085.95'
L12	N00°00'00"E	482.28'
L13	N67°30'00"W	333.64'
L14	S00°00'00"W	162.77'

RECORD REFERENCE

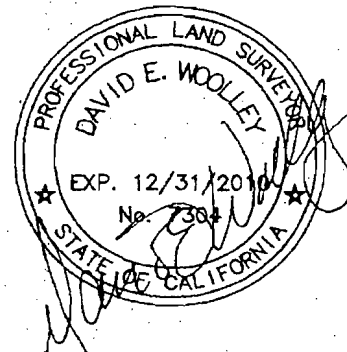
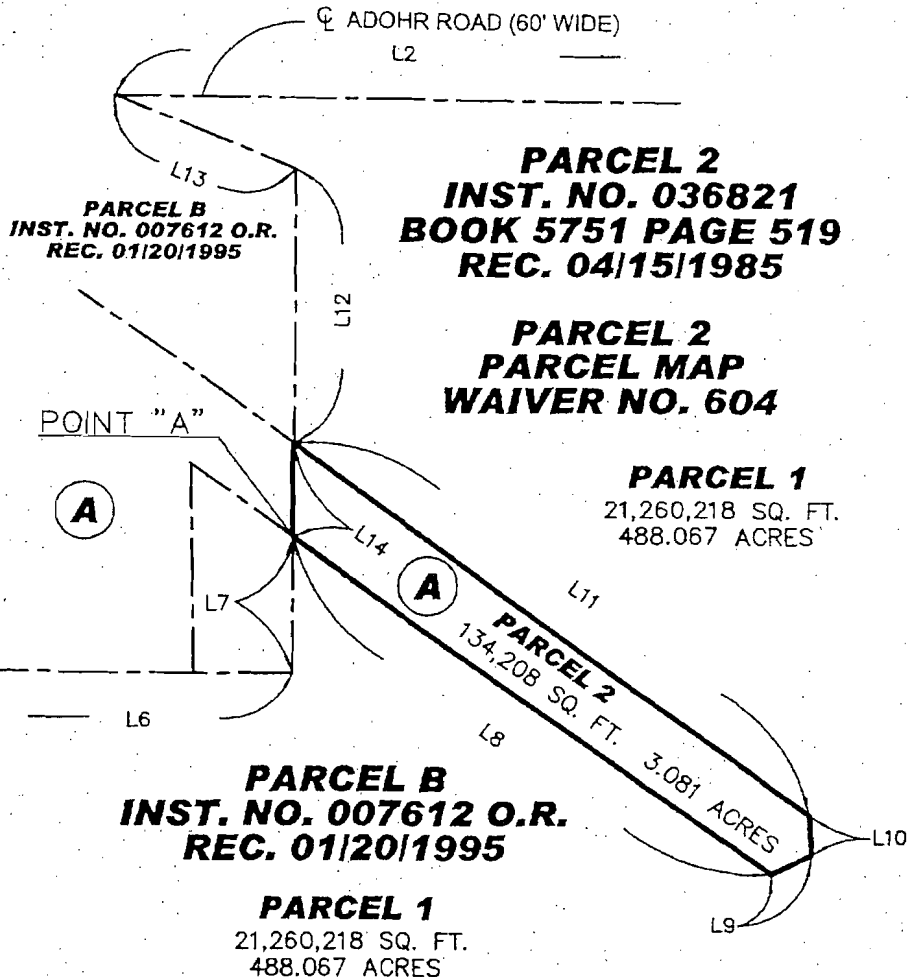
() INDICATES RECORD DATA PER
CERTIFICATE OF COMPLIANCE,
REC. 01/20/199 AS INST. NO. 007612 O.R.

LEGEND

(A) PARCEL A OF INST. NO. 007612 O.R.,
REC. 01/20/1995

SECTIONAL NUMBER OF T30S, R24E, M.D.M.

———— LAND USE BOUNDARY LINE
----- PROPERTY LINE
----- SECTION LINE
----- AFFECTING EASEMENT LINES,
SEE EASEMENT NOTES.



Sections 9 and 10, T30S, R24E, Mount Diablo Meridian
County of Kern, State of California

HECA PROJECT

D. Woolley & Associates
2832 Walnut Avenue, Suite A
Tustin, California 92780
(714) 734-8462 www.dwoolley.com

**EXHIBIT "B",
ATTACHMENT "B"**
FOR CANCELLATION OF
A LAND USE CONTRACT

Scale: 1" = 300'
Date: 02/17/2010
Drafted: BJM
Reviewed: DEW
Task No. DWA-8255
Sheet: 2 of 2

Resolution

**BEFORE THE PLANNING COMMISSION
COUNTY OF KERN, STATE OF CALIFORNIA**

In the matter of:

RESOLUTION NO. ***

APPLICATION FOR CANCELLATION NO. 13-01, MAP NO. 120

**PETITION FOR CANCELLATION OF LAND USE RESTRICTIONS;
LAND CONSERVATION ACT (WILLIAMSON ACT)
(GOVERNMENT CODE SECTION 51282)**

West of Tupman Road, south of Adohr Road, west of Interstate 5, northwest of Tupman area
Hydrogen Energy International, LLC by Manatt, Phelps, and Phillips, LLP (PP12328)

FINDINGS AND DETERMINATION

I, Lorelei H. Oviatt, Secretary of the Planning Commission of the County of Kern, State of California, do hereby certify that the following resolution, proposed by ***, seconded by ***, was duly passed and adopted by said Planning Commission at an official meeting here of this **22nd** day of **August, 2013**, by the following vote, to wit:

YES: ***

NOES: ***

ABSTAINED: ***

ABSENT: ***

**SECRETARY OF THE PLANNING COMMISSION
COUNTY OF KERN, STATE OF CALIFORNIA**

R E S O L U T I O N

SECTION 1. WHEREAS:

(a) Hydrogen Energy International, LLC by Manatt, Phelps, and Phillips, LLP (PP12328), has filed a petition for cancellation of contractual land use restrictions contained in a contract recorded on February 28, 1969, Book 4250, Page 496, Official Records, which restrictions were entered into under the Land Conservation Act of 1965 (Williamson Act) on the land herein described, located in Agricultural Preserve No. 3 under authority of Government Code Section 51282; and

DRAFT

(b) Said parcel of real property is described as follows:

APN: 159-040-02

Section 10, T30S, R24E, MDB&M, County of Kern, State of California, County of Kern, State of California (A complete legal description is on file with the Kern County Planning and Community Development Department); and

(c) The parcel of land proposed for cancellation consists of approximately 72 acres, located West of Tupman Road, south of Adohr Road, west of Interstate 5, northwest of Tupman area; and

(d) The petitioner asks such cancellation on the grounds or for the purposes following: for an integrated gasification combined cycle power plant; and

(e) The Secretary of this Commission has caused a notice of public hearing on this matter in accordance with law and Section 51284 of the Government Code, including sending a copy to the Director of Conservation for the State of California; and

(f) The Planning and Community Development Department has recommended approval of the cancellation and has determined that it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment and this Commission concurs with this determination and that, therefore, under the provisions of Special Situation, Section 15271 of the State CEQA Guidelines, such activity is not covered by the requirements set forth in the California Environmental Quality Act, and that the State CEQA Guidelines concerning the evaluation of projects and preparation and review of environmental documents do not apply thereto, for which reasons it is proposed to dispense with any environmental impact report in consideration of such matter; and

(g) Pursuant to the provisions of Section 51283 of the Government Code, the County Assessor has determined the full cash value of the parcel of land with respect to which the cancellation is requested, as though it were free of the contractual restriction, and has certified to this Commission that the amount thereof is \$644,040, and that the most recently announced County assessment ratio is 100 percent, and that the cancellation penalty fee is 12 1/2 percent of this value, or \$80,505, and has certified that there are no additional deferred taxes under Government Code Section 51283; and

(h) A hearing has been duly and timely conducted, during which the proposal was explained by a representative of the Planning and Community Development Department and all persons so desiring were duly heard; and

(i) This Commission has considered the recommendation of the Planning and Community Development Department and all the testimony presented during said public hearing, after which said public hearing was concluded.

SECTION 2. NOW, THEREFORE, BE IT HEREBY RESOLVED by the Planning Commission of the County of Kern, as follows:

(a) This Commission finds that the facts recited above are true and that this Commission has jurisdiction to consider the subject of this resolution; and

(b) After careful consideration of all facts and evidence as presented at said hearing, it is the decision of the Planning Commission that the application herein described be recommended for **A P P R O V A L**, subject to the payment of the penalty fee, as recommended by Staff, by the Board of Supervisors, for the reasons specified in this Resolution; and

(c) The findings of this Commission upon which its decision is based are as follows:

- (1) This Commission finds that the applicable provisions of the California Environmental Quality Act, the State CEQA Guidelines, and the Kern County Guidelines have been duly observed in conjunction with said hearing in the consideration of this matter and all of the previous proceedings relating thereto.
- (2) This Commission finds and determines the project to be statutory exempt from the requirement for preparation of environmental documents pursuant to, Section 15271 of the State CEQA Guidelines.
- (3) This Commission has determined that pursuant to Public Resources Code Section 21166 and 21083.3, and Section 15271 of the State CEQA Guidelines, said project qualifies as a special situation and does not require preparation of further environmental documents under the requirements of the Environmental Quality Act of 1970.

County Staff has reviewed the Environmental Information Form submitted by the applicant, and it has been determined there are no project-specific significant effects for the Hydrogen Energy International, LLC, (HECA) project. Pursuant to the California Environmental Quality Act (CEQA) and the Guidelines for the Implementation of CEQA, Section 15271, after a review of the proposed project and in light of the evidence in the record, Staff has made the determination that the requested actions for the HECA project do not require the preparation of subsequent environmental documentation based on the following:

- As a result of the requested actions, no substantial changes are proposed in the project that will require major revisions to the Kern County General Plan Final Environmental Impact Report because of the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects.
- As a result of the requested actions, no substantial changes will occur with respect to the circumstances under which the project will be undertaken that will require major

revisions to the Kern County General Plan Final Environmental Impact Report because of the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects.

- There is no new information of substantial importance that was not known or could not have been known at the time the Kern County General Plan Final Environmental Impact Report was certified, and no new significant effects as a result of the requested actions will occur that were not addressed in the Kern County General Plan Final Environmental Impact Report.
 - The requested actions initiate the implementation of a project addressed in the Kern County General Plan and previously analyzed in the Kern County General Plan Final Environmental Impact Report, and the requested actions are in substantial conformance with that plan.
 - The requested actions do not require the preparation of subsequent environmental documentation as the conditions identified in Section 15162 do not occur.
- (4) In accordance with Subdivision (e) of California Government Code Section 51282, the petition for cancellation was accompanied by a proposal for a specified alternative use of the land.
- (5) In accordance with Subdivision (a)(2) of California Government Code Section 51282, a landowner may petition the Kern County Board of Supervisors for cancellation of the subject Williamson Act Contracts; and the Board may grant tentative approval for the cancellation of the contracts if the Board finds that the requested cancellation is in the public interest.

Therefore, in accordance with Section 51282(c) of the California Government Code, this Commission finds the requested cancellation is within the public interest as follows:

- (a) Based on facts presented by the applicant, this Commission finds that other public concerns, which include public concerns regarding energy supply, energy security, global climate change impacts, hydrogen infrastructure and job creation, substantially outweigh the objectives of the Williamson Act; and,
- (b) Based on facts presented by the applicant, this Commission finds that there is no proximate noncontracted land that is both suitable and available for the use proposed on the contracted land because the project site was selected based upon its size, the proximity to existing electric transmission and carbon dioxide storage reservoir, existing natural gas transportation, and brackish groundwater supply infrastructure that could support the proposed power generation; and that development of the contracted land would not provide more contiguous patterns of urban development than development of proximate noncontracted land.
- (6) This Commission does hereby determine that the amount of the cancellation fee which the owner shall pay to the County Treasures as deferred taxes upon such cancellation, in accordance with Paragraph (b) of Section 51283 of the Government Code is in the sum of \$80,505 and does hereby certify said sum to the County Auditor; and finds and determines there are no additional deferred taxes due under Section 51283.1 of the Government Code.
- (7) Pursuant to the provisions of Government Code Section 51283.4, this Commission does hereby establish the following conditions and contingencies, and declares that a certificate of contract

with respect to said parcel of land will be issued and recorded within thirty (30) days after being notified by the landowner that each and all of said conditions and contingencies is satisfied:

- (a) Payment in full of the cancellation fee hereinabove mentioned;
- (b) Unless said cancellation fee is fully paid, or a certificate of cancellation is issued, within one year from the date of recordation for the certificate of tentative cancellation, said fee shall be recomputed as of the date the landowner notifies the Board of Supervisors that she or he has satisfied the conditions and contingencies, as provided in subdivision (b) of Government Code Section 51283.4, and the landowner shall pay any additional fee arising from such recomputation as a further condition to issuance of a certificate of cancellation; provided, however, that the landowner shall not be entitled to refund of any cancellation fee previously paid even if the recomputed fee is less;
- (c) Landowner shall obtain all permits necessary to commence the project of the proposed alternative use, including a permit issued by the California Energy Commission following its environmental review for Project Docket No. 08-AFC-8A; and
- (d) The Secretary of this Commission shall cause copies of this resolution to be transmitted to the following:

Hydrogen Energy International, LLC by Manatt, Phelps, and Phillips, LLP (PP12328) (agent) (1)
Hydrogen Energy International, LLC (owner) (1)
File (3)

