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DOCKET
08-AFC-8
DATE MAR 31 2010
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March 31, 2010

File No. 045049-0001

VIA FEDEX

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 08-AFC-08
1516 Ninth Street, MS-4
Sacramento, California 95814-5512

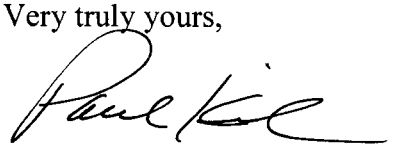
Re: Hydrogen Energy California Project: Docket No. 08-AFC-08

Dear Sir/Madam:

Pursuant to California Code of Regulations, title 20, sections 1209, 1209.5, and 1210, enclosed herewith for filing please find a document entitled, "Notice of Intent to Prepare an Environmental Impact Statement and Notice of Potential Floodplain and Wetlands Involvement for the Hydrogen Energy California's Integrated Gasification Combined Cycle Project, Kern County, California."

Please note that the enclosed submittal was filed today via electronic mail to your attention and served on all parties to the above-referenced project.

Very truly yours,



Paul E. Kihm
Senior Paralegal

Enclosure

cc: 08-AFC-08 Proof of Service List (w/encl., via e-mail and U.S. Mail)
Michael J. Carroll, Esq. (w/encl.)
Marc T. Campopiano, Esq. (w/encl.)

Department of Energy
Washington, DC 20585

March 31, 2010

Mr. Raymond A. Mosley
Director, Office of the Federal Register
National Archives and Records Administration
Washington, DC 20408

Dear Mr. Mosley:

This letter is to certify that the attached disk is a true copy of the **Notice of Intent to Prepare an Environmental Impact Statement and Notice of Potential Floodplain and Wetlands Involvement for the Hydrogen Energy California's Integrated Gasification Combined Cycle Project, Kern County, California.** This disk should be used by GPO in preparing the document for publication.

Mark J. Matarrese 3/31/10
Director
Office of Environment, Security, Safety & Health
Office of Fossil Energy

Clara Barley
DOE Federal Register
Liaison Officer

Attachment

Printed with soy ink on recycled paper

March 31, 2010

MEMORANDUM FOR CLARA BARLEY, GC-77
FEDERAL REGISTER LIAISON

FROM: ANN C. DUNLAP
PARALEGAL SPECIALIST

SUBJECT: Federal Register Announcement

Attached is an announcement entitled *Notice of Intent to Prepare an Environmental Impact Statement and Notice of Potential Floodplain and Wetlands Involvement for the Hydrogen Energy California's Integrated Gasification Combined Cycle Project, Kern County, California.* If there are no comments or corrections to the document, please forward it to the Office of the Federal Register for publication as soon as possible The National Energy Technology Laboratory's Location Code is 89000006.

If additional information is needed, please contact Mr. Paul Detwiler at (412) 386-4839. Thank you for your assistance.

Concurrence:

R. Paul Detwiler
Acting Chief Counsel

3/31/2010
Date

Attachment

6450-01-P

DEPARTMENT OF ENERGY

Hydrogen Energy California's Integrated Gasification Combined Cycle Project, Kern County, California – Notice of Intent to Prepare an Environmental Impact Statement and Notice of Potential Floodplain and Wetlands Involvement

AGENCY: Department of Energy.

ACTION: Notice of Intent and Notice of Potential Floodplain and Wetlands Involvement.

SUMMARY: The U.S. Department of Energy (DOE or the Department) announces its intent to prepare an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 *et seq.*), the Council on Environmental Quality's NEPA regulations (40 CFR Parts 1500-1508), and DOE's NEPA regulations (10 CFR Part 1021) to assess the potential environmental impacts of providing financial assistance for the construction and operation of a project proposed by Hydrogen Energy California LLC (HECA). DOE selected this project for an award of financial assistance through a competitive process under the Clean Coal Power Initiative (CCPI) program.

The project proposed by HECA would demonstrate Integrated Gasification Combined Cycle (IGCC) technology with carbon capture in a new baseload electric generating plant in Kern County, California. The plant would use blends of coal and petroleum coke (petcoke) or petcoke alone as its feedstock, and would demonstrate carbon capture and sequestration on a commercial scale.

The HECA project would gasify the coal and petcoke to produce synthesis gas (syngas), which would then be processed and purified to produce a hydrogen-rich fuel. The hydrogen would be used to power a combustion turbine, generating 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 (CO_2) capture efficiency of approximately 90 percent at steady-state operation. The captured CO_2 would be compressed and transported via pipeline to the adjacent Elk Hills Field (owned and operated by Occidental of Elk Hills, Inc.) for injection into deep underground oil and gas reservoirs for enhanced oil recovery (EOR) and geologic sequestration.

The EIS will inform DOE's decision on whether to provide financial assistance under its CCPI Program to the project proposed by HECA, which has an estimated capital cost of $2.3 billion. DOE's financial assistance (or "cost share") would be limited to $308 million, about 11 percent of the project's total cost. DOE's financial assistance is also limited to certain aspects of the power plant, carbon capture, and sequestration. The EIS will evaluate the potential impacts of DOE's proposed action (provision of financial assistance), the project proposed by HECA and any connected actions, and reasonable alternatives to DOE's proposed action. The purposes of

this Notice of Intent are to: (1) inform the public about DOE's proposed action and HECA's proposed project; (2) announce the public scoping meeting; (3) solicit comments for DOE's consideration regarding the scope and content of the EIS; (4) invite those agencies with jurisdiction by law or special expertise to be cooperating agencies in preparation of the EIS; and (5) provide notice that the proposed project may involve potential impacts to floodplains and wetlands.

DOE does not have regulatory jurisdiction over the HECA project. Its decisions are limited to whether and under what circumstances it would provide financial assistance to the project. There are a number of state and federal agencies that do have regulatory authority over the project; one of them is the California Energy Commission (CEC), which is responsible for power plant licensing under the Warren-Alquist Act (Cal. Pub. Res. Code § 25500 *et seq.*). This licensing process, which will consider all relevant environmental aspects of HECA's proposed project and related facilities, is defined by California law, and under state law is certified as fulfilling the requirements of the California Environmental Quality Act (CEQA; Cal. Pub. Res. Code § 21000 *et seq.*). Under this certified process, CEC holds public hearings, makes a final staff assessment, conducts evidentiary hearings, and issues a decision based on the hearing record, which includes the staff's and other parties' assessments. Through this process, the CEC staff will conduct an independent analysis of the proposed project and prepare an independent assessment of its potential environmental impacts, conditions of certification (e.g. mitigation measures), and alternatives. The staff will consult with interested Native American tribes and local, regional, state, and federal agencies, and CEC will coordinate its environmental review with other agencies, including the California Department of Oil, Gas and Geothermal Resources

(DOGGR). DOE understands that, pursuant to California law and a grant of primacy from the United States Environmental Protection Agency regarding Class II wells under section 1425 of the Safe Drinking Water Act, DOGGR has responsibility for permitting EOR injection and extraction wells, and is likely to have the regulatory lead for the CO_2 sequestration aspects of the proposed project, and would impose permit conditions on these aspects of the project that are needed to ensure the HECA project's compliance with California's requirements regarding CO_2 emissions from power plants.[1]

DOE intends to coordinate its NEPA review of the HECA project with the environmental review conducted by CEC as lead agency under CEQA. It will work closely with CEC throughout its regulatory processes in order to integrate the NEPA and CEQA processes in an efficient and expeditious manner. In particular, DOE will work with CEC on making the environmental analyses conducted for CEC's regulatory processes as useful as possible in DOE's NEPA process.

DATES: DOE invites comments on the proposed scope and content of the EIS from all interested parties. Comments must be received by May 24, 2010, to ensure consideration. DOE will consider scoping comments submitted after this date to the extent practicable. In addition to receiving comments in writing and by telephone, DOE will conduct a public scoping meeting in which agencies, organizations, and individuals are invited to present oral and written comments

[1] DOE anticipates that, pursuant to Cal. Pub. Res. Code § 21000 *et seq.*, California agencies will impose mitigation measures to address potential impacts and project design elements to verify the sequestration of CO_2 injected for EOR.

and suggestions with regard to DOE's proposed action, alternatives, and potential impacts of HECA's project that DOE will consider in the EIS. The scoping meeting will be held in Salon A of the Bakersfield Marriott at the Convention Center, 801 Truxtun Avenue, Bakersfield, California, at 7 p.m. on Wednesday, April 14, 2010. The public is also invited to learn more about the proposed project at an informal session at this location beginning at 5 p.m. Displays and other information about DOE's proposed action and the HECA project will be available, and representatives from DOE and HECA will be present at the informal session to discuss the proposed project, DOE's CCPI program, and the EIS process.

ADDRESSES: Written comments on the scope of the EIS and requests to participate in the public scoping meeting should be addressed to: Dr. R. Paul Detwiler, U.S. Department of Energy, National Energy Technology Laboratory, 626 Cochrans Mill Road, P.O. Box 10940, Pittsburgh, PA 15236-0940. Individuals who would like to provide oral or electronic comments should contact Dr. Detwiler directly by telephone: 412-386-7349; toll-free number: 1-866-269-6493; fax: 412-386-6127; or electronic mail: heca.eis@netl.doe.gov.

FOR FURTHER INFORMATION CONTACT: For information about this project or to receive a copy of the draft EIS when it is issued, contact Dr. Detwiler as described above. For general information on the DOE NEPA process, contact Ms. Carol M. Borgstrom, Director, Office of NEPA Policy and Compliance (GC-54), U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585-0103; telephone: 202-586-4600; fax: 202-586-7031; or leave a toll-free message at 1-800-472-2756.

SUPPLEMENTARY INFORMATION:

Background

Since the early 1970s, DOE and its predecessor agencies have pursued research and development programs that include large, technically complex projects in pursuit of 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 economically competitive performance. 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 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 often involve combustion improvements, control systems advances, gasifier design, pollution reduction (including greenhouse gas reduction), efficiency increases, fuel processing, and others.

The 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 intends to use a significant portion of these funds to provide financial assistance to CCPI projects.

The 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 is much greater.

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 and 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 CO_2; (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 CO_2 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.

Purpose and Need for DOE Action

The purpose and need for DOE action – providing limited financial assistance to HECA's project – are to advance the CCPI program by funding projects that have the best chance of achieving the program's objective as established by the 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 commercial service.

Site of the Project Proposed by HECA

HECA proposes to construct its IGCC baseload electric generating facility on a site currently used for agriculture in Kern County, California. The 1,101 acre site (473 acres of which would be used for the project and 628 acres for a controlled buffer area) is located in south-central California near the unincorporated community of Tupman, approximately 7 miles west of the

city of Bakersfield. The site's topography is characterized by relatively flat, low-lying terrain that slopes very gently from southeast to northwest.

The IGCC facilities would occupy approximately 250 acres (or less than 25 percent) of the site. Most of the remainder of the site would continue to be used for agriculture; some areas would be occupied by new process and potable water pipelines, a transmission line, a natural gas supply pipeline, a CO_2 pipeline, access roads and fuel-handling facilities.

Proposed Generating Plant

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

The plant proposed by HECA would gasify petcoke and coal 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 baseload electricity. At full capacity, the plant would be expected to use about 3,200 tons of feedstock per day (about 1.2 million tons per year). HECA would transport petcoke to the site by truck. Coal would be brought to a nearby railhead and transferred to trucks for delivery to the site.

Combined, the gas combustion and steam turbines would generate approximately 390 MW gross capacity (250 MW net) of low-carbon baseload electricity. This combined-cycle approach of using gas and steam turbines in tandem increases the amount of electricity that can be generated from the feedstock.

The plant would include a system capable of capturing about 90 percent of CO_2 generated during steady-state operation. The CO_2 would be piped offsite for EOR and geologic sequestration in the Elk Hills Field, located approximately 4 miles southwest of the project's location.

The proposed plant would minimize sulfur dioxide, nitrogen oxides, mercury, and particulate emissions as compared to conventional coal-fired power plants. It is expected to remove in excess of 99 percent of the sulfur dioxide produced by the plant and would also control 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 gasifiers would be accumulated onsite and made available for appropriate recycling or beneficial use, and if these options are not available, disposed of in accordance with applicable laws. It is anticipated that a significant fraction of the gasification solids with fuel value can be segregated and returned to the gasification process; the solids without fuel value would be beneficially used or properly disposed of. This return of solids with fuel value to the gasification process limits the amount of solids that must be disposed of as waste or beneficially used for another purpose.

In addition to the gasifiers and turbines, the plant's equipment would include stacks, mechanical-draft cooling towers, syngas cleanup facilities, and particulate filtration systems. The height of the tallest proposed stack would be approximately 260 feet above ground. 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 management facilities for handling gasification solids.

Proposed Linear Facilities

Linear facilities are the pipelines and electrical lines that transport materials and power to and from the plant. The source of process water for the plant would be brackish groundwater supplied by the Buena Vista Water Storage District; approximately 5 million gallons per day 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 sanitary use would be supplied by the West Kern Water District, located to the southeast of the site. The potable water line would be approximately 7 miles 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.

The site of the proposed project is about 8 miles southeast of Pacific Gas & Electric Company's Midway Substation. A 345-kilovolt (kV) transmission line would be constructed to interconnect the project to the grid at this existing substation, and to provide firm transmission service for the

plant's output. This transmission line would follow a relatively direct route between the plant and the substation, and therefore would be about 8 miles long. Rights-of-way (ROW) up to 175 feet in width would be required for this new line.

HECA would also construct an approximately 8-mile natural gas supply pipeline extending southeast from the site, and an approximately 4-mile CO_2 pipeline extending from the site to a custody transfer point where Occidental would take possession of the CO_2 and continue its transportation via pipeline to the Elk Hills Field for EOR use and geologic sequestration. The ROW for these underground pipelines would be approximately 50 feet wide.

Proposed Use of CO_2 for EOR and Sequestration

According to HECA's proposal, the project would result in the sequestration of about two million tons of CO_2 per year during the demonstration phase funded in part by DOE; HECA anticipates this rate would continue for the operational life of the power plant. The captured CO_2 would be compressed and transported via pipeline to the Elk Hills Oil Field approximately 4 miles from the power plant. The CO_2 would enable additional domestic oil production, contributing to the nation's energy security.

The EOR process involves the injection and reinjection of CO_2 to reduce the viscosity and enhance other properties of the trapped oil that facilitate its flow through the reservoir, improving extraction. During EOR operations, the pore space left by the extracted oil is occupied by the injected CO_2, sequestering it in the geologic formation. EOR operations would be monitored to ensure the injected CO_2 remains in the formation.

Proposed Project Schedule

The project proposed by HECA includes engineering and design of the generating plant, permitting of the plant and associated facilities, equipment procurement, construction, startup, operations, and demonstration of using the CO_2 for EOR followed by verified sequestration. HECA anticipates that it would take about four years to construct, commission and commence operation of the plant. It plans to start construction by 2012, and commercial operation by 2016. This schedule is contingent upon HECA receiving the necessary regulatory authorizations (which would be preceded by the hearings and others events mandated by the regulatory agencies' procedures) and upon DOE deciding to provide limited financial assistance for the construction and demonstration phases of the project (a decision that would occur after completion of the EIS).

Connected and Cumulative Actions

Under the cooperative agreement between DOE and HECA, DOE would share the costs of the gasifiers, syngas cleanup systems, a combustion turbine, a heat recovery steam generator, a steam turbine, supporting facilities and infrastructure, and a demonstration phase in which the project would use at least 75 percent coal (calculated on a fuel input basis) to generate low-carbon electricity and capture CO_2 for EOR and sequestration.[2] Under this agreement, DOE would not share in the cost of the air separation unit, CO_2 EOR and sequestration facilities, or certain other facilities. Accordingly, the EIS will evaluate the potential impacts of these aspects of HECA's project as connected actions.

[2] Because of the requirements of California law, DOE believes that the HECA project would need to continue sequestering CO_2 throughout the operational life of the plant.

DOE will also analyze the cumulative impacts of both the proposed project and any connected actions. The cumulative impacts analysis will include analysis of 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.

Alternatives

NEPA requires that an EIS evaluate the range of reasonable alternatives to an agency's 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 the 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 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 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 1,101-acre site or the ROWs for linear facilities), and a no action alternative. Regarding the no action alternative, DOE assumes for purposes of the EIS that, if it were to decide to withhold financial assistance from the project, the project would not proceed. DOE currently plans to analyze the project as proposed by HECA (with and without any mitigating conditions that DOE may identify as reasonable and appropriate); alternatives to HECA's proposal that it is still considering (e.g., the ROWs for linear facilities); and the no action alternative.

As noted above, DOE will analyze any "project-specific" alternatives that HECA is still considering such as the location of the facility within the site boundaries, alternative routes for the process water supply pipeline, CO_2 pipeline and transmission line, and other reasonable alternatives that may be suggested during the scoping period.

Under the no action alternative, DOE would not provide funding to HECA. 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.

Alternatives considered by HECA in developing its proposed project will be discussed in the EIS. HECA analyzed several alternative sites and determined that the only reasonable site alternative was its proposed site based on, among other things, the presence or absence of sensitive resources; the availability of land; and the site's proximity to the brackish groundwater supply, to electric transmission and natural gas facilities, and to a CO_2 storage reservoir.[3] The EIS will describe HECA's site selection process. However, DOE does not plan to analyze in

[3] HECA initially selected another site; it subsequently decided to move the project when it discovered the existence of sensitive biological resources at the initial site.

detail the alternatives sites considered by HECA because HECA is no longer considering these alternatives, they were not part of HECA's proposal, and therefore they are no longer reasonable alternatives.

Floodplains and Wetlands

The footprint of the proposed electric generating and carbon capture facility would not affect any wetlands or floodplains. Wetland and floodplain impacts, if any, from the construction of pipelines and transmission lines would be avoided by the use of horizontal direction drilling. In the event that the EIS identifies that wetlands or floodplains would be affected by the project (including its linear facilities) or connected actions, DOE will prepare a floodplain and wetland assessment in accordance with its regulations at 10 CFR Part 1022 and include the assessment in the EIS.

Preliminary Identification of Environmental Issues

The following environmental issues have been tentatively identified for analysis in the EIS. This list (which was developed from the environmental critique of the proposed project, permit applications that HECA has filed, comments by regulatory agencies on those applications, and information from similar projects) is neither an inclusive nor a predetermined set of potential impacts. This preliminary list is presented to facilitate public comment on the planned scope of the EIS. Additions to or deletions from the list may occur as a result of this scoping process. The preliminary list of potential environmental issues includes:

(1) Atmospheric Resources: Potential air quality impacts resulting from emissions during construction and operation of the proposed HECA project and connected actions (e.g., effects of ground-level concentrations of criteria pollutants and trace metals – including mercury – on surrounding areas, including those of special concern such as Prevention of Significant Deterioration Class I areas). Potential cumulative effects of greenhouse gas emissions.

(2) Water Resources: Potential effects of groundwater withdrawals and water use by the project, including potential impacts resulting from construction and operation of the project, including linear facilities and any connected actions.

(3) Infrastructure and Land Use: Potential effects on existing infrastructure and land uses resulting from the construction and operation of the proposed project and connected actions. For example, potential traffic effects resulting from the proposed project and potential land use impacts of committing farm land to a power plant.

(4) Solid Waste: Pollution prevention and waste management issues, including potential impacts from the generation, treatment, transport, storage, and management of wastes.

(5) Visual: Potential aesthetic impacts of new stacks, mechanical-draft cooling tower, flares, and other structures of the proposed plant, of the linear facilities, and of connected actions.

(6) Floodplain: Potential impacts (e.g., impeding floodwaters, re-directing floodwaters, possible property damage) of siting structures on a floodplain.

(7) Wetlands: Potential effects to wetlands due to construction and operation of the power plant, linear facilities, and connected actions.

(8) Ecological: Potential onsite and offsite impacts to vegetation, terrestrial and aquatic wildlife, threatened and endangered species,[4] and ecologically sensitive habitats due to the construction and operation of the power plant, linear facilities, and connected actions.

(9) Safety and Health: Construction- and operation-related safety, process safety, and management of process chemicals and materials.

(10) Construction: Potential impacts associated with noise, traffic patterns, and construction-related emissions.

(11) Community Impacts: Potential congestion and other impacts to local traffic patterns; socioeconomic impacts on public services and infrastructure (e.g., police protection, schools, and utilities); noise associated with project operation; and environmental justice issues with respect to nearby communities.

(12) Cultural and Archaeological Resources: Potential impacts to such resources from construction of the project and connected actions.

[4] No threatened or endangered species have been identified at the proposed plant site; three listed plant species and eight listed wildlife species may occur in the ROWs of the linear facilities.

(13) Cumulative Effects: Incremental impacts of the proposed project (e.g., incremental air emissions affecting ambient air quality) that, when added to other past, present, and reasonably foreseeable future actions, including connected actions, may have potentially significant impacts on the environment. This analysis will include potential impacts on climate.

The level of analysis of issues in the EIS will be in accordance with their level of importance. The most detailed analyses are likely to focus on potential impacts to air, water, and ecological resources.

Public Scoping Process

To ensure that all issues related to DOE's Proposed Action and HECA's proposed project are properly evaluated, DOE will conduct an open process to define the scope of the EIS. The public scoping period will end on May 24, 2010. Interested agencies, organizations, and individuals are encouraged to submit comments or suggestions concerning the content of the EIS, issues and impacts that should be addressed, and alternatives that should be considered. Scoping comments should clearly describe specific issues or topics that the EIS should address in order to assist DOE in defining the EIS's scope. Written, e-mailed, faxed, or telephoned comments should be submitted by May 24, 2010 (see **ADDRESSES**).

In addition, DOE will conduct a public scoping meeting in Salon A of the Bakersfield Marriott at the Convention Center, 801 Truxtun Avenue, Bakersfield, California, at 7 p.m. on Wednesday, April 14, 2010. The public is also invited to learn more about the proposed project at an informal session at this location beginning at 5 p.m. DOE requests that anyone who wishes to speak at this

public scoping meeting contact Dr. R. Paul Detwiler, by phone, fax, e-mail, or letter (see **ADDRESSES**).

Individuals who do not make advance arrangements to speak may register at the meeting and will be given the opportunity to speak following scheduled speakers. Speakers who need more than five minutes should indicate the length of time desired in their request. Depending on the number of speakers, DOE may need to limit speakers to five-minute presentations initially, but will provide additional opportunities as time permits. Speakers can also provide written material to supplement their presentations. Oral and written comments will be given equal weight.

DOE will begin the formal meeting with an overview of the proposed HECA project. DOE will designate a presiding officer to chair the meeting. The meeting will not be conducted as an evidentiary hearing, and speakers will not be cross-examined. However, speakers may be asked questions to ensure that DOE fully understands their comments or suggestions. The presiding officer will establish the order of speakers and any additional procedures necessary to conduct the meeting.

Issued in Washington, DC, this 30th day of March 2010.

James J. Markowsky
Assistant Secretary
Office of Fossil Energy

STATE OF CALIFORNIA
ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:	)	Docket No. 08-AFC-08
	)	
APPLICATION FOR CERTIFICATION, FOR THE HYDROGEN ENERGY CALIFORNIA PROJECT BY HYDROGEN ENERGY INTERNATIONAL, LLC	)	**PROOF OF SERVICE**
	)	(February 8, 2010)

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INTERESTED AGENCIES

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DECLARATION OF SERVICE

I, Paul Kihm, declare that on March 31, 2010, I served and filed copies of the attached:

Notice of Intent to Prepare an Environmental Impact Statement and Notice of Potential Floodplain and Wetlands Involvement for the Hydrogen Energy California's Integrated Gasification Combined Cycle Project, Kern County, California

to all parties identified on the Proof of Service List above in the following manner:

California Energy Commission Docket Unit

☒ Transmission via electronic mail and by depositing one copy with FedEx overnight mail delivery service at Costa Mesa, California, with delivery fees thereon fully prepaid and addressed to the following:

CALIFORNIA ENERGY COMMISSION
Attn: DOCKET NO. 08-AFC-08
1516 Ninth Street, MS-4
Sacramento, California 95814-5512
docket@energy.state.ca.us

For Service to All Other Parties

☒ Transmission via electronic mail to all email addresses on the Proof of Service list; and

☒ by depositing one paper copy with the United States Postal Service via first-class mail at Costa Mesa, California, with postage fees thereon fully prepaid and addressed as provided on the Proof of Service list to those addresses **NOT** marked "email preferred."

I further declare that transmission via electronic mail and U.S. Mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210.

I declare under penalty of perjury that the foregoing is true and correct. Executed on March 31, 2010, at Costa Mesa, California.

Paul Kihm