STATE OF CALIFORNIA

Energy Resources Conservation and

Development Commission

In the Matter of:

The Application for Certification for the Hydrogen Energy California Project

Docket No. 08-AFC-8A

Reply to Sierra Club’s Motion to Compel

On September 10, 2012, Sierra Club filed a Motion to compel production of information in response to eight data requests. Applicant responded to Sierra Club’s Motion on October 8, 2012. In consideration of the explanations Applicant provided regarding its objections, and further review of available information, Sierra Club hereby withdraws its motion with respect to four of the eight requests – 17(b), 17(g), 20(b) & 20(c). Sierra Club remains keenly interested in Applicant’s responses to the four remaining requests, Nos. 24, 47(b), 48, and 49, and asks the Commission grant Sierra Club’s motion to compel on these requests. Sierra Club briefly replies to new arguments raised in Applicant’s response brief below.

**Data Requests Nos. 24:** Sierra Club requested the Excel spreadsheets to verify the Application’s emissions estimates.

Applicant’s arguments concerning confidentiality of the requested information are unpersuasive. Sierra Club has offered to enter into a protective order to mitigate any confidentiality concerns. Applicants’ claim that there is no mechanism for entering into a protective order in the Commission is without merit. The Commission has approved non-disclosure agreements between parties in other
Release of the requested information will not impact Applicant’s competitive advantage because Sierra Club is not a competitor or a power plant developer. Sierra Club’s experts and attorneys routinely enter into non-disclosure agreements and have robust practices in place for preventing disclosure of sensitive information.

Further, Applicant’s argument that HECA’s emissions estimates are somehow extra-sensitive is unconvincing. Sierra Club pointed to several examples in its data requests and motion to compel where applicants released these spreadsheets in prior CEC cases. See Motion to Compel, footnote 7. Sierra Club now additionally submits a declaration from an independent power plant expert who obtained excel spreadsheets of emissions estimates, under confidential cover, from two separately proposed coal gasification plants in Kentucky during legal proceedings. The declaration of Julia May is attached to this Reply.

HECA’s sensitivity claims are highly questionable since it is possible to reverse-engineer most spreadsheets to produce this information anyway, though it would be time-consuming and tedious to do so. It is extremely laborious to verify HECA’s emissions estimates without the requested information, and HECA’s refusal to provide this information continues to thwart the public review process.

**Data Requests No. 47(b):** Sierra Club requested information related to the project alternatives of burning natural gas or gasifying different blends of biomass and solid fuel.

**Data Requests Nos. 48 and 49:** Sierra Club requested information related to how use of natural gas would require redesign of the facility, and whether alternative fuel blends of petcoke, coal and biomass would require redesign of the facility.

HECA provided substantially similar objections to these three requests on form and relevancy.

HECA’s objection to the form of the requested information is a legal contortion without merit. Applicant argues that Sierra Club’s request for an acknowledgement of certain statements is improper because it is not a request for “information” allowed under the discovery provision, Section 1716(b). This is a stretch. “Information” is plainly a broad term that includes HECA’s acknowledgement of the truth or falsity of a statement. A “yes” or “no” answer to a question increases knowledge; there is information contained in such a direct

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response. Whether or not the Applicant believes the statements in the request to be true, its answer will increase public understanding of HECA’s position regarding the project.

Applicant’s objections to relevancy improperly attempt to narrow the scope of discovery based upon its faulty interpretation of the statutes at issue. The Commission should not reject Intervenor’s request to compel discovery based on Applicant’s view on a disputed legal issue, and it is also should not resolve this type of legal issues on a motion to compel. Sierra Club has a broad right to discovery at this phase of the proceeding. 20 Cal. Code Regs. § 1716(b) (a party to a proceeding may request “any information reasonably available to the applicant which is relevant to the ... proceedings or reasonably necessary to make any decision on the ... application.”) The requested information is relevant because the Clean Air Act, CEQA, and NEPA require evaluation of clean fuels and alternatives. The Commission should not determine the exact contours of those analyses at this early stage. The particular Clean Air Act issue that Applicant raises regarding clean fuels and redefining the source requires review of numerous cases, guidance, the application, and may benefit from further discovery; this legal question, as well as the scope of a CEQA and NEPA alternatives analysis, is fit for a summary judgment motion, not a discovery dispute.

Sierra Club briefly presents its reply below, however, should the Commission chose to confront this legal issue at the discovery stage, Sierra Club requests an opportunity for additional briefing and argument on this contested legal issue.

In sum, Applicant’s objections attempt to limit the analysis of cleaner alternatives based upon their overly narrow view of the purpose, need and objective of the proposed facility. Under the controlling laws, HECA will need to evaluate and potentially implement cleaner fuels or alternatives. The Clean Air requires consideration of clean fuels under BACT as well as under Section 173(a)(5) of the nonattainment provisions, and the alternative analysis is the core of the required analyses under CEQA and NEPA. HECA cannot refuse to consider cleaner alternatives like natural gas and biomass, or even different blends of its current fuel choice, based on its narrow view that HECA must burn coal.

**BACT requires Consideration of Clean Fuel Alternatives**

Cleaner fuels such as natural gas, biomass, and alternative blends must be considered in HECA’s Best Available Control Technology (“BACT”) analysis under the Clean Air Act. A BACT analysis must include consideration of clean fuels to lower emissions limits. BACT is defined as “an emissions limitation based on the
maximum degree of reduction achievable… through…[pollution control methods] including… clean fuels...” 42 U.S.C. § 7479(3); see Sierra Club v. EPA, 499 F.3d 653, 655 (7th Cir. 2007) (“The Act is explicit that ‘clean fuels’ is one of the control methods that the EPA has to consider.”); Hawaiian Elec. Co., Inc. v. EPA, 723 F.2d 1440, 1442 (9th Cir. 1984) (low sulfur fuel likely to be BACT for a facility proposing to burn high sulfur fuel). As the Environmental Appeals Board has explained:

[C]lean fuels are an available means of reducing emissions to be considered along with other approaches in identifying BACT level controls. EPA policy with regard to BACT has for a long time required that the permit writer examine the inherent cleanliness of the fuel.

In re Inter-Power of New York, Inc., 5 E.A.D. 130, 134 (EAB March 16, 1994) (internal citations omitted).

Failure to conduct a proper clean fuels analysis is reversible legal error, and the Environmental Appeals Board has overturned many permits on this basis. In re Miss. Lime Co., PSD Appeal No. 11-01, at 17 (EAB Aug. 9, 2011) (remanding PSD permit for failure to properly consider natural gas as BACT for startup fuel); In re N. Mich. Univ., PSD Appeal No. 08-02, slip op. at 18-19 (EAB Feb. 18, 2009) (remanding permit for failure to properly consider burning more wood or lower sulfur coal as clean fuel); Hibbing Taconite Co., 2 E.A.D. 838, 1989 WL 266359, *8 (EAB July 19, 1989) (remanding permit because agency failed to justify rejection of burning natural gas as a viable pollution control strategy).

EPA recently held that BACT requires a coal gasification plant similar to HECA to evaluate natural gas as a clean fuel. In the Matter of Cash Creek Generation, LLC, Order Denying in Part and Granting in Part Requests for Objection to Permit, at 7 (EPA Dec. 15, 2009). The EPA objected to the Cash Creek permit because “[t]he BACT analysis for this permit considers different technologies and fuels at different times in the plant’s operation, but the analysis does not specifically include any consideration of using natural gas instead of syngas as the primary fuel.” Id. Even if the agency ultimately chooses to reject the natural gas option, it still must provide a “reasoned explanation that demonstrates why the option of using exclusively natural gas is not ‘available’ for this facility.” Id. at 8; see also EPA, PSD and Title V Permitting Guidance for Greenhouse Gases, EPA-457/B-11-001, at 27 (March 2011) (“any decision to exclude an option on ‘redefining the source’ grounds must be explained and documented in the permit record, especially where such an option has been identified as significant in public comments.”)
information Sierra Club requested is relevant at the very least to have a reasoned consideration of alternatives in the record.

Applicant argues that use of different fuel would “redefine the source,” however, the Seventh Circuit has held that some changes to preferred design must be considered or the term “clean fuels” would be meaningless. *Sierra Club v. EPA*, 499 F.3d at 656 (“Some adjustment in the design of the plant would be necessary...Otherwise ‘clean fuels’ would be read out of the definition of such technology.”). Using natural gas at HECA would not redefine the source because the facility is already designed to use natural gas both a startup and a secondary fuel. *See also In the Matter of Cash Creek Generation, LLC.* Nor would burning alternative blends of solid fuel in the same gasifier redefine the source.

This objection also demonstrates why a Commission ruling on whether natural gas, biomass or different blends of fuel would fundamentally redesign the facility would be premature. There is no information in the record to show whether these alternatives would in fact require substantial changes in the facility. Sierra Club is entitled to further information relevant to whether alternatives would require significant changes in the facility before the Commission reaches a decision on this issue.

**CEQA, NEPA and Other Parts of the Clean Air Act Require Consideration of Alternative Fuels**

CEQA, NEPA, and other provisions of the Clean Air Act also require consideration of clean alternatives like natural gas, biomass, and alternative fuel blends. The alternative analysis is the core of the environmental impact analysis under CEQA and NEPA. *See, e.g.*, Cal. Pub. Res. C. § 21002; 40 C.F.R. § 1502.14(a). Consideration of alternatives is “the heart of the environmental impact statement,” because it compels agencies to “present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public.” 40 C.F.R. § 1502.14; *see Citizens of Goleta Valley v. Bd. of Supervisors*, 52 Cal.3d 553, 564-65 (1990) (“The purpose of an environmental impact report is ... to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.”) (citing Cal. Pub. Res. C. § 21061 and § 21001).

HECA claims in its response that one of the fundamental purposes of HECA is to burn coal, but the Applicant cannot artificially constrain the alternatives analysis by narrowly defining the objectives of the project. *See Friends of*
Southeast’s Future v. Morrison, 153 F.3d 1059, 1066 (9th Cir. 1998) (“An agency may not define the objectives of its action in terms so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency’s power would accomplish the goals of the agency’s action,” because “the EIS would become a foreordained formality”) (quoting Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 196 (D.C. Cir. 1991), cert. denied, 502 U.S. 994 (1991)) (correction in original). Natural gas, biomass, and alternative fuel blends are obvious, feasible alternatives to HECA that could reduce the project’s significant environmental impacts. The purpose of the HECA plant is produce power and fertilizer, not to burn coal for its own sake.

Clean Air Act Section 173(a)(5) imposes an additional alternatives requirement on new sources in nonattainment areas. The Act requires “an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed source [that] demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.”

Sierra Club Did Not Request Burdensome Research or Analysis

Contrary to Applicant’s objection, Sierra Club is not requesting burdensome discovery that would entail time-consuming research and analysis. As stated in its motion to compel, Sierra Club is requesting a discussion of what needs to change in the facility if alternative fuels were used and why it needs to change, not detailed engineering support.
Conclusion

Sierra Club requests the Commission grant its motion to compel four data requests: 24, 47(b), 48 & 49. Sierra Club will not have the ability to verify HECA’s emissions calculations if the Applicant does not provide the excel spreadsheets as requested under No. 24. These spreadsheets are routinely provided in the Commission and in other coal gasification proceedings around the country, under confidential cover if necessary. With respect to requests Nos. 47(b), 48 and 49, HECA’s objections to relevance are off-base because they seek to prematurely cutoff Intervenor’s broad right to discovery at this early stage, and without full briefing and argument. Sierra Club urges the Commission to allow full discovery on clean fuel alternatives to HECA in order to build a complete record on the range of available options. If the Commission wishes to address the legal questions of the precise contours of the cleans fuels analysis under the Clean Air Act and the CEQA and NEPA alternative analyses at this early juncture, Sierra Club requests additional briefing and oral argument on these questions.

Dated: October 15, 2012

Signed:

____________ /s/ ______________

Andrea Issod
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Energy Resources Conservation and Development Commission

In the Matter of:

The Application for Certification for the Hydrogen Energy California Project

Docket No. 08-AFC-8A

DECLARATION OF JULIA MAY IN SUPPORT OF SIERRA CLUB'S REPLY TO MOTION TO COMPEL PRODUCTION OF INFORMATION IN RESPONSE TO DATA REQUESTS

I, Julia E. May, declare that the following statements are true and correct to the best of my knowledge, information, and belief and are based on my personal experiences.

1. I am a Senior Scientist and Environmental Consultant with over 23 years of experience performing Energy and Industrial Air Pollution Engineering Evaluations. Please see Exhibit A (Resume of Julia May).

2. In 2010 I was employed by Sierra Club to review the air permit applications for two proposed coal gasification plants in Kentucky: Kentucky Syngas and Cash Creek. During the course of the proceedings, I was provided with the excel spreadsheets of emissions estimates under confidential cover.

Dated: 10/15/2012 Signed: [Signature]

Julia E. May
EXHIBIT A
(Resume of Julia May)
Experience
1989-present

Energy and Industrial Air Pollution Engineering Evaluation

- Evaluation of energy issues including electricity planning, natural gas and coal-fired power plant permitting and impacts, transmission and reliability issues, alternative energy and policy options.

- Industrial air pollution source evaluation including criteria pollutants, toxics, greenhouse gases, pollution prevention methods and engineering solutions.

- Research on best and worst industrial practices, chemical and fossil fuel phaseout methods, policy, and technologies.

- Analyzing permitting, emissions and air monitoring data; compiling available health and environmental impacts data. Evaluation of technical basis of regulatory compliance with environmental laws. Working through practical technical issues of regulation, negotiating with industry and government agencies to craft most health-protective policy and regulatory language.

- Translating inaccessible technical information into lay language and educational materials. Providing technical assistance and cumulative impacts analyses to communities of color that face severe pollution burdens. Assisting communities and workers in developing proposals for environmental health protection regulation, permitting, and policy.

- Managed science department for statewide environmental organization. Hired by regulatory agency as technical advisor to identify feasible air pollution control methods not previously adopted, and to assist communities submitting comments during regulatory proceedings.

Education
1981

B.S. Electrical Engineering, University of Michigan, Ann Arbor
Engineering principles, circuit design, mathematics, thermodynamics, physics, materials science, chemistry, and others

Project examples:

- Evaluation of California Long Term Procurement Plan (electricity planning) and California power plant permits, reliability, transmission alternatives, environmental impacts (e.g. Potrero, Hunters’ Point, Oakley), and coal gasification proposals outside California (1990s to present).

- Evaluation of proposed refinery expansions, oil drilling and pipeline permitting: Emissions and solutions relating to feedstock switches to Canadian tar sands crude oil at ConocoPhilips Wood River, BP Whiting, Detroit Marathon, and proposed new MHA Nation, North Dakota, refineries, as well as dozens of refinery expansions in Northern and Southern California. Oil drilling operations, air impacts, in residential Los Angeles neighborhood. Pipeline transport impacts of crude oil, hydrogen, and other oil industry feedstocks in California and Midwest. Evaluation of coal gasification plant emissions. (1990s to present)

- Development of model California oil industry criteria pollutant regulation, and proposed greenhouse gas regulation and alternatives analysis: Oil refinery regulations for flares,
pressure relief devices, tanks, leakless fugitives standards, petroleum product marine loading, and others. (1990s to present)

**Positions**

2004- present  
**Independent Environmental Consultant (2004 - ongoing) and Senior Scientist, Communities for Better Environment (2006 – present)**  
Energy Use / Industrial pollution quantification / Alternatives analysis, including engineering analysis of proposed and existing industrial permits, analysis of statewide goals and energy planning, as well as policy analysis. Analysis of impacts and solutions to environmental problems including trends in energy use, oil industry feedstocks, associated equipment changes, emissions of criteria pollutants, toxic emissions, and greenhouse gases. Technical consultant and strategist in community campaigns on industrial regulation. Geographic areas include Southern California, Northern California, and multiple U.S. states.

2001-2003  
**Statewide CBE Lead Scientist, CBE, Oakland, CA**  
Responsible for accuracy and strategic value of CBE’s technical evaluations within community and environmental law enforcement campaigns, also led statewide technical staffing. Identified underestimations in electrical power plant expansion air emissions in a community of color which had very high asthma rates; identified alternatives option including sufficient conservation, clean energy generation, and transmission available to prevent need for fossil fuel expansion, documented facts in California Energy Commission proceedings. Analysis of and recommendations on adding regulation to Bay Area Ozone Attainment Plan (concerning flares, pressure relief devices, wastewater ponds, storage tanks, and others) which were ultimately adopted. Evaluated Environmental Impact Reports and Title V permits for refineries and chemical plants; identified emissions, potential community impacts and alternatives. Successfully assisted negotiating Good Neighbor Agreements by identifying technical solutions to environmental violations to bring facilities into compliance.

1990-2001  
**Clean Air Program Director, Northern California Region, CBE**  
Analysis of permits, regulation, air pollution inventories and other emissions information for oil refinery, power plant, cement kiln, smelter, dry cleaner, consumer product, lawn mower, mobile source, and other air pollution sources, neighbor and worker health impacts, with pollution prevention policy development. Successfully advocated for national models of oil refinery regulation. Evaluated and documented root causes of industrial chemical accidents as part of community campaigns for industrial safety. Technical assistance to community members negotiating Good Neighbor Agreements with refineries. Successful advocacy for adoption of policies eliminating ozone depletors in favor of benign alternatives.

1987-1990  
**Research Associate, CBE**  
Led successful campaign working closely with maritime workers and refinery neighbors for adoption of strict oil refinery marine loading vapor recovery regulation, which became statewide and national model. Member of technical working group at BAAQMD evaluating emissions, controls, safety, and costs. Also analyzed school pesticide use and won policy for integrated pest management on school grounds.

1986  
**Assistant Editor of appropriate technology publication, Rain Magazine, Portland, OR**  
Production of publication on innovative energy and environmental success models around the U.S. and the world. Compiled, co-edited, wrote, and provided production for non-profit publication.

1981-1985  
**Electrical Engineer, National Semiconductor Corp., Santa Clara, CA**  
Electronics engineering design team member for analog-to-digital automotive engine controls for reducing air emissions. Troubleshooting hardware and evaluating fault-analysis software efficacy.
A few special activities

2002 & 2006  
**Roundtable on Bay Area Ozone Attainment Progress and South Coast AQMD community technical advisor** Invited member of problem-solving group of decision makers including BAAQMD board members, industrial representatives, and government officials for reviewing progress and proposing action to control San Francisco Bay Area regional smog. Hired as Technical Advisor of SCAQMD to community organizations evaluating availability of alternative options in regional ozone attainment plan.

1995-2003  
**Air pollution monitoring projects including Optical Sensing Air Pollution Monitoring Equipment community “Bucket Brigade” low-tech monitoring projects**  
Provided technical analysis for community negotiators, resulting in permanent installation of a state-of-the-art air pollution monitoring system on the refinery fence line, using optical sensing to continuously measure air pollution and broadcast data to a community computer screen. Researched and reviewed manufacturer specifications, developed Land Use Permit language, and worked with refinery and manufacturer for better Quality Assurance/Quality Control. Worked with US EPA, Contra Costa County, and community groups evaluating the system and publishing report evaluating monitoring of emissions. Administered EPA-funded “Bucket Brigade” low-tech air pollution monitoring project for community groups of Contra Costa County Bucket Brigade project, who carried out training events in several communities surrounding major Bay Area refineries and chemical plants.

1997  
**Installation of Photovoltaic Panels**, Solar Energy International, Colorado. Practical training on solar energy system design and installation for general electrical energy uses including water pumping, house cooling, etc, and applying energy conservation principles.

1993  
**Chemistry of Hazardous Materials** course, U.C. Berkeley Extension, for environmental professionals.
AMENDED APPLICATION FOR CERTIFICATION FOR THE
HYDROGEN ENERGY CALIFORNIA PROJECT

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*indicates change
DECLARATION OF SERVICE

I, David Abell, declare that on October 15, 2012, I served and filed a copy of the attached Reply to Sierra Club’s Motion to Compel, dated October 15, 2012. This document is accompanied by the most recent Proof of Service list, located on the web page for this project at: http://www.energy.ca.gov/sitingcases/hydrogen_energy/index.html

The document has been sent to the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission’s Docket Unit or Chief Counsel, as appropriate, in the following manner:

(Check all that Apply)

For service to all other parties:

X  Served electronically to all e-mail addresses on the Proof of Service list;

___ Served by delivering on this date, either personally, or for mailing with the U.S. Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses marked **hard copy required** or where no e-mail address is provided.

AND

For filing with the Docket Unit at the Energy Commission:

X  by sending one electronic copy to the e-mail address below (preferred method); OR

___ by depositing an original and 12 paper copies in the mail with the U.S. Postal Service with first class postage thereon fully prepaid, as follows:

CALIFORNIA ENERGY COMMISSION – DOCKET UNIT
Attn: Docket No. 08-AFC-08A
1516 Ninth Street, MS-4
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docket@energy.ca.gov

OR, if filing a Petition for Reconsideration of Decision or Order pursuant to Title 20, § 1720:

___ Served by delivering on this date one electronic copy by e-mail, and an original paper copy to the Chief Counsel at the following address, either personally, or for mailing with the U.S. Postal Service with first class postage thereon fully prepaid:

California Energy Commission
Michael J. Levy, Chief Counsel
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michael.levy@energy.ca.gov

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

/s/ David Abell
David Abell
Sierra Club, Environmental Law Program