INFORMATIONAL HEARING AND

U.S. DEPARTMENT OF ENERGY SCOPING MEETING

BEFORE THE ENERGY RESOURCES CONSERVATION AND

DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the:	)	
	)	
Amended Application for Certification for the Hydrogen Energy California Project	)	Docket No. 08-AFC-08A
	)	
	)	

ELK HILLS SCHOOL

501 KERN STREET

TUPMAN, CALIFORNIA

THURSDAY, JULY 12, 2012

6:00 p.m.

Reported by:
Ramona Cota
Contract No. 170-09-002

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Andrew McAllister, Associate Member

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Andrea Issod
Kern-Kaweah Chapter of the Sierra Club

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Tim Kustic
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Department of Oil, Gas & Geothermal Resources (DOGGR)

Leonard Scandura
San Joaquin Valley Air Pollution Control District

Dan Bartel
Buena Vista Water Storage District

Gary Hamilton
West Kern Water District

The Honorable Harvey L. Hall, Mayor
City of Bakersfield

Lorelei Oviatt
County of Kern Planning and Community Development

Brian Marshall, Fire Chief
County of Kern

Craig Pope, Roads Commissioner
County of Kern

Nancy Ewert
County of Kern

David Couch, Councilman
City of Bakersfield

Jeff Tensley, Superintendent/Principal
Elk Hills School District

ALSO PRESENT

Kevin Hall
Central Valley Air Quality Coalition

Mark Romanini

Chris Romanini

Arthur Unger

Trudy Douglass

Gordon Nipp
Sierra Club

Christina Snow

Ron James
International Union of Operating Engineers, State Local 12

Mark Lambooy, Pacific Growers

Beau Antongiovanni

Regina Houchin

Don Van

Marvin Dean

Justin Bone

Richard Chapman
Kern Economic Development Corporation

Ben McFarland
Kern County Farm Bureau

Edward Kosareff

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PROCEEDINGS

6:18 p.m.

PRESIDING MEMBER DOUGLAS: Thank you for that and thanks to everyone for coming to this informational hearing tonight. My name is Karen Douglas, I am a Commissioner of the California Energy and the Presiding Member of this Siting Committee. And this is a committee delegated by the full Energy Commission to run this proceeding and put out ultimately a proposed decision on this project for the full Commission's consideration.

To my left is our Hearing Officer, Raoul Renaud, and to his left is Andrew McAllister, a Commissioner also with the California Energy Commission and the Associate Member of this committee.

At this point I would like to have the parties and also the Department of Energy Representatives introduce themselves. So for that I guess let's go first to the applicant and let me ask you to introduce yourselves.

MR. CARROLL: Hello, my name is Mike Carroll. I am an attorney with Latham & Watkins and we serve as the outside counsel representing the applicant, Hydrogen Energy, in this project.

MS. MASCARO: Hi, I'm Marisa Mascaro from Hydrogen Energy California.

MR. SHILEIKIS: Hi, I'm Dale Shileikis with URS,

the applicant's environmental consultant.

PRESIDING MEMBER DOUGLAS: All right. And staff, please.

MR. WORL: My name is Bob Worl, I'm the project manager for the project.

MS. DeCARLO: Lisa DeCarlo, Energy Commission staff counsel.

HR. HEISER: John Heiser with the Energy Commission, project manager.

PRESIDING MEMBER DOUGLAS: Thank you. And Department of Energy?

MR. ROCKEY: (microphone not on) John Rockey, the project manager. John Rockey, the federal project manager for the Department of Energy.

PRESIDING MEMBER DOUGLAS: We do need, we do need you to be on the microphone so the people on the phone can also hear so let's get the microphone working.

MR. ROCKEY: John Rockey, the project manager from the Department of Energy.

MR. POZZUTO: Fred Pozzuto, the environmental manager with Department of Energy.

PRESIDING MEMBER DOUGLAS: Thank you both. Now we have a number of intervenors in this case and so I'll read out the name of the organization and ask representatives to step forward and identify themselves beginning with Sierra

Club. Is there anyone here representing the Sierra Club?

MS. ISSOD: I'm Andrea Issod with Sierra Club. And I'm here with a few other people.

PRESIDING MEMBER DOUGLAS: Thank you. Association of Irritated Residents?

MR. FRANTZ: Tom Frantz, Kern County Resident.

PRESIDING MEMBER DOUGLAS: Thank you. Is anyone here from the California Unions for Reliable Energy?

(No response.)

Environmental Defense Fund?

(No response.)

Natural Resources Defense Council?

(No response.)

All right. So we have gone now through the parties and through the Department of Energy. I am now going to ask representatives of -- well first I'll ask if there are any local elected officials present who would like to come forward and introduce themselves at this time? Mayor Evans (sic).

MAYOR HALL: Good afternoon, I'm Mayor Hall from the city of Bakersfield.

PRESIDING MEMBER DOUGLAS: Mayor Hall.

MAYOR HALL: I want to express to the Commission and the Department of Energy my personal appreciation for you conducting this informal informational hearing for the

people of Bakersfield and Eastern Kern and also over on the west side here.

You know, this is a very worthwhile project, I believe, when you consider that we are going to provide a number of construction jobs and sustaining jobs once the facility is completed. You know, we care a lot about unemployment in our city and in our county and certainly this is going to be beneficial to that when it's completed.

I think also we have to pay particular attention to the impact on the economy that this project will provide Bakersfield residents, the city of Bakersfield, the county of Kern, with all of the amount of work that is going to go into building this, this facility, you know.

And people every day are concerned about their energy and how we are going to create more opportunities for affordable energy. And certainly when you talk about providing energy to 160,000 homes in Kern County that makes a difference in how we approach our energy cost and our electrical power.

I think it's good that we have cooperative partners over here on the west side that are willing to come forward and help, specifically the Buena Vista Water Storage District is a part.

And, you know, I think with the applicant they have continued to do a marvelous job of community outreach.

They have the facility based in Buttonwillow where people after today if they have further questions they can go to the company's site in Buttonwillow to get more information. Often people get alarmed when they can't secure information and I think the company has done an outstanding job with community outreach.

I think they have done a lot of good efforts with community service projects and doing the right thing to help families and children in our community with a number of the good donations that they have done to help with making life better in Bakersfield and Kern County.

And thank you again for taking the time to conduct this informational hearing today. Thanks very much.

PRESIDING MEMBER DOUGLAS: Thank you, Mayor Hall, thank you for being here.

Let me ask at this time if there are any other local elected officials who would like to come forward?

(No response.)

All right, we'll go on for now. If any local officials come later or would like to be recognized we could do that.

Let me ask now if there are any representatives of public agencies, local, state or federal agencies, present today?

MS. OVIATT: Thank you. I'm Lorelei Oviatt, I am

the Director of Kern County Planning and Community Development; welcome to Kern County. I would like to defer my comments until after you have made your applicant presentations.

I would like to note, although he didn't come forward, that Supervisor-Elect David Couch, who is also a City of Bakersfield City Councilman, is here and interested in all of the proceedings. So I will defer my opportunity to speak until later. Thank you.

PRESIDING MEMBER DOUGLAS: Thank you. Any other representatives of public agencies?

MR. KUSTIC: Tim Kustic, I'm the State Oil and Gas Supervisor, the head of the Division of Oil, Gas & Geothermal Resources. I don't know that we are going to make comments tonight but we will be the regulatory entity for -- well, we are right now the regulatory entity for Elk Hills Oil Field.

PRESIDING MEMBER DOUGLAS: Thank you, thanks for being here.

Other representatives of public agencies?

MR. BARTEL: Hello, I'm Dan Bartel, I'm a consultant for Buena Vista Water Storage District, formerly the general manager there.

And I would just like to let the California Energy Commission know that for decades Buena Vista has been

looking for somewhere to put a brackish water supply to help our growers, help our groundwater basin in the local environment here.

And we always thought that if we had a power plant located nearby we could send a brackish water supply there. And so lo and behold, Hydrogen Energy came along and it's a perfect marriage between a water supply source that was thought of prior to the project. And it's coming together really well and working with the Hydrogen Energy staff has been a pleasure and we look forward to a program with them.

PRESIDING MEMBER DOUGLAS: Thank you. Let me just ask at this time, can everybody hear? Can the people in the back of the room hear when the speakers come up?

(Affirmative responses.)

Good, good, all right. Please come forward.

MR. SCANDURA: Leonard Scandura, Permit Services Manager with the San Joaquin Valley Air Pollution Control District. We will be working with the Energy Commission in preparing our Determination of Compliance for this project.

PRESIDING MEMBER DOUGLAS: Thank you. Other representatives of public agencies?

MR. HAMILTON: Good evening, I am Gary Hamilton with West Kern Water District. We will be providing the potable water for the project when it's, when and if it's complete.

PRESIDING MEMBER DOUGLAS: Thank you. Any other public agencies?

(No response.)

All right. So with that, thank you again for coming forward and I'll turn this over to the hearing officer.

HEARING OFFICER RENAUD: Thank you, Commissioner Douglas. Just a couple of opening comments about what we are doing here before we proceed into a presentation by the Energy Commission staff. Could I have the next slide, please. Thanks.

The purpose of today's proceeding is to provide the public and the parties and the Committee with an opportunity to learn more about the proposed Hydrogen Energy California project. On June 15th the Energy Commission published notice of today's events and also mailed notice to parties, adjoining landowners and interested governmental entities.

You will hear the term "parties" quite a bit throughout the proceeding. And "parties" is maybe a word you would hear around a court proceeding like the plaintiff and the defendant or something like that. Here we have in our Energy Commission licensing proceedings we have an applicant and we have staff, Energy Commission staff who review the project, and then we have intervenors.

And intervenors are members of the public who can participate in the proceeding by filing a petition to intervene and at that point they have all of the privileges and rights and duties of a party, including the ability to obtain information from the other parties and present evidence at our hearings. The Public Adviser, Jennifer Jennings, is in the back of the room standing there at the table. And any of you who are interested in intervening can speak with her and she'll help you with that. As Commissioner Douglas said, we already have several intervenors.

The Energy Commission is a body of five Commissioners who are appointed by the Governor. Currently there is one vacancy on the Commission so there are four sitting Commissioners. And for power plant siting proceedings a committee of two Commissioners is appointed and so they are here with us tonight.

The Committee's job is to eventually issue a Presiding Member's Proposed Decision, which constitutes a thorough environmental analysis of the impacts of the proposed project and contains recommendations concerning the project, which are made to the full Energy Commission which then would decide or vote on whether or not to adopt the proposed decision. Mike, the next slide, please, thanks.

That decision is made upon the basis of the public

record and that means that it is only based upon documents and evidence and testimony that are brought out in public proceedings.

We want to make sure Energy Commission siting proceedings and all proceedings are as open and transparent and available to the public as possible. So we make sure that no contacts or discussions concerning aspects of the project are permitted to take place between the parties and the Commissioners or their advisors, this committee or myself, the hearing officer. All such discussions must be in a public place in a meeting that has been noticed such as this meeting today. Next slide, please.

So that kind of gives you a basis or I hope just a brief understanding of how our proceedings work and what we are doing here. This is kind of the first step in the public process where you get a chance to see the site and address the Committee and listen to presentations about, about the project.

We have scheduled our public comment period to begin at seven o'clock. I, from experience, kind of guess that we are going to be a little late on that. But we'll be here to listen to your comments once the presentations have concluded.

Commissioner Douglas has made a good point to me and that is about the ex parte rule, about communications.

Any communications period, with anybody, between anybody and the decision-makers, need to be made in a public forum. Again, it's just to make sure that all such discussions, conversations and so on are public and on the record.

Okay, with that I think we'll move to the staff presentation. Mr. Worl, if you're ready.

MR. WORL: Good evening. My name is Bob Worl and I am the project manager for Hydrogen Energy. I was -- actually when the project was first filed in 2008 I participated in some of the early phases of the project and now I'm back, as is HECA, or Hydrogen Energy California.

The purpose of my talk is to just give you a little idea of what the Energy Commission's role is from the staff perspective. We're charged with ensuring a reliable supply of electrical energy is maintained at consistent levels, subject to the needs for the protection of public health and safety and for the promotion of general welfare and environmental quality protection.

The Energy Commission's role, which Raoul has reiterated in terms of the actual documentation and the culmination of the process, staff's role is to begin the analysis, to undergo discovery and to do this consistent with the California Environmental Quality Act, CEQA.

I'm going to -- just to let you know, I am going to go quickly through some of this stuff because it's

somewhat repetitive of others so don't be alarmed. This and all of the presentations will be available to you. All you have to do is get a hold of us and we can make that available.

The Energy Commission staff works closely with local, state and other federal agencies as well as other parties, local institutions, the intervenors, everybody. Staff's job is to do an analysis that takes into consideration points of view expressed to ensure that we do a thorough analysis of the issues that are raised. And so we listen to all of the parties and all of the public and their concerns and comments.

We work also closely with the county; in this instance we'll be working with Kern County. We are in the early stages of looking at this project the way that it has been amended under new ownership, SCS Energy, LLC. There have been some changes to the project so it's an amended project.

So we will begin working with all of the agencies to work out the various roles and the various concerns that are, that are raised in the process.

We also work with the Department of Fish and Game, the regional water control board, and this instance also Buena Vista.

And we work with the Office of Historical

Preservation, Native American Heritage Commission, Department of Commerce, Division of Oil, Gas & Geothermal Resources.

With, obviously, Elk Hills, the Elk Hills oil field. The Occidental Petroleum oil field is an integral part of what's proposed by the Hydrogen Energy Project.

We also work with Fish and Wildlife Service where that is appropriate and any other agencies that, that are involved.

The Energy Commission and the Department of Energy in this case for this project, because of it's eligibility for federal funding through the Department of Energy, we will be working closely with, with them in terms of this process.

At this time our intention is to prepare a single, environmental analysis that will take into consideration requirements of both the state CEQA and also the federal NEPA concerns for the project. And part of that is holding this joint site visit/informational hearing with our federal counterparts. There they are.

We need to work closely with the county. In this instance there are a number of aspects to this project that are different than a traditional power plant. We'll be exploring all of those and we'll be exploring the joint responsibility to ensure that the project complies with

local laws, ordinances, regulations and standards as we move forward and that our process considers those as well.

Our licensing process, many people don't really understand. It's very complex until you've participated in it. Then one of the, one of the good things is that it's a very open process. It not only allows but depends upon public participation, participation of other interested parties, agencies.

And basically we like to hold public meetings like this. This is being conducted by the Committee itself so it's a hearing. And most of the staff -- most of the staff events, which will also be public events, we term as workshops. Those will all be noticed in advance of the event. We will try to hold several of them in the local area where the project is and not try to hide our process in Sacramento. That's something -- the commitment that we make to our process.

The staff begins its discovery and analysis with the filing of the project. In this instance the project was already deemed data adequate some time ago. But with the change in ownership and some of the changes to the project itself we worked with the applicant and the other parties and agreed that beginning with a new completely new 365 day process was probably appropriate and we will be pursuing our schedule as if it were a newly data adequate project.

Discovery and analysis begins with an issues identification paper, a series of data requests that are -- we call the discovery process. Public participation, as I mentioned, through workshops and hearings.

Our document, first document, will be a Preliminary Staff Assessment and we will solicit public comment on that. Usually the second document that we deal with is a Final Staff Assessment and that serves as staff's testimony at hearings on the project.

Now in this instance we are also working with the Department of Energy and the Department of Energy intends at this point in time to work with us. And our documents will be joined so that the document will also serve as a draft Environmental Impact Statement. And to that extent we will probably add some headings that people aren't very familiar with and might do some expanded discovery and analysis that will serve the NEPA process as well as the California Environmental Quality Act.

So this will be similar to a standard power plant process but considerably different in terms of our involvement with our federal and our county personnel. It will probably be more extensive than normally takes place.

After the Final Staff Assessment is issued, which in this instance will be a Final Staff Assessment and EIS, the Committee, which is over there, they are the decision-

makers, two of the decision-makers. Two of the five Commissioners. And they then will hold a hearing on the, on the Proposed Decision that they develop and will also -- there will be also opportunity on the Final Staff Assessment for public comment at a -- they will hold an evidentiary hearing prior to developing their preliminary determination -- their Presiding Member's Proposed Decision.

And that hearing is very important. Intervenors are aware of the importance of the evidentiary hearing. And again, that's a more formal process than the Preliminary Staff Assessment that we will be issuing. They have also mentioned that when they prepare their Presiding Member's Proposed Decision that they will have -- that they will hold a hearing on that as well.

I think that that's pretty much it for our process. I will be available any time, either through emails or telephone calls if you have questions on the process, how it works, and we look forward to seeing you often. So thank you very much.

HEARING OFFICER RENAUD: Okay, thank you, Bob. Now I think we'll hear from the United States Department of Energy folks, let's get to their slides.

MR. ROCKEY: Thank you, Bob. Again, my name is John Rockey; I am the project manager from the Department of Energy. And the reason that myself and Fred Pozzuto are

here tonight is because the Department of Energy is co-funding this project through the DOE's Clean Coal Power Initiative Power Program. The Clean Coal Power Initiative was established into law in 2002 and it was designed to be a government/private sector partnership for advanced coal-fired electric power projects.

So HECA was chosen in this program. And the program was selected through a fair and open competition based on solicitations that we conduct called Funding Opportunity Announcements. And to get selected you have to apply and your project has to show improvements in efficiency and cost-competitiveness versus what is commercially available. In fact, this project is a first of a kind in terms of providing carbon capture and sequestration from a power plant.

So HECA applied, they were selected. And then after selected we negotiated with them and developed the project objectives, scope, schedule, so forth, for the project. And part of the project requirements are that the participant must pay at least 50 percent of the project cost. And in most cases, including this case, the participant is providing much more than that. Overall the DOE is providing about 10 percent of the overall project cost.

(Discussion regarding equipment not working.)

MR. ROCKEY: This is going to be really quick, I'm just about done. So I mentioned about the CCPI program. And we do Funding Opportunity Announcements and we have done three of those over the last ten years. HECA was selected under Round 3, which the main objective was to demonstrate technologies that capture and sequester carbon dioxide.

And specifically, some of the major goals that we had were targeting capture of 90 percent of the stream of gas that is being treated and reducing the costs to do this. And the projects had to sequester a minimum of 300,000 tons per year of CO_2. HECA is sequestering much more than that, around 3 million tons or so.

So DOE selected the project and we signed a cooperative agreement with them September of 2009. Our contribution to the project is $408 million out of the estimated approximately $4 billion.

Bob mentioned that the project was reconfigured under new ownership in September of 2011. And they recently amended their application with the CEC, which kind of kicked off this whole process beginning with this meeting tonight with the DOE.

And I want to just say one final thing is that most of the DOE funding for the project is coming from the American Recovery Act of 2009. You see the objectives there. And the funds for that program expire on September

30, 2015.

I'm going to briefly turn it over to Fred Pozzuto who is going to talk a little bit more about the NEPA process.

MR. POZZUTO: Hello everybody. I'd just like to thank again all the elected officials and county, state and the mayor of Bakersfield. It was very nice for him to take time, especially off-time hours, to come out here.

I don't want to belabor this process more than it is because we are trying to streamline this NEPA process, which is the National Environmental Policy Act process, to integrate it with the CEC's process so we don't become more bureaucratic than government agencies already are.

So this sort of cluttered slide here, you can see where we are in the process. Here where the AFC amendment was sent in by the HECA folks. For the discovery phase, this is with CEC.

There was a Notice of Intent by the Department of Energy put in the Federal Register to do an EIS/CEC joint document.

This Informational Hearing took place a few weeks ago in Sacramento and now we are here at the Public Scoping Meeting.

NEPA in general, beyond environmental concerns, is really -- was set up so the American public knows how the

federal government is spending their money. And like John said, we're contributing about ten percent to the project cost for this. But it is an integrated process that we've developed and the CEC has sort of bought into this slide. Anyhow, there will be another comment period later to the federal government and the CEC when this draft EIS is complete and when Bob's folks have done their preliminary and final, their staff assessments.

This Notice of Availability will also be put in the Federal Register. And the main item is that the DOE is not going to issue a Record of Decision after all this documentation until the decision is made in the -- the final decision here after the hearing phase by the CEC is when the DOE is going to make a Record of Decision.

Again, this is sort of a slide here that explains our process and it's an integrative process. This is a little bit of a time line. As best that we can guesstimate it the close of the comment period for the DOE, this is considered our scoping process, of what the public wants to have included in the EIS document, will run until the 27th of July. However, we do accept comments as they come in.

For anybody's information, in the back is a mailer if you do not want to come up and speak in the public forum. It's on the back desk there if you want to write your comments down, mail them to me. We will share those with

the CEC and they will become part of the public record.

And the oral and written comments carry the same weight so whether you want to come up here and speak or write it. This writing is not going to come exclusively to the federal government, we're going to share this with CEC.

The one thing that I wanted to make a little bit clearer is in this one overall document is that there is really -- the only difference between ours, the Department of Energy's and the CEC's, will be really in two areas of study and that's the alternatives analysis and the purpose and need part of this document. The Department of Energy's alternative analysis is either going to fund the project or not fund the project.

Our alternative analysis -- our purpose and need rather, excuse me, is that our purpose and need is to try to advance this technology. The purpose and need of the CEC is to go through their entire process to make sure that all issues are addressed. And typically all the issues that we will always have in the public interest are environmental impacts regarding air quality, endangered species, cultural resources, economic impacts and job creation or impacts to non-job creation, social matters, environmental justice issues and safety and health concerns. For example, traffic and that sort of thing.

But again we want to emphasize this is an

integrated process. So even though the Department of Energy is sitting up here we are going to, as two agencies, going to integrate this into one single and complete document.

Again, the oral presentation is -- when the Department of Energy holds it is more of a hearing. We don't answer questions for you right now. We will answer them in response at some later date in the EIS. So it is not a question and answer period with us unless, unless we need some clarification.

So without any further delay I am going to pass this on to the HECA folks, Mr. Carroll, Ms. Mascaro, and they are going to really give you the full rundown of this proposed project. Thank you very much.

MS. MASCARO: Good evening. I am Marisa Mascaro from Hydrogen Energy California, or the HECA project as we call it. I'd like to thank the Commissioners and staff of the California Energy Commission, the Department of Energy, as well as the members of the local community for being here this evening. I would also like to thank the school for the use of their facilities.

Tonight I have a brief video and then a presentation. So I'll play the video first and then continue with some slides.

(A video was played.)

In my presentation this evening I'll give a brief

overview of the key features of the HECA project, its processes, the use of carbon dioxide for enhanced oil recovery and the economic and environmental benefits of the facility.

Hydrogen Energy California combines commercially demonstrated technologies into an integrated facility that will convert coal and petroleum coke to hydrogen for generating electricity, manufacturing fertilizer and other useful products, and capturing carbon dioxide for expanding the recovery of oil that remains in California's oil reservoirs.

This all-encompassing statement is meant to include all the various aspects of the HECA project. But first and foremost HECA is a power plant regulated by the California Energy Commission.

HECA is a 300 megawatt combined-cycle power plant with flexible baseload generation. It includes a manufacturing complex for fertilizers and other nitrogen-based products.

A key feature of the project is that it will capture 90 percent of its carbon dioxide during steady-state operations for sale to Occidental of Elk Hills, where they will use it for enhanced oil recovery or EOR. This means that approximately three million tons of carbon dioxide will be sequestered through enhanced oil recovery annually, which

is the equivalent of taking 650,000 cars off the road.

This slide shows a plant rendering with the basic components on it. There's also a poster board at the front if you'd like to take a look up close.

In simplified terms, the solid fuel, coal and petroleum coke, is brought to the site either via rail or via truck, where it is then put into a gasifier and converted to hydrogen through gasification, not through combustion. There is no burning of the coal or petcoke.

After gasification the carbon dioxide is stripped off and sent via a secure underground pipeline to Occidental of Elk Hills, where they will use it for enhanced oil recovery. The hydrogen can then be used to generate power and to manufacture fertilizers.

SCS Energy California acquired the HECA project in September of 2011 from the previous owners, BP and Rio Tinto. Although the project ownership has changed the key project features remain the same. HECA is hydrogen-fueled electric generation from fossil fuels, utilizing 90 percent carbon capture and storage. The site location remains the same, approximately seven miles from the western-most boundary of Bakersfield and two miles from Tupman.

HECA will preserve fresh water for agriculture by using brackish, non-potable water from the Buena Vista Water Storage District.

The HECA project will not discharge any waste water and this is what we call zero liquid discharge.

In addition HECA will continue to bring economic benefits to the county and state.

SCS Energy's design and their enhancements also resulted in some improvements to the project. We will be utilizing the hydrogen to create additional revenue streams to make cost-competitive clean power.

During periods of high electrical demand HECA will produce mostly electricity. If this were a typical power plant, during periods of low electrical demand the plant would sit idle, realizing no return on its capital investment. HECA though, during periods of low electrical demand, can use its hydrogen to create other products than electricity, and this is when we will make less electricity and more fertilizers.

Another important feature of the project is that it's dispatchable. And this means that the power is easily ramped up and down. And this is important because it complements and is a backup to renewable resources such as solar and hydro. So that if -- and also wind power. So that if, for example, the wind is not blowing, HECA can produce more power.

HECA also has included an option for a rail spur for feedstock and equipment delivery and product off-take.

As I've said, one of the key features of the project is 90 percent carbon capture and storage. The state of California has set aggressive greenhouse gas goals. And low-carbon baseload power and low-carbon manufacturing are essential to achieve the state's 2050 greenhouse gas goals.

As the graph shows, if the status quo were to continue, carbon dioxide emissions would continue to increase. But the state is seeking to achieve an approximately 80 percent reduction in greenhouse gas emissions by 2050. To do this the state of California will need to nearly eliminate all greenhouse gas emissions from the electricity sector.

The state can do this through renewable resources, solar, wind, hydro, or through the use of fossil fuels and carbon capture and sequestration. The state will also need to transform all transportation fuels to low to zero carbon and will need to dramatically reduce or eliminate the carbon footprint of all manufacturing, including fertilizers.

The site location remains the same as under the previous ownership. The site consists of 453 acres that will be used for a process area and 653 acres that will be used as a buffer and remain in active agriculture.

After an extensive site selection process the site was chosen because it is close to the enhanced oil recovery site and is also approximate to key features required by a

power facility such as water supply and electric transmission.

HECA will be capturing three million tons a year of carbon dioxide and selling it to Occidental of Elk Hills. Occidental of Elk Hills is an ideal location for carbon dioxide enhanced oil recovery for a few reasons.

First, because Elk Hills has been in operation for 100 years it contains mature wells that need the carbon dioxide enhanced oil recovery to extend their useful production life.

Second, again because of the age of the field, the field is well-documented and characterized. This means that the geology of the area, including the mechanisms for trapping and storing the carbon dioxide, are well understood.

Although carbon dioxide enhanced oil recovery is new to the state of California, it has actually been used in the industry for nearly 40 years in the Permian Basin in West Texas where there's an ample supply of naturally occurring carbon dioxide.

And although it may be difficult to see, this graph represents Occi's vast experience with carbon dioxide enhanced oil recovery. And they are just a world leader in the use of carbon dioxide.

The HECA project will bring many economic benefits

to the state and county. HECA will create more than 2,400 jobs at the peak of construction. HECA will bring $3.4 billion in economic stimulus to Kern County during construction.

During project operations the site will have 200 permanent jobs and this translates to $291 million of annual economic stimulus in Kern County over the project life.

HECA represents a $5 billion investment in California's infrastructure and construction industries. HECA will bring millions of new tax revenue to the state and county over the life of the facility.

And with the use of the three million tons of carbon dioxide that are sent for enhanced oil recovery, Elk Hills will generate additional oil, creating new revenues for Kern County and the state.

HECA has many environmental protection features. HECA will adhere to best available control technology standards and install state of the art air emissions controls. This plus the capture of carbon dioxide means that HECA will produce lower overall air emissions than any conventional power plant of its size.

HECA will help the state achieve its goals of reducing greenhouse gas emissions.

HECA will recycle petroleum coke, a low-value byproduct of oil refining. Today petroleum coke is shipped

overseas where it is burned, releasing carbon dioxide and other air pollutants.

HECA will protect and conserve California's valuable fresh water resources by using brackish, non-potable water for its process needs.

HECA will be obtaining its water from the Buena Vista Water Storage District. And as we've heard from Dan Bartel, HECA will play an important role in the district's ground water remediation program.

In addition, HECA will further protect local water supply by eliminating all surface water discharge.

HECA submitted its amended Application for Certification to the California Energy Commission on May 2nd. The application will now undergo a 12 month environmental review under the California Environmental Quality Act and the National Environmental Policy Act. The various environmental areas that are covered in the application are listed on the slide.

HECA considers public outreach an important part of the project development and strives to inform all stakeholders at the federal, state and local level of project activities. Here in the local community HECA is involved with the local and Kern County schools, the Kern County Planning and Community Development Department, the Board of Supervisors, local environmental organizations, the

Chamber of Commerce, neighborhood groups, among others.

HECA has an aggressive, but we believe, achievable schedule for commencing construction, operations and the economic benefits that flow from those. We anticipate commencing pre-construction in June of 2013, commencing construction and earth-moving activities in August 2013, completing construction in February of 2017. And then following commissioning and start-up, commencing commercial operations in September of 2017.

Finally, we welcome anyone to stop by our information center in Buttonwillow and visit with Darlena or you are welcome to visit us online at heca.com. That's H-E-C-A. And online you will find links to key project documents. Thank you for your attention.

HEARING OFFICER RENAUD: Thank you for that. I'd like to get Bob Worl back up to go through the staff's Issues Identification Report. The Energy Commission staff's job is to review the application and conduct an environmental review. They have begun that work and have developed an initial Issues Identification Report and Bob is just going to go over that with you to point out some of the environmental issues that the staff sees potentially arising here.

MR. WORL: Okay, it might take me a minute to get our presentation back up there.

Okay. I just wanted to say a few more words. This particular slide just depicts sort of the moving pieces of our process. We have already gone through that very top part, the pre-filing and the filing and the Amended AFC and we get down to the start of discovery.

The Issues Identification Report, which I'll discuss briefly, and data requests, analysis, et cetera, evidentiary hearings, which we have talked about briefly, and moving on through the Presiding Member's Proposed Decision and the final decision by the Commission Members.

This basically illustrates the input points to the process. We listen to intervenors, who also work with the Public Adviser, the public who works with the Public Adviser. Jennifer Jennings who is here and will introduce -- probably shortly after I've finished here.

You can see the blue box in the center is the staff. We do the staff assessment and prepare staff testimony. And that will be done in addition with the Department of Energy, the county and the other agencies as well as DOGGR, Department of Oil Gas & Geothermal Resources, they have an integral and very important part in this process. Again, this just illustrates that there are a lot of, there are a lot of parties and participants in the process.

Again, not to belabor the discovery and analysis

part, which we have, we have covered. But I wanted to mention again, public participation and methods and our workshops. This is a critical feature to the Energy Commission process. It's why we say that it's an open process and we are pretty proud of the way it works.

The public, whether you're an intervenor or not, you have the opportunity to submit written comments, to provide oral comments at public meetings, to participate in workshops. At some point in time if you become very concerned regarding your point of view you can become a formal intervenor. And the Public Adviser, Jennifer Jennings, is available to help if someone wants to consider that process.

Also participation at workshops and hearings, providing written comments on staff's assessment. And should you so desire you have the opportunity to present or sponsor expert testimony. And provide comments and testimony on the Committee's PMPD at the full Commission -- and at the full Commission hearing. So there are numerous opportunities to participate in this process and we urge you to consider and to remain active and involved.

It is very important to us that we listen to you and consider your points of view as we prepare our analysis.

Public participation and information sources. We've mentioned the open public process, workshops,

hearings. All of these are noticed at least ten days in advance. You can also sign up on the electronic mailing list we call the List Serve. You can do that. And there's documents available that will tell you, again, that will reiterate this website, www.energy.ca.gov/listservers. And there are a list of projects that you can sign up for, one of them being the Hydrogen Energy California project.

All project documents associated with the Hydrogen Energy analysis are available on the project's specific website, which is, again, www.energy.ca.gov/sitingcases and after that would be Hydrogen Energy. And then -- the "index.html" also will get you to a list of siting cases that are active, of which one is the Hydrogen Energy project.

You can also send emails directly to us or to the Public Adviser, to the applicant, and we will work to get those into our docket. Public comments, to the extent that we can, we have them available electronically, we will post those on our website for the Hydrogen Energy project.

And the Dockets Unit at the Energy Commission, if you wanted to mail a hard copy letter, is 1516 Ninth Street. Well actually it's no longer MS-15, that's us up on the fourth floor. I think it's MS-4, I'm not sure. Do you know what it is offhand? If you just put Dockets Unit it will get to them but I believe it's -4. And Sacramento,

California, 95814.

Now, one of the first obligations as we begin discovery in this process is to develop an Issues Identification Report. The purpose is to inform all of the stakeholders of the potentially significant issues staff believes it will encounter and to provide an early focus for stakeholders. And that includes the public, the applicant, Department of Energy, Division of Oil, Gas & Geothermal Resources, the Committee and anyone else who has a specific interest in this project. The idea is to focus people's attention on issues that need a thorough vetting in terms of discovery but also in terms of the ultimate analysis.

The criteria for identifying an issue is it must be -- it must have significant impacts that result from the project which would be difficult to mitigate.

Or the project as proposed may not comply with applicable laws, ordinances, regulations or standards.

Or the project as proposed conflicts with -- conflicts may arise between the parties about the appropriate findings or conditions.

The primary effect is that it delays the schedule and it makes, in some instances, a project difficult to permit.

Potential issues that we identified associated with the Hydrogen Energy Project at this point in time. The

first one that we identified isn't really, it's not a hard and fast issue per se, it's a jurisdictional issue in the scope of review. There are a lot of different players associated with this project. And we have yet to completely and clearly define how we are going to coordinate achieving the goals of evaluating the Hydrogen Energy Project and determining what permits are required and who is required to issue those permits.

Also, as is always the case with a project that's large in scope and that involves a lot of construction. And during operations such as this normally a combustion process, not a part of this project. But this project has potential for a lot of truck traffic transporting coal and petroleum coke and also transporting byproducts from the facility to markets or to long-term storage.

And that poses potential air quality benefits that staff needs to identify and thoroughly vet and we need to look at what the benefits and opportunities are for mitigation. And associated with that, we also need to look at the potential for those processes producing greenhouse gases. That partially offsets the capture of 90 percent of the hydrogen production facility's CO_2 and the eventual transport and possible sequestration in the Elk Hills Oil Field.

We also want to be cognizant of biological

resource issues. We know that this area has a number of species that are of state and national importance and we want to be very careful about the potential impacts to those resources.

Cultural Resources. The area has long been known to be very rich in cultural resources, particularly Native American that once were in this vicinity and also on the Elk Hills Oil Reserve, not just the Hydrogen Energy area itself. So we are taking a long look at that.

Associated with that is the responsibility of both the state as well as the federal government to coordinate and to work with the tribes. To involve them in the process and to be cognizant of their wishes and desires in terms of the potential impacts to their cultural resources.

Hazardous Material Management. This project has a number of products that would require close scrutiny as being potentially hazardous. Obviously hydrogen is one of those but a compressed, you know, CO_2 line is another, is another one. But there's also the production of ammonia and other products and byproducts associated with the, with the manufacturing facility.

Soil and water issues. Any time you have an agricultural area you are going to have soil concerns and issues and water. This project uses a large amount of water. Currently it's been identified that the Buena Vista

District brackish water is a potential good source for the high-volume water use of the project but staff will continue to look at that.

Traffic and transportation issues associated with the delivery of the coal and petroleum coke to the project, which I had previously mentioned, as well as the taking away of the byproducts, marketable byproducts and waste byproducts of the facility.

And waste management. There is a particular issue associated with the volume of material that results from the gasification process of the coal and petroleum coke and it has some very specific characteristics that don't at this time appear to be dangerous or harmful. But nevertheless the volume is such that it has the county concerned and also has the applicant currently looking at means of resolving that particular product as either having marketable opportunities or needing to be landfilled and transported to another location.

That's the summary of the issues that staff has currently identified that have the potential to complicate the analysis, to potentially impact the schedule for the project. And for also those -- some of those issues are areas where we really need to look very closely at the laws, ordinances, regulations and standards that are applied by the county and by the state for, for those materials.

The screen that is up here right now is an idealized schedule for the project. It begins with the amended AFC being filed around the first part of May and goes on through the various steps and procedure that I have outlined that staff involve itself with in terms of the discovery and analysis phase.

We are currently here at July 12th, the Committee Informational Hearing and Site Visit, and we want to thank you all. This is a very good turnout, by the way, thank you for coming.

Also we need to hear from the San Joaquin Valley Air Pollution District. They need to provide a Preliminary Determination of Compliance for the air quality aspects of the project. And that to date has been moving rather nicely.

There is also, there is also a relation -- the air quality issue is related also to the air district being able to be the entity that provides the prevention of significant deterioration permit for a project of this type. Right now the EPA has submitted for consideration the inclusion into the state implementation program the transfer of that authority to the San Joaquin Valley Air District.

Again, we are looking at a number of agencies, federal, state and local agencies. Final Determinations and that -- that also involves working with the Energy

Commission to ensure that we are aware of all that's needed and that we work together to achieve the goals of getting the information required in that regard.

And again, we've mentioned a number of these and we've talked about the culmination with a Final Staff Assessment. Then the Department of Energy Draft Environmental Impact Statement, which at this point in time is intended to be synonymous with staff's Final Staff Assessment, it will be a joint document. I listed that as to be determined because our experience is we never know how well that works out, cooperating, until we get there. And we are on the way, it's looking good, but we are ever hopeful.

The other, the other aspects of the schedule, the idealized schedule, are Committee or Commission-determined schedule events. We don't at this point in time have enough information, we are not far enough into the production of the preliminary and final documents or the analysis phase for the Committee to be in a position to determine for sure when those events will take place.

That's the prehearing conference, the preparation of the Presiding Member's Proposed Decision and the committee hearing on the PMPD. Which again is a point at which public input is desirable. And then the final Commission decision. A hearing that's sometimes called a

hearing on the Presiding Member's Proposed Decision and Final Decision.

But again, this schedule is idealized. It's based on the benchmarks that the Energy Commission strives to achieve in terms of the various elements. As I said, we always start off being very hopeful. We also, though, are flexible in terms of resolving issues that arise, not just the ones that I had mentioned but also others that crop up any time that you have as many moving parts as this particular project analysis will have. And that's pretty much it.

HEARING OFFICER RENAUD: Okay, thank you, Bob.

MR. WORL: And I want to thank you all for coming and being patient with me.

HEARING OFFICER RENAUD: Thank you, Bob. And what we are going to do next is our Commissioners here have a few questions for the applicant and then we'll move to a brief just introduction by our Public Adviser, a description of how you can participate, and then we'll move to public comment. So who wants to start? Commissioner Douglas.

PRESIDING MEMBER DOUGLAS: All right. Well we might end up tag-teaming here but I'll ask a few questions.

Obviously the applicant is coming in as a new project owner and so we are really starting at the beginning of the process. But while I was not on the Committee

handling the initial project I had some, I followed it to some degree. And one striking difference about this proposal that really jumped out at me when I looked at the materials to prepare for this informational hearing is the fact that the project initially proposed began with a 100 percent petcoke and no coal profile and I think somewhere in the middle of that proceeding the amount of coal might have shifted upwards to maybe a quarter. But now I see that the proposal is for 75 percent imported coal and 25 percent petroleum coke. So my first question to the applicant is, if you can explain why the project is proposed with that fuel source?

MS. MASCARO: Thank you. The project will use 75 percent -- can people hear?

PRESIDING MEMBER DOUGLAS: Let's make sure the microphone works.

MS. MASCARO: The project will use 75 percent coal and a blend with 25 percent petcoke and that's because there has been a change in the manufacturer of the gasifier. We've done that because the gasifier we have now included in the design is more reliable and more efficient. That blend is what the gasifier can use. The gasifier cannot use 100 percent petcoke.

PRESIDING MEMBER DOUGLAS: Okay. So what I understood is that you have changed the manufacturer of the

gasifier. Who was the original manufacturer and who is the current proposed manufacturer?

MS. MASCARO: The original manufacturer was General Electric and the current manufacturer is Mitsubishi Heavy Industries.

PRESIDING MEMBER DOUGLAS: Okay. And the current gasifier that you are proposing, can you explain more about why it cannot use or why it needs the 75 percent coal? Or is that too technical a question right now? Because we can ask that later.

MS. MASCARO: We do have technical resources here.

MR. MIDDLEMORE: Hi, my name is Bob Middlemore, operations and engineering for the HECA project. And the question you asked was, what is it about the Mitsubishi gasifier that has us with the blend that we are proposing?

One of the characteristics of a gasifier is it -- what it does is it takes ash that is in the material and it creates a fluxant, which is a coating on the walls, that provides protection and cooling for the inside of the gasifier. And the Mitsubishi design is such and the experience that they had is such that they are only comfortable at this point running up to 25 percent petcoke. And that's the reason for that particular blend ratio.

PRESIDING MEMBER DOUGLAS: Okay, thanks, thanks for answering that. And I've got another question that you

may or may not be called on to help with. But I was curious about the slide that you put up saying that the air emissions from this proposed plant would be less than any other conventional plant of its type. And I wondered if you could unpack that a bit and tell me more about what you're comparing it with, what types of emissions you would be anticipating that might be similar or different. And I saw a qualifier there somewhere on the slide that said something about taking sequestration into account. So I'd just be interested in hearing a bit more about that statement.

MS. MITCHELL: My name is Julie Mitchell, I'm with URS Corporation, I'm an atmospheric scientist working on the project.

If you take into consideration all of the pollutants that are emitted from the project, that includes NOx, VOC, particulate CO_2, other greenhouse gases for a similar size project you will see that the total emissions from the project are less than other similar projects.

PRESIDING MEMBER DOUGLAS: Yes, go ahead.

ASSOCIATE MEMBER McALLISTER: So could you talk about the mechanisms of that. Now since we're talking about emissions just sort of -- if you could explain where the different pollutants, you know, criteria pollutants of various sorts and carbon ,sort of, are removed from the emission stream. If those are going -- so that the carbon

is going off and being sequestered. What's happening to all the other stuff? Is that the control technology at the back end or is it some part inherent in the process?

MS. MITCHELL: With the other pollutants other than the greenhouse gases the control technologies that are installed in the different emissions sources, whether it be in the HRSG stack or in the other sources, there are control technologies to limit the emissions. And they are controlled to BACT, which is best available control technology, which is in the EPA and the San Joaquin Valley Air Pollution Control District regulation requirements that any -- that this source and for that matter any source that's permitted wouldn't -- have to meet the best available control technologies. So these are meeting the best technology that's available for a hydrogen facility if you are looking at that portion of it, and/or for the fertilizer portion. Plus as you know the CO_2, 90 percent of the CO_2 in the syngas stream goes off to sequestration.

ASSOCIATE MEMBER McALLISTER: Could you talk about how the shift of fuel source has changed your control technologies, if at all?

MS. MITCHELL: The shift in fuel source actually has not changed the control technologies for this project.

PRESIDING MEMBER DOUGLAS: Okay. Just another question along these lines. And I don't know, if staff

would like to add anything you should feel free as well. But just going back to the initial question of comparing this to the air emissions of another, a conventional facility of this size. Were you comparing it to the air emissions of a gas facility of this size, of a 300 megawatt combined cycle, for example?

MS. MITCHELL: If you take a look at the greenhouse gas emissions, that's a fairly large portion of the emissions that come off of a facility like this, you can see that. But I will say we did actually do -- we have had a request from one of the intervenors, from AIR, to look at the comparison between Avenal and this project and we have looked at Avenal compared to this project. And you take a project -- it actually is -- it's a natural gas power plant that's also in the San Joaquin Valley that was fairly recently permitted.

If you look at the NOx, VOC and PM, which are the pollutants of most concern in the Valley because of non-attainment statuses, the actual emissions of the HECA project from the turbine, from the power generation portion of it. So if you look at the turbine on Avenal and the turbine on HECA, the emissions from HECA are lower all across the board. And the HECA project produces more gross megawatt hours per year.

PRESIDING MEMBER DOUGLAS: Okay.

MR. CARROLL: And I can just -- to provide some specifics because I know this is an important issue. But with respect to NOx, the Avenal project is 144 tons per year, HECA is 104. On a pound per megawatt hour basis for NOx, Avenal, which is a typical natural gas fired project is .1 pounds per megawatt hour where HECA is .06.

With respect to VOCs, total tons per year are 34.5 for Avenal, 14.4 for HECA. VOCs on a pound per megawatt hour basis, .02 for Avenal, .01 for HECA.

And them PM_{10}, $PM_{2.5}$ emissions total ton per year are 80.78 for Avenal, 52.1 for HECA. And on a pound per megawatt hour basis for PM, .05 for Avenal and .03 for HECA.

And we will be docketing this in response to the data request filed by AIR so that you can see it. But as Ms. Mitchell said, across the board what we are seeing when we compare it to a conventional natural gas fired project is the criteria pollutants that are of key concern are lower. And of course Avenal doesn't have any carbon capture and sequestration and we have that additional air quality benefit associated with HECA.

MS. MITCHELL: And I would like to note that this is on the power production portion of it, not -- that's excluding the fertilizer --

PRESIDING MEMBER DOUGLAS: Right. I understand, that makes sense. All right. Another question for the

applicant I have is the question of how dispatchable the project is proposed to be. I definitely see that you are proposing a combined-cycle and presumably with a heat rate comparable to combined-cycles, although I'm not certain about it at the moment. But you are also proposing to have basically, as I understand it, one very large turbine. And I am interested in how dispatchable, when you talk about being able to follow load or balance load, is that hourly, is that daily, is it fast start?

MR. MIDDLEMORE: First it's important to understand how it does, maybe it puts some context to it. What we are doing is we gasify the solid fuels, as you know, we make hydrogen. And the hydrogen can go one of two places, it can go either to the power plant to make power or to the fertilizer plants to make fertilizers. Just so you know. Like two-thirds on average, two-thirds of the hydrogen ends up in power over the course of a year as opposed to making fertilizer.

And that's how we gain that dispatchability. The power plant can ramp between 100 percent power output to 70 percent. And when it's at 100 percent the ammonia plants are running at 60 percent. And vice versa, when we ramp the power down at 70 percent the ammonia plant in this case -- and I should say that it's the ammonia plant that's ramping up and down. The urea and UAM production is constant. But

it ramps from 60 to 100 percent opposite to the power block. And what that does is it produces a power dispatchability on the order of 100 to 130 megawatts. It depends on, you know, the time of year and how hot it is, et cetera.

PRESIDING MEMBER DOUGLAS: Okay.

MR. MIDDLEMORE: But that's the amount of dispatchability we have.

PRESIDING MEMBER DOUGLAS: So it's like 100 percent to 70 percent, you said, for the power plant?

MR. MIDDLEMORE: Correct.

PRESIDING MEMBER DOUGLAS: And over what time period does the ramp occur?

MR. MIDDLEMORE: We would be ramping between those values every day. So 16 hours at maximum power production and eight hours a day at minimum power production.

PRESIDING MEMBER DOUGLAS: Okay.

ASSOCIATE MEMBER McALLISTER: So just to drill into that a little bit. So how quickly can it do the ramping? So if you're like, you know, how fast can it get from 100 to 70 percent?

MR. MIDDLEMORE: Yeah.

ASSOCIATE MEMBER McALLISTER: Like when is that 130 megawatts available?

MR. MIDDLEMORE: To go from one value to the other takes about an hour.

PRESIDING MEMBER DOUGLAS: Thanks. Do you have any other questions, Commissioner McAllister, for the applicant? I have a few questions for staff.

MR. MIDDLEMORE: Can I -- while you're talking. I want to follow-up to the previous answer I gave. One of the -- so the Mitsubishi technology, as I explained, is new and they are still generating experience with regards to the amount of petroleum coke.

The technology that we had chosen before, GE, is a much older technology. And with the newer technology come a lot of benefits that I should have pointed out as well. So I talked about the way the gasifier is cooled. Mitsubishi has a water wall design to cool it, as opposed to GE which uses a refractory.

The difference between the two approaches is a technology improvement. And what it does for you is the refractory was a very, very high maintenance item. It required us to have three gasifiers, one of which was a spare, to provide the same amount or actually not quite as much hydrogen as the one gasifier that Mitsubishi can produce.

The refractory reliability required that gasifier to shut down about every two months for a turnaround. And every time you swap gasifiers you have startup and shutdown emissions and you have warming emissions to keep one on hot

standby. So we have eliminated a lot of emissions by switching to the Mitsubishi gasifier over the GE.

In addition, because one gasifier can do the same as three, it has a higher reliability, our operating costs are lower and our capital costs are lower. And what that translates to is a lower cost, you know, for all the products that we make, electricity and fertilizer products. So I just wanted to follow up with that.

Thank you for that.

ASSOCIATE MEMBER McALLISTER: So I wanted to get just a better -- so there are a lot of moving parts to this project. You know, it's got traditional generation but it's also got sort of characteristics but it's also got, you know, you're producing a value stream for the fertilizer, you're producing a value stream for the power.

I want to hear a little bit more about the sale of the CO_2 to Occidental and sort of what that looks like. And so I guess, you know, I'm trying to get a sense for -- and this will come out further I'm sure as we get into this process. But sort of what, what level of -- what's the impact to the project if any of those sort of go south a little bit or, you know. I guess, do the project economics, and I don't need any, you know, intellectual property here. But the project economics really, how much do they depend on any one stream? Like how complex is this project and how

does that translate on kind of the risk that you feel that you're taking on?

MS. MASCARO: The project economics are based on revenue streams from all sources, all sources meaning electricity, fertilizers and the carbon dioxide. And that's what makes this project design more economically viable than the previous project design, which did not have the fertilizer components. And all of the contracts for those, the off-take from those products are still being developed and are under discussion now with utilities, Occidental and fertilizer companies.

PRESIDING MEMBER DOUGLAS: Okay.

MS. MASCARO: We do need all three to meet the project economics.

ASSOCIATE MEMBER McALLISTER: Okay, thank you.

PRESIDING MEMBER DOUGLAS: Thank you. Actually it's unusual for us to ask so many questions in an informational hearing but this is an unusual project. This is an unprecedented project in terms of the sequestration component and in terms of the fuel mix. It is certainly not something that the Commission has seen recently except for the prior iteration of the project that has been before us. So I just offer that as a few words of explanation for those of you who are familiar with our processes and who might be wondering why we have so many questions at the

informational hearing.

ASSOCIATE MEMBER McALLISTER: Karen, can I ask one more question?

PRESIDING MEMBER DOUGLAS: Of course you can. And I've got a few for staff too, go ahead.

ASSOCIATE MEMBER McALLISTER: I didn't know any of that because I'm a new commissioner so, you know, I think my ignorance is allowing me to ask lots of questions here.

But could you -- so there also are a bunch of natural resources involved here. Obviously the brackish water, which we'll probably hear I guess from staff probably first and, you know, at some point in the process here from Buena Vista, which I understand that brackish water source is kind of an interesting aspect of this project.

But to the HECA team I wanted to ask about the potable water source on the project side of it. Is the potable water basically being used for the steam cycle? Sort of what's the -- what's the potable uses? Like what volume of water are we talking about and for what use?

MS. MASCARO: The potable water will not be used for any cooling or industrial purposes, it's to supply sanitary water for the 200 employees on the site.

ASSOCIATE MEMBER McALLISTER: Okay, so there's really -- so that's not a significant impact to, say, the water district or anything like that.

MS. MASCARO: Correct. It's a very minimal --

ASSOCIATE MEMBER McALLISTER: That's a typical, a typical amount of water, okay. So where are you getting the makeup water from for the steam turbine and everything?

MS. MASCARO: So all of our industrial water use will be the brackish water from the Buena Vista Water Storage.

ASSOCIATE MEMBER McALLISTER: So you are going to clean up the brackish water, use that in the steam cycle --

MS. MASCARO: Yes.

ASSOCIATE MEMBER McALLISTER: -- as well as for your, your hydrogen process source.

MS. MASCARO: Correct.

ASSOCIATE MEMBER McALLISTER: Okay, thanks.

PRESIDING MEMBER DOUGLAS: All right, I'll be brief. Just a couple of questions, as few as one but we'll see, for staff.

One thing that struck me as I looked at the Issues Identification Report is that there were a lot of issues that we needed to -- that you as staff need to work through and they need to come out through the process. I was interested by the discussion of SB 1368 and whether it raised a LORS conformity issue or not. And what I read in the Issues Identification Report is that the concern that staff was expressing was due to potential difficulty in

assessing the extent of sequestration as opposed to heat rate or other measures. And I just wanted to ask if I read that correctly? And the underlying concern when you raised that was the sequestration issue.

MS. DeCARLO: Yes, if I can speak on behalf of air quality staff, yes. Ultimately it's sequestration that we are concerned about analyzing. One, ARB hasn't adopted a methodology yet under SB 1368 to analyze sequestration in terms of compliance with SB 1368. So I know they are starting to work on that but we don't know if that will be in place in time for us to use. So we'll be working with ARB, even if it's not in place, in trying to figure out what methodology we should use to account for the sequestration of the CO_2.

And secondly, it's the ultimate oversight of the sequestration that we are going to have to work through because at least at this point the Energy Commission doesn't have jurisdiction over Occidental Petroleum, the ultimate party who will be actively utilizing the CO_2. We'll have to figure out if mitigation -- if conditioning HECA to then ensure the sequestration will provide staff with enough assurance that it will actually get done and be monitored.

So those are the two kind of sides in the sequestration issue that we see so far.

PRESIDING MEMBER DOUGLAS: Okay, thank you. You

raise in the staff Issues Identification Report the issues of measuring, verifying, reporting and monitoring and so on. And it seems to me sitting here that it would be rather difficult to do that without access to the site where sequestration is taking place. But I'll leave that to the staff to make its recommendation to the Committee on the issue more broadly.

And I'm glad to hear you raise the Air Resources Board because they -- I guess they are not here tonight. But they were very much on my mind as we looked through the list of agencies that had come here and it would be, I think, very important to work closely with them.

To what extent is this new project presenting issues that were analyzed before when staff put out the PSA on the -- especially the areas that might be difficult, particularly like sequestration. To what extent are these issues that you've analyzed the first time around and you are shoring up or changing the analysis based on the different proposal and to what extent -- when I read the Issues Identification Report it really looked like there had not been a lot submitted that you felt as though you had to chew on. And that was just my reading between the lines on what the Issues Identification Report seemed to say.

MR. WORL: Well, as I said, there's a lot of moving pieces here. One of the, one of the longstanding

issues is sequestration is a question, an issue that is before the state on a much broader scale than just this project. And there have not been a lot of determinations or guidance or regulatory process that's in place to help us through this so in some ways we feel like we are sort of pioneering.

The other thing is that we have to work to do this. The monitoring, reporting and verification long-term as well as the immediacy involve working directly with Occidental Petroleum, their Occidental Elk Hills, and being able to evaluate their water alternating gas enhanced oil recovery process.

And looking at their monitoring/reporting verification program and processes to see whether or not they are going to meet, you know, our CEQA needs to be able to verify that yes, the CO_2 is no longer being produced. Affecting, you know, DOGGR's responsibility to ensure that once it's introduced it doesn't affect potable water sources, aquifers.

But, you know, we have, we have an above-ground responsibility as well to ensure that it's being recaptured and reprocessed, reinjected and eventually staying. We as staff don't really have those answers yet.

PRESIDING MEMBER DOUGLAS: All right, thanks. I have one more question for the applicant and then I think I

am out of questions at the moment; Commissioner McAllister may have some.

The Issues Identification Report raised what I read as staff's view that the applicant should be applying for maybe two permits from DOGGR, the injection well and the enhanced oil recovery. Is that your view or is that something that you are still talking about?

MR. CARROLL: I believe our view is that Occidental of Elk Hills will be applying for the permits that it requires from DOGGR to conduct the enhanced oil recovery. The sequestration is not a process that would be separately permitted, the sequestration would happen as a result of the EOR.

PRESIDING MEMBER DOUGLAS: Okay.

MR. CARROLL: Does that answer your question?

PRESIDING MEMBER DOUGLAS: Yes, you did answer my question, all right. Commissioner McAllister, any other questions?

ASSOCIATE MEMBER McALLISTER: No, I'm good for the moment, thank you.

PRESIDING MEMBER DOUGLAS: All right. Well we are well overdue for public comment. I want to thank everyone for your patience as you sat through a number of lengthy presentations and Commissioner McAllister and I got to satisfy our curiosity ahead of everyone else. But now we

will, we will be here to hear from you. So with that, go ahead.

HEARING OFFICER RENAUD: Thank you, Commissioner Douglas. And before I forget, I've got to thank Superintendent Tensley in the back for opening the school to us for this evening. We very much appreciate it, thank you.

(Applause.)

Okay. Public Adviser Jennings, would you like to stand up and say a few words before we go to public comment?

MS. JENNINGS: Yes, thank you. And again, it's great to see so many people here willing and able to participate in the review of this complicated project.

The Commission's process, as you saw also, is a complex one and it is my job. I am independent appointed official. I work for the Energy Commission but I am independent within the Commission. And it is my job to assist the public in participating in our review process.

So the one take-away I want to give you, I am going to ignore my PowerPoint, you won't have to go through that, is that you can call me at any time, my office at any time. Ask questions about the process. If I don't know the answer we will try to find the answer out for you. My cards are in the back.

Also at every public hearing we have you have an opportunity to comment. Every public hearing or workshop is

also on WebEx. Although it is not always perfect at least it gives you some understanding of what's going on. And also the WebEx recordings will be posted on our website, on the Energy Commission's website. And I urge you to look at the Energy Commission's website and spend some time getting familiar with it. And if you need any assistance also contact my office in navigating that website.

If you wanted to comment tonight we ask that you just put your name on a blue card and you'll be called. And thank you very much and we look forward to future meetings in the area.

HEARING OFFICER RENAUD: Okay, thank you, Jennifer. Okay, let's go to public comment. We have a microphone up here at the front with a podium. Just house rules, if you would as you speak address the Commissioners up here. And I have a lot of cards and it's late, it's getting late, so let's try and limit your remarks to three minutes if you could, please. Let me call Kevin Hall first. Central Valley Air Quality Coalition, Kevin Hall. And after Kevin will be Mark Romanini.

MR. K. HALL: Thank you. My name is Kevin Hall, I'm from Fresno, I am the Director of the Central Valley Air Quality Coalition. And not to start off snarky but I want to say there is a value stream to the local health care industry if this project is approved too.

The fall and winter months in the valley are referred to by doctors as the heart attack season for our high particulate levels, the highest of which are here in Kern County.

I also wanted to point out that the tour -- I want to talk about toxic impacts very quickly and I would like to refer you to the document entitled "Ambient Air Pollution Impairs Regulatory T-cell Function in Asthma" published in *the Journal of Allergy and Clinical Immunology* of August 2010 by Dr. Kari Nadeau, a Stanford researcher.

Dr. Nadeau took -- she is a geneticist and looked at the T-cell counts in Fresno children in relation to diesel exposure. And I bring this up because I am gravely concerned about the -- and not discussed or presented are the impacts of the trains bringing the coal through southeast Bakersfield. Southeast Bakersfield according to the Place Matters in the San Joaquin Valley report published February 2010 by the Central Valley Health Policy Institute shows that residents of Southeast Bakersfield have a life span that is more than 20 years less than those born and raised in North Bakersfield. We find this throughout the Valley but it is primarily tied to diesel exhaust.

The trucks, the trains create in Bakersfield and southeast Kern County a diesel triangle and that's what we are faced with.

The tour was inadequate because if you made it to the rise and then looked over and saw the oil field and then looked down toward -- it's a chute right at Arvin. And the prevailing winds carry all that pollution right into that concentration at the bottom of the cul-de-sac that is the San Joaquin Valley and why those pollution levels are so high all around southeast Kern County. I'm trying to rush through this with so many people waiting to speak.

Relevant monitors to track air pollution levels. If the air district, as is the practice, tries to use an upwind monitor you are being misled. You must look downwind. Maricopa, Arvin, Edison, Bakersfield. Do not take anything north of here. Prevailing winds 90 percent of the time, northeast to southwest.

And mitigation by our Valley Air Pollution Control District is inadequate. Unlike your board which is structured based on expertise, ours is structured by elected officials, two of whom are on the record as already in support of this project. We fought for five years to get a doctor and an atmospheric scientist on that board. It's a 15 member board.

My closing remark. I'd like you to please think of California as a city. And if you picture California as a city the San Joaquin Valley is on the wrong side of the tracks. The levels of poverty, the levels of -- the racial

mix. These are environmental justice communities. When people are going to build a dirty project they build it here. And this is possibly the worst possible place I think anyone could find for this kind of project and I would like you just on a philosophical note to imagine yourselves going home and proposing this in your communities. Thank you.

HEARING OFFICER RENAUD: Thank you for your comment. Next I would like to call Lorelei from Planning. Yes, thank you. I'm sorry, Mark. You'll be next, I'm sorry.

MS. OVIATT: You'll be next.

HEARING OFFICER RENAUD: We had a special request here.

MS. OVIATT: Thank you. I apologize, Mark.

Lorelei Oviatt, Director of Planning and Community Development for Kern County. I am here tonight with the Kern County Fire Chief, Brian Marshall, the Roads Commissioner Craig Pope, we have Nancy Ewert from Waste Management, which is Waste Management the county department, and we have also compiled comments from Kern County Environmental Health Services.

We have extensive experience cooperating with the California Energy Commission and the Department of Energy on large scale projects and we appreciate the diligence always of the staff in listening to our concerns.

This project is very unique. We believe it is unlike any other power plant that has ever been permitted by your Commission.

And we believe that the CO_2 sequestration project is in very capable hands with Occidental Petroleum, who has had a long history of their gas and oil operations. Our questions on that project are very minor and are really just we'd like to know where the pipeline is actually going to be, whether it's going to be in any of our county roads for a franchise, and we are also interested in the actual operations of the CO_2 sequestration.

Our primary questions and concern focus on the Hydrogen Energy plant and the chemical manufacturing component which results in power. We have submitted a letter tonight and it has general comments of concerns. My department has consolidated all of the questions and concerns from the other county departments. The nature and amount of chemicals processed and products produced have very serious potential impacts on our surrounding property owners and users of transportation routes.

We appreciate the internal controls that have been proposed in the application but we have extensive experience here with refineries and chemical plants. And our first responders need to be protected with facilities, programs, equipment and internal monitoring controls that we are very

familiar and conversant with and we look forward to working with the CEC staff on a state of the art facility.

We also have concerns with how land use has been presented. This was presented as a power plant that produced fertilizer. Yet the application document is -- every other page talks about products for transportation. They're going to sell anhydrous ammonia; they're going to load it on -- on rail cars. They are going to sell desulfurized and degassed sulfur. They're going to -- you know, we're not sure what they are using the urea for.

In our zoning ordinance this is only allowed if all they produce is fertilizer for agricultural use, that's it. We have asked them applicant to be up front about this, we have asked them to provide us a list of exactly what they are going to produce and sell. Because if they are going to do anything beyond that it is a chemical plant, it needs industrial zoning, it needs an industrial general plan designation. And we look forward to, you know, being clear that we believe this is a chemical plant that produces power.

We certainly concede that the California Energy Commission is absolutely the appropriate place to process this project. And based on our experience in past projects we are confident that we can work our way through whatever issues we have to make this project the most appropriate and

safe for the residents of Kern County on our transportation routes. Thank you.

HEARING OFFICER RENAUD: Thank you for your comment. Okay, Mark Romanini. After Mark will be Tom Frantz.

MR. ROMANINI: Yeah, my name is Mark Romanini, I am a resident here of Bakersfield, have been my whole life. And I have been opposed to this project since its inception with British Petroleum and even prior to the environmental improvements they made in the Gulf.

The primary problem I have with this now and as I did back then is basically the location we're sticking it in. We kind of say we have the worst air quality in the nation, we kind of go on and we accept that and move on. We don't really know what that means unless you live here. And even if you live here I don't know if you know what we are really breathing.

But if you take the national ambient air quality standards that are established for the entire country, last year, and last year being a good air year for California, Bakersfield exceeded the eight hour ozone standard 70 times, or 69 to be specific, and the particulate matter, fine particulate, 28 times. So both of those are unhealthy ranges for children to be breathing. So if you put together you're looking at like 90 to 100 days out of the year I am

subjecting my children, my eight-year-old to air that's harmful for him to breathe.

And to see this project move forward again -- I'm happy we're sequestering or attempting to sequester carbon dioxide but that's not the struggles we face here in Kern County, it likes primarily with NOx, that's the big primary, the primary source for ozone and particulate matter that we are forced to deal with and it's going to take a collective effort by the entire valley if we are ever going to get our levels down. From residents to businesses we all have to be a bit more diligent about how we live life if we want to improve our quality of life here.

Dan Bartel made some comments about the brackish water being used here. I being a farmer as well in this area and located in the Buena Vista Water District disagree with his statements. Yes, that water is brackish. But given the correct facilities, you could take that water, blend it with clean water and use it on crops that are capable of using salt, like we grow here. Primarily pistachios, not a problem. So to me I look at that water as wasted water not being utilized to its full potential where it lies right now.

And also to your point about kind of complementing renewable energies. I'm not thinking -- I don't see how this necessarily complements renewable energy. I would like

to see Bakersfield move towards kind of Jerry Brown's idea of the 8,000 megawatts of power he has proposed by 2020. We have abundant marginal lands in this area, we have abundant sunshine, and it's just a way better fit.

So in closing I would just like to say, you know, where and what we pollute is a choice, breathing that air is not. Thank you.

HEARING OFFICER RENAUD: Thank you for your comment. Tom Frantz. And then I have a card, Chris Romanini will be the next speaker after Tom. Go ahead.

MR. FRANTZ: Okay. I live about 11 miles as the crow flies that way and farm 40 acres of almonds. I'm a retired school teacher and an air quality advocate.

I'm glad Mark said what he did because I was go into that too. This proposal is a huge pollution source here in Kern County. And when AIR made a data request to compare this plant to Avenal we're looking at total project emissions, not simple boiler emissions.

The HECA project states in their documents, whether it's correct or not I don't know, that there will be 164 total NOx -- tons of NOx emitted by the project and then the transportation could add another 90 tons of NOx to that. That's 254 tons of NOx. And Avenal at over twice the power was only 144 tons of NOx, you know, relatively cleaner.

Now they didn't mention particulates. HECA is 170

tons of particulate matter, PM_{10} and $PM_{2.5}$, you know, about 50/50. That is far more than a plant like the Avenal plant. And I think a reason for that is they insist on water cooling even though Avenal wanted to be more high-tech and more environmentally conscious maybe and go to air cooling. And so best available control technology, you know, maybe should be air cooling for a project in a polluted environment such as ours here.

And I agree with the brackish water comments just made. Brackish water is a relative term, that's not an absolute term. You can have a whole range of total dissolved solids and call it brackish water. That water is usable.

And of course as this project uses that water, where is the clean water coming from to take its place? There is no surplus clean water in this valley, we're water-limited here. And that clean water that moves into that pore space once they remove the brackish water is coming from somewhere and is already being used. It's not like they are producing clean water out of thin air here and doing a wonderful thing. They're basically stealing the clean water probably from another water district like the Kern Water Bank or something somewhere like that. It's not all good as they want it to appear.

At the workshop in Sacramento. I'd like to know

who was it that said, if there is a CO_2 leak that CO_2 would turn to ice and probably make the Bakersfield residents happy because it's so hot here? Now I know that's a joke and I didn't quote it exactly but it should be on record that that was said at the workshop. It was probably a proponent of the project that said that.

And that's, that's implying that we're pretty stupid down here to say something about that in such a serious matter. If there is a CO_2 leak it could be deadly to hundreds of people or even thousands of people as it was in Africa at one point where 1,700-and-some people died suddenly in one night. Coal miners know how deadly CO_2 is in the mine where you die instantly if you go into a pocket where there's CO_2. So to make a joke about CO_2 leaking from this project is totally inappropriate at a public meeting.

HEARING OFFICER RENAUD: One more minute, please.

MR. FRANTZ: Yeah. Well, I can't begin to refute all the misinformation we have heard tonight about this project from the proponent so as an intervenor I'll try and do that in writing.

This project is wrong on so many levels but the air pollution is the thing we are most concerned about. It's not appropriate to have such a polluting plant. It's ironic that this is not clean hydrogen power. When you burn

hydrogen -- they're producing NOx at very high levels. And when you transport a fuel in and a waste product out you're creating NOx at very high levels for an area that can't afford it.

And the mitigation that would be proposed by the air district is totally insufficient because it's based on emission reduction credits from the past. They are sometimes bogus, sometimes very old, and this product will add new additional NOx to this southern end of the valley where we have the highest pollution and the worst health from that pollution in the nation. So I'll have to stop there.

HEARING OFFICER RENAUD: All right, thank you, sir, appreciate that. Chris Romanini and the next will be Arthur Unger.

MS. ROMANINI: Hello; my name is Chris Romanini. Our family is the fourth generation to farm in the Buttonwillow area. We have been stewards of the land for over 100 years and want to pass to the fifth generation a healthy, viable future in farming.

As neighbors of HECA's project we have concerns. Number one, they're proposing a rail. Where will it be? We don't know. It's impossible for me to comment on how it will affect my ranch if they won't tell us where it's planned for. When are they required to present a route for

the Buttonwillow area?

HEARING OFFICER RENAUD: Is there anyone that has a quick answer to that? We are not necessarily here to answer questions, we are here to listen. But if there is a quick answer to that we'll be happy to try and help you.

MS. DeCARLO: It is my understanding that the route plan has been filed as confidential until they have finished their discussions with landowners. We can't go forward with a full analysis, obviously, until we have an identified route. So it would be before we release our, one of our staff assessments, for sure at the very latest.

MS. ROMANINI: Our second question is eminent domain. HECA has stated that they do not have the power of eminent domain for this project. But will the CEC promise that eminent domain will not be forced on us for this project by any government or public entity or by HECA? Can you promise that?

PRESIDING MEMBER DOUGLAS: The Energy Commission does not have eminent domain authority. We can't make any promises about -- and HECA does not either.

MS. ROMANINI: You can't make promises?

PRESIDING MEMBER DOUGLAS: About what some other entity that is not us could do. But I can't imagine that it is being proposed. If anyone is aware that eminent domain is being proposed by anyone they can speak up. But that is

not an Energy Commission authority, it's not something we have ever --

MR. CARROLL: It is not something that the applicant is pursuing. We did file some responses to data requests that were made in writing indicating that there are no plans to pursue any of the rights-of-way or land that's necessary for the project through eminent domain, primarily because we don't have the power of eminent domain.

MS. ROMANINI: My third question is traffic. I can't imagine the huge volume of vehicles. I'm figuring over 1,000 vehicles a day when you count 300 coal trucks, 200 employees, coke trucks, fertilizer trucks, service people, and then they all have to go back home. They will be passing our farms, competing on the road with our slow-moving farm equipment, flocks of walking sheep, school buses and sometimes in dense tule fog. If rail brings the coal the roads will still be clogged. Will you require that they specify a route and who will enforce them from keeping to that route?

MS. DeCARLO: If they end up going with a route using trucks for the coal delivery staff always ensures that there is a specified route and that we analyze the potential impacts from using that route.

MS. ROMANINI: Thank you. And then health. Kern County has the --

HEARING OFFICER RENAUD: Ms. Romanini, I'm sorry but you're over your three minutes. We do have a lot of your neighbors here waiting to speak. Can you, can you finish up quickly.

MS. ROMANINI: Well.

HEARING OFFICER RENAUD: You can submit your questions in writing, you know, and they will get in the docket. The public comments that are in writing do get responded to.

MS. ROMANINI: Can I finish the one sentence on health, my one statement on health?

HEARING OFFICER RENAUD: Yes, please.

MS. ROMANINI: We have the worst air in the nation and HECA's emissions will only make our air worse. Some of our employees and my family members have asthma, cardiovascular disease or cancer. The closer you get to the facility the more concentrated the toxics will be and the higher our health risks.

I am requesting that HECA show they are good neighbors. Require them to construct an independently monitored air monitoring station on the exterior of the perimeter of their property so their plant -- so that we can see the degree of concentration we in the neighborhood, what we are exposed to. Thank you.

HEARING OFFICER RENAUD: Thank you. Okay, Arthur

Unger followed by Trudy Douglass.

MR. UNGER: I'm Arthur Unger, I live in Bakersfield, I'm a Sierra Club member. And I came to this school and I saw the white roofs and then I saw when we got on the bus the solar panels that one of the neighbors has and I figured people in Tupman are a little smarter than the people in my neighborhood. But then I saw all the dark, naked roofs, no solar panels, just like most of my neighborhood.

I wonder if we took the $400 million of taxpayer money that DOE has given to this project and used them to put solar on the roofs, how many counties we could cover, how much jobs we could make and how much energy we could produce and how much air pollution we could save? And the 400,000 tons of carbon dioxide that are not going to go down to produce oil, which we don't need anyway because we are going to burn that and make more air pollution and more carbon dioxide.

I don't think we could get as many long-lasting jobs out of solar because it works so well you don't have to maintain it much.

I wonder where the coal comes from in New Mexico? I had the honor to train there as a physician in the 1960s in Albuquerque. And I wonder what part of the state they're tearing up to get the coal and where they're building the

railroads through the Land of Enchantment to carry the coal to California so we can breathe it? Thank you.

HEARING OFFICER RENAUD: Thank you. Trudy Douglass, followed by Gordon -- I'm not sure if I can read that. Niños maybe?

SPEAKER FROM THE AUDIENCE: Sierra Club?

HEARING OFFICER RENAUD: Sierra Club, yes.

MS. DOUGLASS: I'm Trudy Douglass, born and raised in Bakersfield. I am neither a political or an environmental activist, I am just an outraged citizen. I'm skipping some of this stuff and going to this point.

SCS has been trying to permit PurGen One in New Jersey but New Jersey is saying no. What they are saying no to is a project that was set in an industrial area, a DuPont chemical factory designated as a toxic waste site, with ocean breezes to dispel the pollution and a thick sandstone formation to hold the CO_2.

Our site is farmland in a closed end of a valley with a porous shale to hold the CO_2 until holes are drilled through our protective barrier for the oil.

I think that this project represents the worst in capitalism where the government and private interests combine to overwhelm the public health and safety.

There's a lot of money to be made and they talked about their stream of whatever they're going to do, a lot of

money. But it's at the expense of the people and of the health and of the welfare of all of us.

If the project goes through as it is right now there will be higher medical costs for pollution-based diseases. There will be a lower or reduced longevity, lower productivity of the people and the land and higher fees and fines for our failure to meet the EPA particulate standard.

Although HECA is the polluter in this case they will avoid the censure by buying those magical (made quotes gesture) air credits with our tax money to offset their offense against us. This might be legal but it's not right and building a facility in Kern County goes beyond foolish to criminal.

If the Energy Commission feels that California desperately needs a new resource for electricity they should promote or permit SCS to get a gas facility, a natural gas facility.

If it is to be a chemical factory let the county of Kern decide and let them put it, the facility in an area zoned for the manufacture of hazardous materials.

Please act at least as wisely as New Jersey.

In conclusion, other meetings should be scheduled. It would be good to schedule them in Arvin and Bakersfield so that people with disabilities or transportation problems can attend. As you saw, this is like the middle of nowhere

and after it gets dark it's dangerous to drive. So that's it, thank you.

HEARING OFFICER RENAUD: Thank you. Okay, Gordon and then Victoria Golden.

MR. NIPP: My name is Gordon Nipp, I'm the Vice Chair of the local Sierra Club chapter, I live in Bakersfield. The Sierra Club will turn in detailed written testimony by the July 27th deadline so I am not going to go into a lot of detail on these.

Needless to say, we are concerned about many of the issues that have been already brought up. Air pollution, we fight it out here with Los Angeles every year for the dirtiest air in the country. Arvin, the air pollution from this project is going to drift down to Arvin, southeast Bakersfield, Lamont, areas like that that really do have the dirtiest air in the country.

Not only that but those are environmental justice areas, low-income areas. The environmental justice issue there needs to be really addressed.

Coal. I have to "coal" is a real flag for the Sierra Club. That sort of really brought us to attention here. Bringing in coal from New Mexico, a new coal-fired power plant in California. That's probably not something that ought to happen. What are the impacts in New Mexico, for example? What are the impacts along the -- along the

railroad line between here and there? What are the impacts in southeast Bakersfield as this coal goes through southeast Bakersfield, another environmental justice area.

Greenhouse gas emissions Arthur mentioned too. The ten percent of the GHG emissions that are not being sequestered amount to about 400,000 tons per year. That puts this project into about number 66 in California, the 66 highest greenhouse gas emitter in California. A new one that we're doing this to?

There are a lot of other issues. Well, one issue that I should mention here that didn't come up in the staff Issues Identification Report, this new Issues Identification Report, is farmland conversion. It's a very important issue here in Kern County and certainly an important CEQA issue. It's especially important in that the land is under Williamson Act contract and so you should be dealing with the farmland conversion issue as well.

Well, like I say, we will turn in detailed written testimony and I'll leave it at that. Thank you for your consideration.

HEARING OFFICER RENAUD: Thank you. Okay, Victoria Golden. The next speaker will be Christina Snow. Victoria Golden, are you here?

(No response.)

HEARING OFFICER RENAUD: No? Okay. Christina

Snow. Good. And after Christina will be Ron James.

MS. SNOW: Hi, I'm Christina Snow, I'm a farmer here in Buttonwillow. And my concern is the traffic. It just -- we've got slow-moving --

PRESIDING MEMBER DOUGLAS: Could you move closer to the mic.

HEARING OFFICER RENAUD: Pull the mic down a little bit.

MS. SNOW: We have slow-moving tractors and slow-moving equipment and we've got a lot of trucks already driving through Stockdale Highway and Highway 58. Oil field related already. This is a farming community. And if you put this complex in it's going to be an industrial complex. And we've got some of the best farm ground in the world and we're going to lose 1,000 acres. And I'm really concerned that we're going to lose another natural resource, farm ground. So that's my concern.

HEARING OFFICER RENAUD: Thank you. Okay, Ron James followed by Mark Lambooy.

MR. JAMES: Ron James, Operating Engineers Local 12, Bakersfield Office. I'm about the only person that's going to be for it, I guess. Well, I am for it because I don't feel it's going to be built if it is unsafe.

You know, we have tons of people out of work in Kern County, we need jobs. And it will be jobs for our

membership, jobs for people in Kern County. The economy is going to get money, the county. I mean, it seems like in Kern County any time you build something they don't want to build it, you know, except for maybe wind farms because they're in the desert. People don't want wind farms in the desert but they keep building them.

I think this is an ideal spot just for the simple fact it's close to Elk Hills. What do you want to do? Build a pipeline that is going to be 200 miles away from here? It's not feasible.

Anyway, I hope it is built and I'm for it. Thank you.

HEARING OFFICER RENAUD: Thank you. Okay, Mark Lambooy followed by Beau Antongiovanni. I think I messed that name up but you probably know who I mean.

MR. LAMBOOY: Yeah, my name is Mark Lambooy, I'm a local landowner. In fact, I'm right across the street from the applicant's site.

I disagree with the guy right in front of me, I think this is the worst possible area to do this. The further down you go on the list the less you can say your ideas because it's all getting redundant.

But my concerns, brackish water, we heard that it might not be brackish water. My concern is, what's the life span on it if it is brackish water? Is it infinite? Will

it come to an end? And then where is the rest of the water going to come from?

I'm reading the "HECA and the Environment" in your brochures. I'm reading under "Preserving Valuable Fresh Water." One of the third sentences from the end in that group: "as well as refrain from using fresh water that can be better used by others."

I know there's a new water bank from West Kern right next door. I understand that potable water is going to be supplied to the plant from this West Kern Water Bank; is that accurate? Can someone answer that, potable water?

MS. MASCARO: Potable water will come from West Kern Water District, I am not sure of the exact location with respect to --

MR. LAMBOOY: That's right next door to the East Side Canal, kitty-corner. And 75 gallons per minute, 75 gallons per hour, what was the number on that potable water?

MS. MASCARO: I don't have those numbers --

MR. LAMBOOY: Is there anybody in this room that can refresh my memory on that?

SPEAKER FROM THE AUDIENCE: Seventy-five gallons per minute.

MR. LAMBOOY: Per minute? Seventy-five gallons a minute, 108,000 gallons a day, 39 million gallons of water per year.

What guarantee that this plant will not continue to grow? It came in with BP at $2 billion and 100 employees, now it's $4 billion, 200 employees.

Concerns with obvious things as an immediate neighbor, you know, lighting. Yeah, the lighting is going to be diffused and not a big deal. It won't be noisy. These are all things that are concerns of mine.

The business and the traffic, unsightly. Two hundred and fifty foot towers. Is that accurate, 250 foot tall? Anybody know how tall these towers with the blinking lights will be? Anybody? Two hundred and 13 feet? Okay. Vary slightly.

Property value. What happens to our property value. I use my imagination, is this going to help my property value to hold? Will it raise it, will it drop it? I fear it will drop it, grave concern.

As a pistachio grower we have the trees right across the street on Adohr. Those trees need a minimum of 800 hours of chilling hours below 45 degrees. As a producer what will this plant do? Will it emit any kind of heat where I'm looking for under 45 degrees? And even if it is just a little bit will part of my orchard be affected? All of it? One row? Ten trees? It's all negative, you know. We're looking for things that we need to produce our crops so that's a concern.

The pollution. It's been talked over and over and over again, 350 trucks a day. We were informed that trucks are a minimal part of the overall emissions. It's frightening to hear that.

Again, we heard best farm ground with deliverable water going to be taken out.

It just doesn't seem like this is the place for this, in this valley. The air quality has been touched on more than once.

I mentioned this at the BP town hall meeting when they were here and I got a little bit of a chuckle from it. But just, you know, things you think about. As this thing comes into town and is it going to make our life better, worse, the same, you know. It was closer to 9/11 when this thing was first coming on the discussion block or whatever you want to call it and what are the odds.

But, you know, the Buttonwillow grid, you know, it's a valuable part of California's electrical system and this would be a huge enabler for that grid. You know, use your imagination. I doubt it would happen too but these are things we think about as neighbors on is our life any better or any worse. And it always, the needle always tips toward worse. We don't want that. We want our life to, you know, improve.

HEARING OFFICER RENAUD: If you could wind it up,

please, you're over.

MR. LAMBOOY: Yes, thank you. Finally on the 16 percent less polluting than other plants. What's the plan down the road? That by 2017 this will replace -- all the other plants will become hydrogen?

Anyway, so just thanks for the opportunity to comment. It's just our prayer that it won't happen in this valley. Thanks.

HEARING OFFICER RENAUD: Thank you. Okay, Beau. You're here, good. And then Regina Houchin.

MR. ANTONGIOVANNI: Hello, how are you guys? I too, like the member of the Sierra Club, will be making most of my comments formally through writing. I just want to clarify on some of what I consider the smoke and mirrors of the operation.

We've spent some of the night or most of the presentation talking about the sequestering of CO_2 gasses. And what they didn't talk about was the NOx the VOx and all these -- the particulate matter that is going to go up into the atmosphere and we're going to then breathe in as smog.

And most people already touched on that but just to quantify some of it. At one of the meetings with some of the HECA officials, as Mark said, they told us that there was 350 truckloads a day -- there are 350 trucks a day coming into the plant for fuel purposes. This represented

.5 percent of the total emissions for the project. So what that means is that the project is going to have 70,000 diesel trucks worth a day of emissions coming out of it.

Now as farmers here, pistachio farmers, when we plant our crops we put -- our crops are pollinated by male trees. In the northwest corner of every orchard we start putting our male trees so that the pollen can drift across the entire crop. And it occurs to me as we stand here in this building, and someday my kids may come here and go to school, that five miles from here in the northwest corner is going to be the source of 70,000 diesel trucks a day worth of NOx, VOx, black carbon and whatever other particulate matter that will lead to everything else that, you know, the people before me have talked about. So I just wanted to quantify that.

Also in relation to something that Mark just said. There is a report out by Thomas McKone, one of 18 distinguished experts in public health economics from the Berkeley Lab Energy Service co-authoring a national report on the hidden cost of energy production. One of those hidden costs -- I'll read from it here: "Economists, as external costs, they include the economic impacts from human health effects, physical damages to structures and reduction in grain crop harvests caused by air pollution."

Now -- so there is data out there that proves that

the emissions from this type of facility causes reduction in crop production.

I have been privileged to be part of a study about 25 miles from here where we study yields on pistachio trees in a peer-reviewed -- in a peer-reviewed study. And we have data that shows over a six year period the production of the orchard in closest proximity to the emitter has -- was far less than the production of the other orchard, of the rest of the orchard. And the trees themselves prior to harvest, according to measurements that we have taken, would have led you to believe that production would actually be greater based on tree size. So something happened that caused those trees to abort nuts and not produce. So what Mark said is a real issue.

Now he also touched a little bit on terrorist threats and, you know, mentioned that he was kind of laughed at the last time. But I did some research online. And in 1995 I think we all remember that Timothy McVeigh blew up the Oklahoma City Federal Building. And when he did it he did it with 5,000 pounds of ammonium nitrate.

Now based on numbers given to me at another meeting, I was told that this facility would produce 500,000 tons of ammonium nitrate a year. They will keep onsite at all times a 45 day supply, which is 61,644 tons of ammonium nitrate. That means that there will be 22,831 times the

amount of ammonium nitrate that Timothy McVeigh used to blow up the Oklahoma City building on this site at all times. And every -- according to my calculations from people who take deliveries of ammonium nitrate, every truck that comes off this facility delivering it will contain 52,000 pounds of ammonium nitrate. That's 9.6 times the amount of ammonium nitrate that was used to blow up the Oklahoma City building. That's a real threat. Especially when we are located about seven miles from one of the largest power grids in the state, if not the nation.

Obviously I'm not a terrorist but how easy would it be? Think about it, think like a terrorist. How easy would it be to get one or two drivers on one of these trucks, make a right turn instead of a left turn, and blow -- and blow one of the largest power-producing facilities in the state if not the nation off the grid. And that's something I would like to request the DOE talks about with Homeland Security. I think they might have some input on that. Now --

HEARING OFFICER RENAUD: If you could wind up. We've let you go on --

MR. ANTONGIOVANNI: My last point.

HEARING OFFICER RENAUD: -- almost five minutes here.

MR. ANTONGIOVANNI: Okay. My last point is

related to the Isabella Dam. And I don't know if you guys are all aware but -- well first of all, according to the Miller-Haggin Agreement from the 1800s, they talk about -- it was basically the agreement that helped drain some of these lands from the waters that are held behind Isabella Dam. It talks about the water to the south and east of here and refers to this land as swamp and overflowed land. So this agreement was enacted to drain the swamp and overflowed land or to keep the water from going there.

And also within this agreement they make a statement that it is expressly understood and agreed that no party to this contract will claim any damage resulting from the breaking of such reservoir or levee or other works. It's all right here in this, in this document.

And in the early 1900s the United States of America entered into a contract among the -- the United States of America, the North Kern Water Storage District, Buena Vista Water Storage District, Tulare Lake Basin Water Storage District and the Hacienda Water District.

In this agreement the United States of America, I believe the same people that write you your paychecks, acknowledged the Miller-Haggin Agreement as -- as a, you know -- basically they acknowledged that nothing in this document supersedes this Miller-Haggin Agreement in which you cannot hold liable any party to the agreement for

damages from flood and establishes that ground as swamp and overflow ground. Now according to my research online --

HEARING OFFICER RENAUD: Excuse me, Beau, really, we have let you go on about three times as much time as you're supposed to have so if you could wind it up, please.

MR. ANTONGIOVANNI: Yeah, I will. According to my research online -- in November of 2007 the Army Corps of Engineers released the Isabella Dam consensus report. That confirmed the high risk classification of the dam, ranking Isabella Dam among the six highest risk and highest priority dams in America and later they elevated it to the highest priority. So the water behind Lake Isabella Dam has been rated by the US government as -- as the highest risk dammed water in the nation.

Now according to my research, according to contours and elevations, the site for this plant is actually below, below the elevation and ground level of the land that was formerly talked about in this document as swamp and overflow land. So if that dam breaks or if there is a flood this ground is going to be flooded, and has every right to be flooded and there will be -- there will be no possible recourse by the parties involved in this land.

So my question to you, the DOE. Knowing that, do you believe that it's -- that it's good policy to give $400 million of taxpayer money to build a facility at the bottom

of an ancient lake bed that has a dam that has -- that has been determined by the US to be the biggest threat or most likely to erupt in the country? And that's all I have to say about that.

HEARING OFFICER RENAUD: All right, thank you. Regina Houchin and then -- I'm really having a hard time reading this. It's Don, it looks like maybe U-A-W.

ASSOCIATE MEMBER McALLISTER: Don Van.

HEARING OFFICER RENAUD: Don Van. Okay, Don Van. You probably know who you are. Thank you.

MS. HOUCHIN: Hello, my name is Regina Houchin. And I have no land in the area, I have no vested interest, I have no possibility of monetary gain but I have been in Buttonwillow for 50 years. My children live in Buttonwillow, my grandchildren live in Buttonwillow. And my main concern is the health and safety of my family.

I am the president of the Buttonwillow School Board. I am on the Buttonwillow Recreation and Park District Board. All of them obviously involving children.

And so when information comes to me that there are going to be such increased volume of traffic on our roads. And you can say we are so far away but trust me, if the trucks are coming in on Stockdale that is going to make those people that use Stockdale use our 58. It's not going to -- it's not going to help at all.

While I say I have no monetary gain, I certainly do have the potential for a reduced gain as I am a bookkeeper and predominately my clients are agriculture, of which some spoke this evening. And if their crops are adversely affected and they leave the area then so does my business.

And I just ask that you represent me, the individual resident of one of these communities, in doing diligence in looking at every avenue outside of the money needed by Kern County, the money needed by the state of California. Because money cannot buy your health. And as a parent and grandparent that is ultimately and should be ultimately our concern. Thank you.

HEARING OFFICER RENAUD: Thank you. Okay, Don. And then we'll have Marvin Dean after him.

MR. VAN: Thank you, I won't take much of your time here right now. I've heard all the stories tonight and I've heard a lot of the stuff. And one thing I have very much -- we sit two miles here in Tupman from this plant. The plant, they've said all the things they're going to do with CO_2, NOx, everything. But I have heard nothing at all -- our wind here is a prevailing west wind, average 7 to 12 miles an hour on a daily basis, sometimes more, sometimes less.

But there's an ammonia plant right there. It is

going to put out a lot of ammonia. Anhydrous ammonia is a byproduct of urea. So they say storage facility. Shows there maybe a pipeline going to rail cars there. What happens if something happens to one of these storage tanks and this school sits right here two miles away. That's a big concern of ours here and all the other people that live here.

Sure, we're a small community. But we have just as much rights here as the other people do. But that particular one thing right there would bother me more than anything. And that's one of the things, unless they can give a perfect guarantee that none of those facilities and none of those tanks could ever rupture and that could blow that ammonia right over here to this community. Thank you.

HEARING OFFICER RENAUD: Thank you. Okay, Marvin Dean and followed by Justin Bone.

MR. DEAN: Good afternoon. Good evening, I should say, or good night.

HEARING OFFICER RENAUD: Good night (laughter).

MR. DEAN: I'm going to be brief. My name is Marvin Dean, I live in southeast Bakersfield. I represent the environmental justice community out in that community. Before I get started I want to just give a little bit of a history of my background and from where I make my remarks.

One, I started my career right there at the Midway

Substation there at Buttonwillow building power lines into the Diablo nuclear power plant, so I am very familiar with power plants and construction and power lines and all that kind of stuff we're talking about.

I also, when the air district was formed, the San Joaquin Valley Unified Air Pollution Control District, I was one of the first hearing officers for the southern office, this area here, Bakersfield, for ten years. So I am very familiar with these type of projects coming in, putting these projects in with the best technology, the best practice.

And I find that a lot of the promises that are made on the front end when these projects are constructed don't always hold true. And I'll say to you all, listening to the Commissioners' questions and also the staff's questions, I think you're right on key. Keep asking the hard questions. Because we make these projections and they don't always come through.

The second thing is -- I wanted to say is that the concerns that I see here -- what really brought -- let me just say this also. I just found out about this about a day and a half ago so I really haven't done a lot of research on this. So I'm just going to make some general remarks but I will be writing some things for the written record later. But your staff outlined some of the things that I thought

you were right on time -- air quality. The ground and water issues, waste, the traffic.

And the main thing that really brought me out more so than anything was this coal, use of the coal. And trucking that stuff and also bringing it in by rail into my community, southeast Bakersfield. I would ask bout the control of dust from the transport. How is that stuff going to be transported in? Is it going to be on trains, is it going to be open cars, is it going to be closed containers? Then when it gets to the truck -- we need to really look at that in terms of the pollutant from the coal dust.

Why is that important? Some of us know here -- one other thing I want to say, I also serve now on the air environmental justice task force for the air district so we look at environmental justice issues. And some of you know that the EPA has fined this valley $29 million that we have to pay a year until we can get the attainment -- clean up our air here.

So one of the things that this project is going to do, even though they're saying that it's going to be a little cleaner than the Avenal plant and all that, but my question would be is what impacts is that going to have on the air quality? And if that is going to not help us reduce the air quality, clean it up, I don't think it will, then we all in this community, in this valley, when we pay our

registration fee, we're going to have to pay an extra $14 a year until we can come back in attainment level. And that's going to impact environmental justice and low-income people in a way that is going to be something that we are going to have to mitigate if this project goes forward.

And then the second part of that is if the project does go forward -- I want to just put a few things up perhaps for mitigation. Is that, again, the air quality is not only bad air, I talked about the EPA fine, but the health effect that some of these other people spoke about.

We need to have to make sure that in terms of mitigation they address the coal dust in terms of making sure that that doesn't -- that be secured in such a way that it doesn't impact this valley.

We want to make sure that if they are going to use credits to offset some of the pollutants. Because, you know, these ER credits they can usually say that we're going to offset the effect by buying these credits. I would say that there ought to be a burden of two. For every pound of air that they pollute there ought to be 2-to-1. Because sometimes they'll go 1-to-1 -- or sometimes they'll even go 1-to-1. So I'm saying if it's going to do it, because of the $29 million fine we have, it ought to be a 2-to-1. For every air pollutant that they put in here that they have to offset it by these credits. I don't necessarily like

credits but if you use it they ought to be a 2-to-1 ratio.

The other thing is because of the low-income people that's going to be paying that fee. If this project does go forward there ought to be a program established so that part of the construction that the folks in these low-income neighborhoods are going to be a part of the construction process. They fund the program that also gets these folks job-ready. And also that women and minority subcontractors be included in this process. Because we are all going to be affected. So if this project is going to go forward then we all should share in the rewards of that. And I'm saying if it's determined that the project is going to go forward.

And then the other thing is they ought to -- and I would ask EPA, the department that's putting some money into this thing, is if you are going to support this project and finance it then you ought to give us some relief from this $29 million fine that we are being fined because of the air quality because this project may impact the air quality. So therefore you are fining on one hand, then you ought to give us some relief if you are going to support this project and finance it.

So those are just some general statements. And I think most of the people that I heard speak tonight and the questions that staff has raised, you guys are right on

target and I just want to wish you well.

HEARING OFFICER RENAUD: Thank you.

MR. DEAN: It was a way to find this place. It's the first time I've come out here. I'll tell you, it was a -- it was a job getting here. But thank you.

HEARING OFFICER RENAUD: Okay, thank you. All right. Justin Bone and followed by Richard Chapman.

MR. BONE: Hi, my name is Justin Bone and we -- my family and I both live and farm in this area. We heard a lot about the projected emissions from this project.

And my question is, does this include the emissions from the importation of the fuel, the coke and the coal? Does it include the exportation of the product and the waste and does it include the emissions from the employees that will be coming?

My concern, as others, is that this project is not helping us in our efforts to better our air and so I want to ask, what is the total net air pollution added to our area with this project?

And then just really quick as well, this project, it was alluded to earlier but I think it deserves to be mentioned again. It does remove prime farmland from our area. And once it's gone it will never come back and I think that's something that needs to be addressed. Thank you.

HEARING OFFICER RENAUD: Thank you. And I can just say that the things you mentioned are all parts of the staff analysis and will be in the staff report.

Okay, Richard Chapman followed by Ben McFarland.

MR. CHAPMAN: Hi, good evening. My name is Richard Chapman, President and CEO of the Kern Economic Development Corporation. And we represent Kern County through a public/private coalition, businesses, communities and the like, all 8400 square miles. Our mission is, plain and simple, to retain and recruit jobs, good, high-value jobs for Kern County. When we're faced with double-digit unemployment, extreme poverty and the like and how do we, how do we help the citizens with jobs.

Obviously given that our litmus test is capital investment. Each project, does it meet the litmus test of capital investment, wage income as well as public revenue. Money, tax revenue that goes back to the citizens in terms of infrastructure.

And the good news for this project, it hits on all those. Again, economic development merits, $4 billion. Capital investment. The construction alone, 2,000 construction jobs is critical at this time when the construction industry has taken a big hit. We're rebounding but we have a lot more to go. $1.7 billion over five years for just construction employment.

Also the $50 million a year labor income throughout the life of the project is critical for us. A lot of projects we work in they're built and then the jobs tend to go away. And this is not the case here. We are proud that there is going to be retention of full-time permanent jobs. The pay for these jobs is 20 percent, up to 20 percent, 17 to 20 percent more than the county average, I think it's about $47,000. Add in the multiplier effect, it's critical. Are there indirect induced jobs, purchases? Are people, are they buying local products, people eating in local restaurants? I believe that this has met muster for that.

And public revenue. There are projects, I believe, like we're campaigning for the heavy maintenance facility. But that won't pay tax, that won't pay tax revenue. This project will. So that's critical for us when we look at every type of especially renewable energy project, will or they will not -- they are not exempt from sales tax or property tax.

And then finally the overlay of diversification is key. We talk about working with oil companies, enhanced oil recovery. We are number one in the country; this will help retain that edge.

And the complementary part is just critical. And just showcasing Kern County as innovative. We already have

the world's -- the country's largest wind farm they're building. A project like this of economic significance would definitely showcase how -- how progressive and innovative Kern County is. So thank you for your time.

HEARING OFFICER RENAUD: Thank you. Ben McFarland and the next speaker would be -- Edward Rosareff I believe that is.

MR. McFARLAND: California Energy Commissioners and staff, my name is Ben McFarland, I am the Executive Director of the Kern County Farm Bureau, an organization that represents more than 1400 agricultural entities, their employees and families in Kern County. It is our mission to promote, protect and strengthen Kern County's agricultural interests.

I am here to advise you of our initial concerns on the impacts the proposed Hydrogen Energy project would have on agriculture and those who live on and work the land in the Buttonwillow/Tupman community. Specifically the bifurcation of local farming operations as the result of new rail lines, irretrievable loss of prime farmland as classified by the state's Department of Conservation, disruption of neighboring farming activities and a contribution of emissions negatively impacting local air quality and which our farmers already face the severest regulations and costs for compliance in the world.

Thank you for your interest in our concerns and we look forward to working with you as this process develops.

HEARING OFFICER RENAUD: Thank you. Edward -- sorry, I couldn't read your last name.

MR. KOSAREFF: Kosareff.

HEARING OFFICER RENAUD: Kosareff, okay, thank you.

MR. KOSAREFF: Thank you for your time. I'm a concerned citizen more than a farmer in this area, although I do live and farm here. And all I could say is dittos to what all the people said. I would just be reiterating what they all said.

One topic comes to mind. I want to tell a little story until I get there. We were in the LA area, my wife and I, and she likes pistachio ice cream. And so we sat down in an outdoor café and ordered pistachio ice cream. And the gentleman explained to us what came with it and all this. So my wife got her ice cream and no pistachios on top of this ice cream. So we asked him, why no pistachios? And he says, well didn't you know that there is a salmonella scare in the pistachios. Yeah, we have heard about it being pistachio farmers. So at that time there was a terrible salmonella scare with these pistachios. And the market fell apart and slowly it's come back.

So my point is that there's a lot of pie in the

sky with this project. We see a lot of numbers floating around, 90 percent sounds like saving a lot of CO_2. But what about the 10 percent? What about the other pollutants that we seem to be -- that they're throwing around and then fast they disappear, we don't talk about them.

The previous owners, BP, spoke about -- I asked one gentleman, we had a meeting with him about the byproduct of the coal, that there would be some sort of byproduct in the form of a slurry. Now I don't know if the whole project has changed where that disappears now or now we hear this fertilizer project. So what is it? Are we making electricity or are we selling fertilizer?

If we kept all the fertilizer here for California and we didn't allow it to go beyond the boundaries of California my PCA tells me there's a million pounds of fertilizer to be -- that would be enough for the whole state of California. We know good and well that that fertilizer will not stay in California, it goes to the highest bidder.

So back to the story of the pistachios. All we need, all we need here in this area is for one scare, one scare to come from this plant to say that there's something in the air, there's something in the soil, there's something coming from this plant that is polluting our crops. Whether it be pistachios or almonds or cherries or grapes or any other product that's grown in this area. And then we get a

call from our processors that say, I don't think we want your product anymore because of your proximity to that plant and what can happen to this -- to your products and could devastate the entire product. And that's all I have to say on that. Thank you for attention.

HEARING OFFICER RENAUD: Okay, thank you very much. That's all the blue cards I have. Let me ask if anybody, if there is anybody on the telephone listening in who wanted to make a comment?

(No response.)

No indication? No. Is there anyone who didn't submit a card who would like to speak?

(No response.)

No, all right. Let me ask our Commissioners if they have any closing remarks before we adjourn, either of you?

PRESIDING MEMBER DOUGLAS: I just have a brief closing remark, again, this is Commissioner Douglas. I want to thank all of you who have come out here. Some quite local, some from Bakersfield or further, further away. It's really beneficial for us to hear from you so we appreciate you making the effort. And I see a lot of people who stayed throughout what's been a long night so again thank you for making the effort.

ASSOCIATE MEMBER McALLISTER: I'll just reiterate

that. This is really a key part of the process and having everybody in the community here is -- gives us all a reality check and is actually, you know, one of the most important parts of the project -- of the gathering of the record so that we can make, you know, a good decision that makes sense for California. So thank you all again. And we are embarking on a relatively long process so I'm sure we'll see each other again in the relatively near future so thank you very much.

HEARING OFFICER RENAUD: Thank you.

PRESIDING MEMBER DOUGLAS: So with that this informational hearing is adjourned.

(Whereupon, the Informational Hearing/
U.S. Department of Energy Scoping Meeting
was adjourned at 9:18 p.m.)

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CERTIFICATE OF REPORTER

I, RAMONA COTA, an Electronic Reporter and Transcriber, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Informational Hearing/United States Department of Energy Scoping Meeting and that I thereafter transcribed it.

I further certify that I am not of counsel or attorney for any of the parties to said hearing, nor in any way interested in the outcome of said hearing.

IN WITNESS WHEREOF, I have hereunto set my hand this 27th day of July, 2012.

RAMONA COTA, CERT*478