

## DOCKETED

<b>Docket Number:</b>	08-AFC-08A
<b>Project Title:</b>	Hydrogen Energy Center Application for Certification Amendment
<b>TN #:</b>	200478
<b>Document Title:</b>	Arthur Unger Comments: Comments to CEC
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Arthur Unger
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	9/16/2013 1:37:58 PM
<b>Docketed Date:</b>	9/16/2013

*Comment Received From: Arthur Unger*

*Submitted On: 9/16/2013*

*Docket Number: 08-AFC-08A*

## **Comments to CEC**

Dear Mr. Roberts,

Please deliver these remarks on Hydrogen Energy California (HECA) to the California Energy Commission. I will try to deliver a hard copy 9/17. Thanks, Art

Dear Commissioners,

Here are my concerns about Hydrogen Energy California (HECA).

It is past time to stop making carbon dioxide and other Green House Gases. Global warming has raised the earth's temperature one degree centigrade, raised all the oceans over six inches, increased the hydrogen ion concentration of the oceans enough to adversely impact sea life and dried our farms and forests. If we allow HECA, the first thing it would do is increase the scarring of New Mexico from coal mines. Then HECA will pollute the air from New Mexico to Kern County with trains and trucks bringing fuel and removing ash. The coal, or perhaps later, petroleum coke, will become synthetic gas. 90% of the carbon dioxide produced to make the synthetic gas will be injected into Occidental Oil Company's wells to recover oil. That oil will be burned to produce carbon dioxide. Thus, even if the injected carbon dioxide remains underground until the carbon dioxide in earth's atmosphere decreases from the current 400 parts per million to a safer 350 ppm, or the 280 ppm of the year 1820, please do not think that HECA makes energy with significantly less global warming, aka climate disruption, or air pollution than other fossil fuel projects.

Will HECA pay for the wear of these trucks on local roads?

The San Joaquin Valley Air Pollution Control District says that all the air pollutants HECA's trains, trucks and plant make will be mitigated. How much of that mitigation will benefit Tupman residents or the children whose school is near HECA? This end of the Valley and the Los Angeles basin vie for America's worst air; we want to clean the air locally, not just maintain the overall pollution in the Air District.

Kern agriculture does not now get all the water it could use to grow profitable crops for export. Climate disruption has probably decreased Kern's water supply and will decrease it much more almost year by year. HECA uses 7500 acre-ft of water annually; none of that water is too salty for local crops.

A century ago, Fritz Haber combined hydrogen, from methane, with nitrogen to make "bread from the air". HECA may use most of the electricity it produces to make a modest amount of inorganic nitrogen fertilizers. Making and shipping inorganic nitrogen fertilizer has resulted in at least two accidental and two deliberate, massive, fatal explosions. Recently, most plant materials that are not sold, are returned to the soil. That is one way farmers reduce the use of inorganic nitrogen fertilizers.

When estimating how many "permanent" jobs, not construction jobs, HECA would provide, please subtract any farm management or labor jobs lost due to use of land by HECA. Would skilled workers for HECA emigrate from other countries, other places in the USA or could some of them be local? What would happen to HECA if Occidental decided they could no longer profitably extract oil from the local field at whatever price that oil brought?

Conservation, efficiency and renewable energy are all we need to avoid harm from HECA and other fossil fuel projects. For example, the \$408 million federal tax payers are giving HECA could be used to hire and train under-employed local workers to paint existing roofs high albedo white and insulate older homes. That saves more electricity than HECA hopes to produce.

Thank you for the opportunity to comment,  
Arthur Unger

Bakersfield, CA 93305-1719