### **Docket Optical System**

**From:** "Dr. Thomas Oakes" <pairedhelix@cox.net>

**To:** <docket@energy.state.ca.us>

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# Solar Hydrogen Energy Co.

10303 Centinella Dr. La Mesa, CA 91941 TEL 619 670-6555 pairedhelix@cox.net

**DOCKET**08-AFC-8

DATE FEB 02 2011

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February 2, 2011

California Energy Commission

RE: Your request for comments: Energy Commission staff is soliciting comments and feedback from stakeholders on the proposed design and content for this first phase - an effective grant program that will assist local jurisdictions in expediting planning and permitting for renewable energy development.

Written comments on the subject of this notice should be emailed by 5 p.m. on February 15, 2011 to docket@energy.state.ca.us and sneidich@energy.state.ca.us, or hard copy mailed or delivered to:

# **Our Comments:**

## #1. There should be a single permitting office.

That office can issue a permit for all of the considerations such as air pollution, water pollution, local entities, city, county, fire department, water department, judicial, legal, lighting exposure, advertising, etc. If the permitting process is not set up this way it will hinder expansion of renewable energy immensely. The state of Florida set up a system on this model.

## #2. Hydrogen as renewable fuel should be permit free.

Example:

San Diego APCD

Rule 10: A permit may be possible after review when a product is sold.

Rule 11: There is an exemption for research and development concerning hydrogen generation and handling.

### California must go farther.

Renewable hydrogen generation should be permit free. Renewable hydrogen is different than hydrogen manufactured from natural gas. Oil refineries are the largest user of industrial hydrogen consuming perhaps 95% of the hydrogen made in USA. It is used in the oil refining process. For this purpose hydrogen is made by *reforming natural gas* using fame technology.

Hydrogen as fuel is completely clean. When used in a hydrogen fuel cell or hydrogen vehicle only pure water comes out of a vehicle tail pipe yielding no emission into the air. When hydrogen is flamed out for heating purposes in industrial kilns and furnaces no nox or other pollutants are emitted.

Since **renewable hydrogen** can be generated by **photoelectrochemical generating process** employing only solar, low wind, and/or small hydroelectric sources and <u>no</u> fossil fuel such as oil, coal, natural gas, or utility electricity there is no pollution and therefore must be given special exemption in the permitting process which is primarily devoted to protecting the air and environment.

## Note:

Please invite us to participate in the discussion and meetings considering what may be established concerning permits for **renewable hydrogen generation** and **use of hydrogen** in residential, commercial, industrial, governmental, and defense department applications.

Thank you.

Thomas W. Oakes, PhD, CEO Solar Hydrogen Energy Co

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## Solar Hydrogen Energy Company

Thomas W. Oakes, PhD 10303 Centinella Dr. La Mesa, CA 91941 Phone 619 670-6555 email: pairedhelix@cox.net

"19th century was the century of the steam engine.

20th century was the century of the internal combustion engine.

21st century is the century of the solar hydrogen and the fuel cell."

"Whoever Controls Energy Wins" TM