

## H2 Safe and Clean Alternative Program

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### Brief Synopsis of Presentation:

#### **Jim Ohi (NREL): Hydrogen Safe and Clean Alternative Program**

There are three components of a clean and safe alternative program:

- 1) hydrogen infrastructure planning and deployment — identify resources, needs, and opportunities and develop data and analytical tools;
- 2) codes and standards — incorporate hydrogen safety issues into existing and proposed national and international codes and standards; and
- 3) renewable hydrogen and distributed generation — assemble and test “renewable power packages”.

As an initial part of this activity we have looked at the national distribution of hydrogen producers and sites to determine where they are located relative to the national interstate highway system, the national electrical grid and the natural gas transmission system, as well as renewable resource availability. All these networks and resources mesh nicely and appear to present opportunities to accelerate deployment of a future hydrogen infrastructure based on both conventional and renewable energy resources.

An extremely important element of this activity is the coordination of all codes and standards activities for the DOE Hydrogen Program. We are looking to create an integrated, multi-year codes and standards effort involving all key stakeholders, and want to integrate the codes and standards activities with the overall infrastructure planning and deployment effort. Related activities include development of the Sourcebook for Hydrogen Applications (1998) and formation of the HTAP Safety Committee, collaboration with the International Hydrogen Infrastructure Group, and work with other related organizations. NREL plans to develop and maintain a database for one-stop shopping on codes relevant to fuel cells on a website within the next year or two.