

Update on the National Hydrogen Association

By Karen Miller, Vice President, NHA

The National Hydrogen Association is about to celebrate its fourteenth year as the internationally recognized premiere trade association promoting the use of hydrogen as an energy carrier and removing the barriers to the implementation of hydrogen systems. The NHA has a robust membership and continues to achieve its program goals. In 2002, political interest in energy independence and security resulted in an increased interest in hydrogen energy technologies. The U.S. government began implementing the National Energy Policy (NEP) which included provisions for hydrogen use in stationary and transportation applications. Secretary of Energy Spencer Abraham introduced the FreedomCAR initiative that will fund hydrogen research for all vehicular applications from passenger cars to heavy duty trucks. The NEP and FreedomCAR announcements bode well for government funding of hydrogen energy research and development programs for 2003 and beyond.

The U.S. Department of Energy demonstrated its commitment to hydrogen by restructuring. The new Hydrogen, Fuel Cells, and Infrastructure Technologies Program, headed by Steve Chalk, will focus on transportation applications of hydrogen, but includes support of technologies that apply to stationary and portable applications as well, such as supply, storage, and performance issues.

NHA Programs and highlights from 2002:

Codes and Standards

Significant progress was achieved in 2002 with the adoption of proposed changes in the ICC Model Codes to include hydrogen technologies in the I-codes, to be published in 2003. In addition to active NHA participation, stakeholders were kept informed throughout the process through the Hydrogen Safety Report, a monthly electronic newsletter dedicated to hydrogen safety, codes and standards issues. This report is posted online and made available to all interested parties, including industry, government, code officials, and the public at www.HydrogenSafety.info.

The NHA hosted two safety codes and standards workshops in 2002. The first in February in Hilton Head, South Carolina in conjunction with a Savannah River Technology Center's Hydrogen Storage Workshop and the second in Fort Worth, Texas in conjunction with the final action hearings of the International Code Council. Proceedings for both meetings were posted on-line at www.HydrogenSafety.info and were also accessible from the [NHA home page](#).

The NHA's Working Group Two: Metal Hydrides, made significant progress in 2002. Through working group meetings, conference calls, emails, and collaboration with DOT and the U.S. Fuel Cell Council, the group prepared a draft standard on charged metal hydrides, and successfully proposed it as a new international standards work item in ISO TC 197.

Policy

Government affairs and policy efforts are funded solely by a portion of dues from Sustaining members of the NHA. The NHA goal of seeing the Hydrogen Future Act of 1996 reauthorized has not yet been achieved. Refocused Congressional priorities following the September 11 attacks have delayed the passage of the bill; however, hydrogen enjoys more support and recognition in government circles than ever

before. U.S. DOE is in the process of gaining consensus on 5-year planning documents that help achieve the hydrogen economy. The NHA has been an active participant in the development of these plans.

Communications

The NHA communicates with members and non-members alike through a series of publications and website notifications. Please visit www.HydrogenUS.org for more information.

The Members' Only portion of the NHA website, introduced in 2001, has seen increased usage since its inception. The Members' Only page contains a wealth of information, including draft ISO documents, an electronic searchable membership directory, ICC AHC Updates, Legislative Updates, Federal Testimony and Resumes from Job Fair participants.

When standards development organizations request NHA input or comment, the NHA keeps members informed of efforts in the international codes and standards arena by posting applicable draft documents to the NHA Members' Only page of the website. Emails were sent to all members notifying them that particular draft documents from IEC-TC-105 and ISO-TC-197 were available for review and comment. Documents that were posted include:

- A report on the 10th Plenary ISO-TC-197 meeting in Paris,
- Notification of the 11th Plenary ISO-TC-197 meeting in Montreal,
- Cryogenic Vessels – Static Vacuum Insulated Vessels – Part 2: Operations Requirements
- Fuel Cell Model Standard
- Test Methods for Performance of Fuel Cell Power Systems
- Cryogenic Vessels Committee Drafts
- Fuel Cell Module Standard (working group 105-02)
- Test methods for Performance of Fuel Cell Power Systems (working group 4)
- New work item proposal: International Standard for Hydrogen Generators Using Fuel Processing Technologies
- GRPE Draft Regulations on Gaseous Hydrogen Onboard Storage Systems
- Gaseous Hydrogen and Hydrogen Blends – Land Vehicle Fuel Tanks
- 13th Annual U.S. Hydrogen Meeting
- The 13th Annual U.S. Hydrogen Meeting and Technology Exhibition of the National Hydrogen Association was held in conjunction with the World Hydrogen Energy Conference in Montreal, Canada. The conference had attendance of over 1000 and was a great success. The NHA received a record amount of sponsorship to support both WHEC and our Annual Meeting.
- The 14th Annual U.S. Hydrogen Meeting, Energy Security through Hydrogen, is planned to be held March 4-6, 2003, in Washington, DC. This meeting will contain sessions on a wide variety of energy options, including photolytic production of hydrogen, reformation of fossil fuels, clean coal technologies, and hydrogen generation through renewable energy resources, including biomass, photovoltaics, hydropower, wind, and nuclear. The meeting will focus on a global perspective, highlighting national and international projects and policies. As always, the meeting will address associated safety, codes and standards issues related to siting these technologies. The NHA has contracted with H2 Expo to increase exhibiting opportunities for the meeting.