



National Hydrogen Association

Testimony Submitted for the Record

By

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To the

Subcommittee on Energy and Water Appropriations
127 Dirksen Senate Office Building
Washington, DC 20510

on the Subject of

Funding for the U.S. Department of Energy Hydrogen Initiative
For Fiscal Year 2006

April 22, 2005

Chairman Domenici, Senator Reid and Honorable Members of the Committee: The Members of the National Hydrogen Association thank you for the opportunity to present testimony for the record to the Energy and Water Subcommittee and mark this occasion to recognize the recent change in jurisdictional authority of all U.S. Department of Energy programs to your Subcommittee. The membership of the National Hydrogen Association (NHA), which represent all facets of the existing and emerging hydrogen technology industries, **request full support of the President's Hydrogen Initiative** of \$259,544,000 for FY06. It is further requested that the Committee **not jeopardize the viability of this initiative by reassigning spending priorities through congressionally directed projects.**

The Presidential Hydrogen Initiative managed by the Department of Energy achieved results this past year:

- The Secretary of Energy announced over \$500 million in project awards including \$190 million over five years for the controlled hydrogen and fleet technology validation demonstrations.
- Under the DOE hydrogen program, three new hydrogen fueling demonstration stations opened in the U.S.

- Successful R&D in fuel cells will bring the production cost target of \$50kW for fuel cells in transportation closer to reality.
- Successful R&D in hydrogen production will drop the cost of hydrogen from \$5.00/gallon to \$3.60/gallon, making the goal of \$1.50/gallon more achievable.
- Codes were developed to enable the storage of hydrogen in fueling stations, and additional safety codes are under development.
- Fire marshals, code officials, state energy officials and emergency responders received information and training in hydrogen safety in approximately 17 cities and towns.
- Critical R&D areas like storage, production from renewable resources, nuclear energy, and how to make coal a zero emission source of energy continue. Sharing the results at conferences, program review meetings and elsewhere enable a broad information exchange so efforts within the government and private sector are not duplicated.
- International dialogue continues on many levels on ways nations can collaborate in areas of hydrogen technology policy, trade and R&D. For example, discussions at the ministerial level through the International Partnership for the Hydrogen Economy are focused on collaborative agreements between nations which could help pave the way for sharing R&D results, manufacturing and trade. At the policy and regulatory level, international discussions and negotiations are ongoing on the topics of standards, codes and regulation enforcement. At the research level, attempts are being made to collect, quantify and share information and lessons learned from international demonstration projects and R&D programs.

This Committee's investment in hydrogen is a wise use of resources. Members of Congress and the public are concerned with dependence on foreign supply. Hydrogen provides a clean and secure option. Added value was achieved by the Committee-imposed requirement to have federal dollars cost-shared with the private sector. Members of the National Hydrogen Association are involved in all of the hydrogen technology projects with the federal government and are the industries, small businesses, state agencies and universities providing the partnership dollars.

The value of enabling successful demonstrations through public-private partnerships is exemplified by the goals of the "Controlled Hydrogen and Fleet Infrastructure Demonstration and Validation Project" managed by the Hydrogen and Fuel Cell Infrastructure Technologies Program within the U.S. Department of Energy. The Technology Validation Project is an unprecedented collaboration of auto companies and energy companies working together toward a common goal. The Department's request for FY06 of \$14.9 million for infrastructure and \$29 million for autos is part of a competitively bid and cost-shared program. It is important to note that added value is provided by the requirement for data collection and sharing among the teams. The lessons learned will be shared with the community at large, a critical step in the commercialization of hydrogen and fuel cell technologies. This project will provide real world experience and results for program prioritization and decision-making which will help move the technology forward. **This learning demonstration project is one of the standard bearing projects of the President's Hydrogen Initiative and should be fully funded.**

As the development and implementation of hydrogen and fuel cell technology continues, new opportunities for collaboration will emerge. Consistent execution of a unified and structured

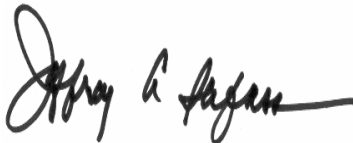
federal strategic plan for R&D is vital to ensuring the commitment required to establish and sustain these critical, public-private partnerships.

In the FY05 Omnibus Appropriations Bill, the Committee stated education in hydrogen was “too premature,” and the budget was cut to zero. The NHA membership disagrees with the Committee’s view. In fact, the need for education has been identified as one of the top three barriers to commercialization for hydrogen technologies. Education and training of code officials, fire marshals and other emergency responders is a critically important and immediate need. Corporate resources have handled some of the early education needs, like cost-sharing in some of the cities mentioned above but the demand for education materials and opportunities is growing faster than corporate resources alone can accommodate. The new hydrogen energy technologies are being implemented across the breadth of the entire US energy infrastructure. Ensuring the coherent, timely education of officials can best be assured through a neutral, government-funded activity to create and deliver education materials.

The FY06 budget request includes support for two important categories of the hydrogen program: \$1.8 million for training and education and \$6 million for codes and standards development. The members of the National Hydrogen Association acknowledge the budget request for these important topics is inadequate and would request additional funding but we recognize the fiscal constraints of this Committee under current national priorities.

On behalf of the 110 members of the National Hydrogen Association, we appreciate the opportunity to submit testimony for the record. We urge the Subcommittee to fully fund the President’s Hydrogen Initiative through the Department of Energy and to be extremely judicious and limit designating special projects which we believe undermine the capability of the DOE Hydrogen Program to develop this technology.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey A. Serfass". The signature is fluid and cursive, with a long horizontal stroke at the end.

Jeffrey A. Serfass
President
National Hydrogen Association